





































Code	Session		Chair	Room	Start	Finish
SC1	Organization and Human Resource Management 1		Dr. Uthairat Muangsan	Floor 11, Room 1101	11:00	12.20
0008	11:00	11:20	Quality of Work Life Affecting Organizational Commitment of Officers in SC Asset Public Company Limited <i>Wanchanok Utaipattanacheep and Praphan Chaikidurajai</i>			
0023	11:20	11:40	Work Motivation Affecting Organization Commitment of Staffs at Finance Division of Land Development Department <i>Porntip Sukprasong and Praphan Chaikidurajai</i>			
0025	11:40	12:00	Organizational Culture Affecting Organizational Citizenship Behavior of Employees in Saha Pathanapibul Public Company Limited <i>Parika Srimarong and Praphan Chaikidurajai</i>			
0036	12:00	12:20	Quality of Work Life Affecting Organizational Commitment of Employees in Siam Commercial Bank <i>Kanya Soonthonphot and Praphan Chaikidurajai</i>			

Code	Session		Chair	Room	Start	Finish
SD1	Accounting, Finance, and Banking 1		Dr. Natsapun Paopun	Floor 11, Room 1102	11:00	12.20
0002	11:00	11:20	Factors Affecting MAI Index Price <i>Pongpun Jukkaew and Somporn Punpocha</i>			
0004	11:20	11:40	Factors Affecting Savings and Investment of Financial Institutions Employees in Bangkok <i>Pannarat Apairat and Natsapun Paopun</i>			
0016	11:40	12:00	Factor Affecting the Personal Saving Management <i>Napaporn Lohthong and Natsapun Paopun</i>			
0018	12:00	12:20	Investment's Behavior and Motivation Affecting Decision to Invest in Stock Exchange of Thailand <i>Apirada Wijitpoo and Natsapun Paopun</i>			

Code	Session		Chair	Room	Start	Finish
SE1	Business and Marketing Management 1		Dr. Praphan Chaikidurajai	Floor 11, Room 1107	11:00	12.20
0003	11:00	11:20	The Passengers Satisfaction for Using Bus: A Case Study (Yellow Bus) In Sakonnakhon Province <i>Chadarporn Nabchid</i>			
0005	11:20	11:40	Marketing Strategies Affecting Consumer Behavior in Selecting Fresh Coffee Shops <i>Mallika Thamnarong</i>			
0007	11:40	12:00	Factors Affecting the Decision to Purchase Goods Online in the Digital Age, Consumers in Bangkok, and Prim million <i>Wimwipa Suwannatrai and Nilubon Sivabrovornvatana</i>			
0009	12:00	12:20	A Case Study of Customer Satisfaction with Pest Control Services from Union of Unicorn Group Co., Ltd. (Eastern Branch) in Chonburi Province <i>Chaiamon Chantarapitak and Nilubon Sivabrovornvatana</i>			

Code	Session		Chair	Room	Start	Finish
SF1	Business and Marketing Management 2		Dr. Nontipan Prayurhong	Floor 11, Room 1108	11:00	12:20
0010	11:00	11:20	The Situation of Thai Fruit Export in Vietnam Market and Trends <i>Bussarin Jeenkerdsup</i>			
0011	11:20	11:40	Factors Affecting Satisfaction of Using Thai Farmer Bank (Public) Co., Ltd.'s ATM Machine <i>Haskan Themthrom and Nilubon Sivabrovornvatana</i>			
0012	11:40	12:00	Marketing Factor Affecting Buying Decision of Organic Vegetables and Fruits Snack: The case of Saun Sai Som <i>Umpawan Pongsaeng and Nilubon Sivabrovornvatana</i>			
0013	12:00	12:20	Tennis's Satisfaction Towards Service of K.S. Sukhumvit Tennis Court <i>Phasawit Burapharittha</i>			

Code	Session		Room	Start	Finish
SLB	Sunday Lunch Break		Lounge Floor 12A	12:20	13:20

Code	Session		Chair	Room	Start	Finish
SA2	Logistics and Supply Chain Management 2		Asst. Prof. Dr. Ungul Laptaned	Floor 10, Room 1001	13:20	15:00
0052	13:20	13:40	The Inventory Management of Automotive Parts for SMEs Sector in Nakhon Nayok <i>Jirawadee Intakarn</i>			
0056	13:40	14:00	Internet of Things and Supply Chain Management <i>Nithipol Pathumya</i>			
0059	14:00	14:20	Logistics and Supply Chain for Mice Business <i>Thanaporn Samanthong and Tharinee Maneesri</i>			
0060	14:20	14:40	E-Supply Chain Solutions for Solving Problems in Thai SMEs Supply Chain <i>Watcharasit Wichitpong</i>			
0061	14:40	15:00	Transportation Economics <i>Suteeta Hengpoojaroen</i>			

Code	Session		Chair	Room	Start	Finish
SB2	Logistics and Supply Chain Management 3		Asst. Prof. Dr. Nilubon Sivabrovornvatana	Floor 10, Room 1002	13:20	15:00
0062	13:20	13:40	Blockchain Development Service for Supply Chain Industry <i>Supatcha Jeerapairojkul</i>			
0063	13:40	14:00	Make a Difference and Create Environmental Protection with Reverse Logistics <i>Nongnapat Sangnual</i>			
0067	14:00	14:20	Applying Blockchain Technology in the Supply Chain in Thailand 4.0 <i>Poosuda Yeemapichard</i>			
0068	14:20	14:40	How China's New Silk Road Affecting to Thailand <i>Suwisa Saekhow</i>			
0069	14:40	15:00	Electronic Commerce Affecting Logistics Service Providers in Thailand <i>Kamchanok Posuwan</i>			

Code	Session		Chair	Room	Start	Finish
SC2	Organization and Human Resource Management 2		Dr. Uthairat Muangsan	Floor 11, Room 1101	13:20	15.00
0037	13:20	13:40	Quality of Work Life Affecting Organizational Commitment of Employees in Dejo Shanghai Furniture And Construction Co., Ltd. <i>Thanuch Homnan and Praphan Chaikidurajai</i>			
0040	13:40	14:00	Compensation Affecting Organizational Commitment of Power Development Officers <i>Supanee Srivankaew and Praphan Chaikidurajai</i>			
0041	14:00	14:20	Quality of Work Life Affecting Performance Efficiency of Officers in Agricultural Research Development Agency (Public Organization) <i>Nara Meepo and Praphan Chaikidurajai</i>			
0044	14:20	14:40	Job Characteristics Affecting Organizational Citizenship Behavior of Golf Instructors in Bangkok Metropolitan Region <i>Pattra Boosnampetch and Praphan Chaikidurajai</i>			
0047	14:40	15:00	The Motivations in Working Performance: A Case Study on K-Bank Staff, Chaengwattana Headquarter <i>Nopparat Laothirapanich and Vichit U-on</i>			

Code	Session		Chair	Room	Start	Finish
SD2	Accounting, Finance, and Banking 2		Dr. Natsapun Paopun	Floor 11, Room 1102	13:20	15.00
0020	13:20	13:40	Factors Affecting on Decision Making towards Investment in the Stock Exchange of Thailand of Individual Investors in Bangkok <i>Khwanjai Sonthiwong</i>			
0024	13:40	14:00	Factors of Financial Well-Being of Officer under Municipality of Bang Bua Thong District Nonthaburi Province <i>Watcharin Liamyu</i>			
0042	14:00	14:20	Real Estate - Treasure of Richness <i>Ratchata Kanchanarote</i>			
0045	14:20	14:40	Factors Affecting the Decision Making of Customers on Choosing Life-Saving Deposit Service from Bank for Agriculture and Agricultural Cooperatives (BAAC) in Bangkok <i>Rutsita Mitrun and Natsapun Paopun</i>			
0048	14:40	15:00	A Study of Financial Management After the Retirement <i>Sukanya Kongton and Natsapun Paopun</i>			

Code	Session		Chair	Room	Start	Finish
SE2	Business and Marketing Management 3		Dr. Praphan Chaikidurajai	Floor 11, Room 1107	13:20	15.00
0015	13:20	13:40	The Effect of Herzberg's Maintenance Factor Influencing Employee Loyalty Towards Direct Selling Business: A Case Study of Thai Direct Selling Development Association <i>Niwat Chantharat</i>			
0017	13:40	14:00	Marketing Mix Factors Affected to Sneakers Buying Decision through Online Media of People in Bangkok <i>Thanantorn Sareethash and Vichit U-on</i>			
0019	14:00	14:20	Marketing Mix Affecting the Decision of Consuming Clean Food in Bangkok <i>Thipayavaree Worawatcharakarn and Vichit U-on</i>			
0021	14:20	14:40	Title Factors Affecting the Use of Co-Working Space Services <i>Fareda O.S. Amodi and Nilubon Sivabrovornvatana</i>			
0022	14:40	15:00	Marketing Mix Affecting Purchasing Behaviors of Complementary Foods for Elderly in Bangkok <i>Phetrlada Tiankham</i>			

Code	Session		Chair	Room	Start	Finish
SF2	Business and Marketing Management 4		Dr. Nontipan Prayurhong	Floor 11, Room 1108	13:20	15:00
0030	13:20	13:40	The Marketing Mix Affecting Purchasing Decision or Computer Assembling of Population in Samut Songkram Province <i>Thagoon Sangtam and Vichit U-on</i>			
0031	13:40	14:00	Factors Influencing to Purchase's Decision of Eggs from Cage Free System in Bangkok <i>Krich Rawanprakhon and Nilubon Sivabrovornvatana</i>			
0032	14:00	14:20	Impact of the Quality Customer Relationship Management Affecting Delivery Satisfaction of Customers in Nonthaburi <i>Jindarut Thomput and Vichit U-on</i>			
0039	14:20	14:40	Marketing Choices Affecting Satisfaction of Choosing Private School for Children in Wang Thong Group Company Limited <i>Patcharanaree Charoenhirun and Vichit U-on</i>			
0043	14:40	15:00	Core Competencies of Chef in Commercial Cookery Management <i>Vorapol Itthikhanesorn</i>			

Code	Session		Room	Start	Finish
SPB	Sunday PM Break		Foyer	15:00	15:20

Code	Session		Chair	Room	Start	Finish
SA3	Logistics and Supply Chain Management 4		Asst. Prof. Dr. Ungul Laptaned	Floor 10, Room 1001	15:20	16:20
0070	15:20	15:40	Applying Inventory Management Skills with Productive Daily Life <i>Krittachai Chaiput</i>			
0072	15:40	16:00	Reverse Logistics in Electronic Commerce <i>Natchanon Chapimon</i>			
0073	16:00	16:20	Developing a Logistics Facilitation Monitoring Mechanism <i>Apichaya Pattananusinthu</i>			

Code	Session		Chair	Room	Start	Finish
SB3	Logistics and Supply Chain Management 5		Asst. Prof. Dr. Nilubon Sivabrovornvatana	Floor 10, Room 1002	15:20	16:00
0074	15:20	15:40	High-Speed Rail Linking 3 Airports Project <i>Pimwaree Narintarangkul Na Ayutthaya</i>			
0075	15:40	16:00	Behavioral Factors Influencing Partner Trust in Logistics Collaboration <i>Apichaya Pattananusinthu</i>			

Code	Session		Chair	Room	Start	Finish
SC3	Information Technology		Dr. Uthairat Muangsan	Floor 11, Room 1101	15:20	17:20
0001	15:20	15:40	Factors affecting the purchase decision via Facebook Live Channel Facebook Live <i>Aunlarin Chuenphueak and Nilubon Sivabrovornvatana</i>			
0006	15:40	16:00	Factors Affecting the Students and the Parents' Adaptation towards the Electronic Payment System, For the Tuition Fees Of Thai Business Administration Technological College via Smartphones <i>Lisi Lui and Natsapun Paopun</i>			
0034	16:00	16:20	Cross-Border E-commerce Research Of Chinese SMEs <i>Liu Han Sheng</i>			

0038	16:20	16:40	Social Network Usage Behavior Influencing Elder's Happiness in Phrom Khiri, Nakhon Si Thammarat <i>Benjawan Buathong and Vichit U-on</i>
0057	16:40	17:00	Cloud Computing: Overview and Research Issues <i>Suthini Kupvivat</i>
0079	17:00	17:20	The Technological Impacts on the Turnover of Insurance Business <i>Veerakij Utharnsakul</i>

Code	Session		Chair	Room	Start	Finish
SD3	Accounting, Finance, and Banking 3		Dr. Natsapun Paopun	Floor 11, Room 1102	15:20	16.20
0049	15:20	15:40	Factors Influencing Personal Financial Planning of the Generation Y in Bangkok <i>Benjawan Sivanunwong and Natsapun Paopun</i>			
0050	15:40	16:00	The Study of Factors Affecting on Customers' Selection of Personal Loan Service from Commercial Banks in Bangkok <i>Naruemon Butsree and Natsapun Paopun</i>			
0051	16:00	16:20	Factors Influencing Personal Financial Planning of Employee's in Dindaeng District, Bangkok <i>Paveena Wiwan and Natsapun Paopun</i>			

Code	Session		Chair	Room	Start	Finish
SE3	Business and Marketing Management 5		Dr. Praphan Chaikidurajai	Floor 11, Room 1107	15:20	16.40
0058	15:20	15:40	Factors Affecting the Decision to Buy a Condominium <i>Wiraon Chestasing</i>			
0064	15:40	16:00	Product Reviews in Social-Network that Influence Buying Decision of Customer in King Mongkut's University of Technology North Bangkok <i>Waraporn Suphankhong</i>			
0065	16:00	16:20	The Influence of Presenter on Purchasing Behavior and Intention to Buying Product <i>Rattikarn Klaewkarnthai</i>			
0071	16:20	16:40	How Culture Effect To Buying Decision Process <i>Sirasith Charoenjit</i>			

Code	Session		Chair	Room	Start	Finish
SF3	Business and Marketing Management 6		Dr. Nontipan Prayurhong	Floor 11, Room 1108	15:20	16.40
0076	15:20	15:40	Marketing Mix Factors Affecting Dining Decision of Saimai Restaurant Customers <i>Jakarat Kanakasai and Uthairat Muangsan</i>			
0077	15:40	16:00	Employee Opinions on Tourism Policy Travel Agencies in Bangkok and its Vicinity <i>Rungnapa Kampaya and Uthairat Muangsan</i>			
0078	16:00	16:20	Causal Factors Influencing Operational Expectations Members of Direct Sales <i>Tanida Phoosuwat and Uthairat Muangsan</i>			
0080	16:20	16:40	Factors Affecting Consumer Behaviors Changes on Food Consumption <i>Panjamaporn Pholkerd</i>			

Code	Session		Chair	Room	Start	Finish
SWD	Welcome Dinners		Asst. Prof. Dr. Ungul Laptaned		19:30	21:30
	19:30	21:30	<b>Welcome Dinners:</b> Baiyok Sky Hotel, Baiyok Tower #2, Bangkok, Thailand			

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# Accounting, Finance, and Banking

**RCGR<sup>2nd</sup>  
2018**



0002

**Factors Affecting MAI Index Price**



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# Factors Affecting MAI Index Price

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## Abstract

In this study, the Ordinary Least Square model is used to study factors affecting the price index of the Market for Alternative Investment (MAI). These factors are Index the Stock Exchange of Thailand (SET), Dow Jones Industrial Average Index (DJIA), Market Capitalization (MC), Price to Earnings Ratio (PE), Price to Book Value (PVB), Market Dividend Yield (MDY), Exchange Rate - THB / USD (EX) and the turnover of Local Individuals (LI). According to studies, it has been found that the correlation coefficient in the same direction as the MAI index is the Exchange Rate - THB / USD (EX), the turnover of Local Individuals (LI), and the Price to Earnings Ratio (PE). However, the return from Market Dividend Yield (MDY) is in the opposite direction to the MAI index, while the remaining variables do not affect the MAI such as Index the Stock Exchange of Thailand (SET), Dow Jones Industrial Average (DJIA), Market Capitalization (MC) and Price to Book Value (PVB). Problem detection Autocorrelation showed calculation Durbin-Watson was 0.8052, which was less than the  $D_L$  at 1.6790, and used the Newey-West standard error according to Whitney Newey and Ken West to alleviate the problem of Heteroscedasticity and Autocorrelation. It was found that the standard deviation was increased and the t-statistic value decreased, which would not make the parameter estimator to differ from the Ordinary Least Square (OLS) method.

**Keywords:** Model, Affecting, Market, Direction

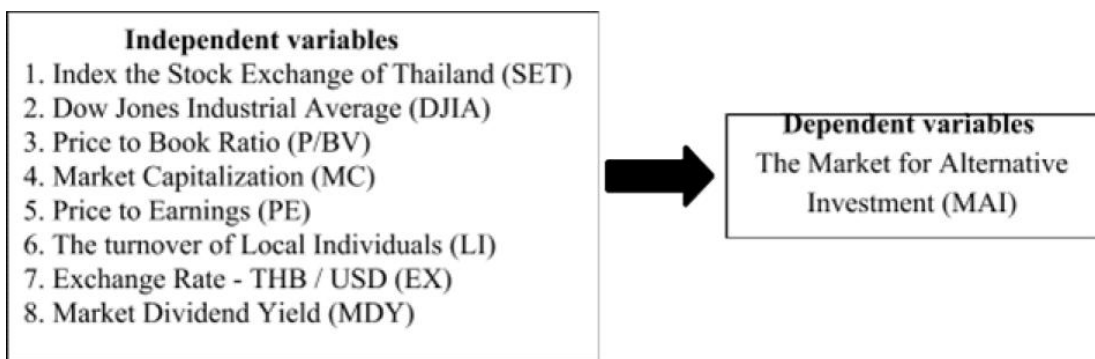
## 1. Introduction

At present, there are investors interested in investing in the stock market. Thailand's largest stock market is The Stock Exchange of Thailand (SET), which was set up to raise capital from local and foreign investors. The listing on the capital market will make the stock spread to investors. And those funds will be invested in various aspects of the company to enter the market such as buying machinery, expanding the factory, etc., called the primary market and investors can trade in the secondary market (Secondary Market). The SET's limit is to have a registered capital of 300 million baht. MAI, Market for Alternative Investment, has the same funding mechanism as the SET. However, the MAI has revised the size of the listed securities. From 20 million baht companies, they can be listed on the Market for Alternative Investment (MAI), thus making it one of the medium and small businesses to raise capital in the market to expand the business.

The Market for Alternative Investment (MAI) was officially launched on June 21, 1999 and has been added to the market until December 2017. The company has registered more than 146 listed companies with a value of Baht 547.16 million. There is a continuing increase in the number of companies listed on the Market for Alternative Investment (MAI). The Company's Alternative Investment (MAI Index) is an index calculated from the Stock Exchange of Thailand (SET), but the method of calculating the same way. The SET's Market for Alternative Investment (MAI) as of September 2, 2002 is the base date for the index. The MAI index has peaked at 726.72 in December 2014, despite strong domestic and international political and economic turmoil.

There are some factors that influence the index of the MAI index, which causes the MAI Index to fluctuate and speculation. This will affect the capital market development. Therefore, it should study the factors that determine the appropriate stock price index in accordance with the market mechanism to effectively the secondary market. The results of this study can help investors decide to invest in the MAI Index.

## 2. Conceptual Framework





### 3. Research Methodology

The research tools used in this study was variables on the factors influencing the index of the MAI index. The samples used in this study were factors influencing the index of the MAI index. The sample size was determined based on the method of the Ordinary Least Square with a confidence level of 99 percent and an error level of 1 percent resulting in the minimum sample size of 129 samples. Therefore, data was carefully collected to avoid any error (e) and the samples were thus chosen through purposive sampling.

Statistics used in the data analysis were mean, Median and standard deviation. Hypotheses were to find the relationship of independent variables, Multiple Regression Analysis.

### 4. Conclusion, Discussion, and Suggestion

#### 4.1 Conclusion

Exchange Rate - THB / USD (EX) increased 1 unit, the increase of 15.88358 units. Price to Earnings (PE) increased 1 unit, the increase of 1.667521 units and the turnover of Local Individuals (LI) increased 1 unit, the increase 0.001726 units but Market Dividend Yield (MDY) will increase by 1 unit, the decrease of 42.12026 units. Variables that do not correlate with MAI were Market Capitalization (MC), Price to Book Ratio (PBV), Dow Jones Industrial Average Index (DJIA) and Index the Stock Exchange of Thailand (SET).

Problem detection Autocorrelation showed that the regression equation had positive autocorrelation problems. Because of the calculation Durbin-Watson was 0.8052, which was less than the  $D_L$  at 1.6790, and used the Newey-West standard error according to Whitney Newey and Ken West to alleviate the problem of Heteroscedasticity and Autocorrelation. It was found that the standard deviation was increased and the t-statistic value decreased, which would not make the parameter estimator to differ from the Ordinary Least Square (OLS) method.

#### 4.2 Discussion

After reviewing the relevant literature, this study uses multivariate regression analysis to find the relationships using the Ordinary Least Square (OLS) regression model. The independent variables are: Index the Stock Exchange of Thailand (SET), Dow Jones Industrial Average Index (DJIA), Market Capitalization (MC), Price to Earnings Ratio (PE), Price to Book Value (PVB), Market Dividend Yield (MDY), Exchange Rate - THB / USD (EX) and the turnover of Local Individuals (LI) and the dependent variable is MAI and then investigate the problem Multicollinearity and autocorrelation problems before. The results are based on the assumptions set as follows.

Dow Jones Industrial Average Index (DJIA), it is one of the most important indexes in the global stock market. It is important as a measure of the state or economic momentum. This is a reflection of the stock market in the United States. The Market for Alternative Investment (MAI) is relatively small and its liquidity is lower, making foreign investors less likely to invest in this market. Therefore, there is no correlation between the MAI. According to research by Kanueanid Panalad (2013) study Factors that

Affect Index of Market Price of MAI was affecting The Dow Jones Industrial Average Index and net foreign investors net trading volume on the Market for Alternative Investment (MAI) did not affect the Market for Alternative Investment (MAI) index because of its market value and liquidity.

Exchange Rate - THB/USD (EX), use the exchange rate of each month. According to the announcement of the Bank of Thailand. During the Thai economy, liquidity is good. As a result, the baht strengthened. Foreign investors are more interested in investing. As a result, net foreign investors' turnover increased. The exchange rate between the baht and the US dollar has the relationship in the same direction as the MAI. Sarunrat Terachotikanakul (2010) Study on Factors Affecting Foreign Exchange Trading Value of Foreign Investors in The Stock Exchange of Thailand found that the exchange rate between the baht and the US dollar has a correlation between trading volume on the SET 50.

The turnover of Local Individuals (LI), when the average monthly trading value of individual investors the increase in liquidity and confidence in investment in the MAI has led to a rise in the MAI. Therefore, it is expected that the average monthly trading volume of investors will increase. Local individuals have a relationship in the direction same with MAI. According to the research of Kanueanid Panalad (2013) study Factors that Affect Index of Market Price of MAI. The turnover of Local Individuals is in the same direction.

Price to Earnings (PE), when a listed company increases its profit margins, the price of MAI and the stock price index increases or the Price to Earnings is higher. It is predicted that if the growth rate of earnings per share the relationship is in the same direction as the MAI. In accordance with the research of Narong Jajajornkul (1998) studied the subject, Factors determining return on investment in securities of Thailand has Price to Earnings (PE) correlated with the return on investment in the SET in the same direction.

Market Dividend Yield (MDY) considers dividends to be shareholders' equity converted to equity. As a result, the shareholders' equity decreases. Such securities are reduced. It is expected that the rate of return correlates in the opposite direction to the MAI. According to the research of Piyanch Meankhow (2013) studied factors that affect the SET index. The correlation of Market Dividend Yield in the opposite direction is that of the Stock Exchange of Thailand.

The Stock Exchange of Thailand (SET), the index reflects the movement of all securities prices. It is expected that this will affect the relationship with the MAI due to institutional investors and foreign investors. It has not been invested in the Market for Alternative Investment (MAI), which has affected the volatility of the SET Index. This is in contrast to the research of Kanoongnuch Panadon (2013) studied Factors Affecting the Price Index of the Market for Alternative Investment (MAI) because of the reasons mentioned earlier.

Market Capitalization (MC) and Price to Book Ratio (P/BV), there is no correlation between the MAI and the MAI due to its high listing period. However, many of the businesses listed on the Stock Exchange of Thailand have increased their performance resulting in higher return on equity and low dividends. It was expected to review the results in market value per book value that was unlikely to be associated with the MAI. In accordance with the research of Narong Jajajornkul (1998) studied the subject Factors determining return on investment in securities of Thailand. It is found that the Market

Capitalization (MC) and Price to Book Ratio (PBV) are correlated with the return on investment in the stock market of Thailand during the period from 1992 to 1996.

#### 4.3 Suggestion

The Market for Alternative Investment (MAI) is one of the most attractive investment markets. A market that responds to small businesses to bring money to business. The risk is greater. The Stock Exchange of Thailand by size and investors. The current market volatility. People turn to invest more. This is for the benefit of the variable. Influence Index is instrumental in helping to make investment decisions and this study factors affecting the price index of the Market for Alternative Investment by Ordinary Least Square (OLS) regression model uses only 10 years of monthly data. More effective results. It should be stored more frequently daily or weekly.

### 5. Acknowledgments

This research has completed according to Asst. Prof. Dr. Somporn Punpocha give the good suggestion for the correction. The researcher has received the conceptual of the research completely. I have to thank and high respect, including all of instructors who gave the knowledge at University of the Thai Chamber of Commerce.

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**Factors Affecting Savings and Investment of  
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## **Abstract**

In this study, the research aims to study factors affecting the saving and investment of employees of financial institutions in Bangkok. The study is conducted to investigate the size, purpose, savings and investment of employees of financial institutions. This is a quantitative study. Quantitative research uses a survey research method with a questionnaire.(Questionnaire) The samples were 400 self-administered questionnaires and processed by the program. Based on the results of the study, the size and form of the objectives were found to be related to the size of the savings and investment, namely age, marital status, education level. Monthly income, monthly liability Behavior in accepting risk and only financial knowledge is not related to size, savings and investment. From the test relationship at the 95% confidence level, it was classified by style with the purpose of savings and investment of financial institution employees. In Bangkok It will be invested in money. The ultimate savings and investment goals are: Long-term stability is ensured. And as a guarantee to families, respectively invest in financial instruments. The purpose of saving and investing is to focus. Create long-term stability. Secondly, as a guarantee to the family and for the sake of capital. (Profit), respectively. Invest in Asset Forms. The purpose of saving and investing is to focus to build up the stability in the long run, the next is to secure the family and to the growth of capital. (Profit), respectively. Factors related to size and pattern of savings and investment in money form are age, status, education level, income per month, monthly liabilities behavior in accepting risk And financial knowledge. Factors related to size and pattern of savings and investment in financial instruments such as age, status, education level, income per month Monthly Liabilities Behavior in accepting risk and financial knowledge. Factors related to size and patterns of savings and investment in assets include age, status, education level, income per month Monthly Liabilities Behavior in accepting risk And financial knowledge.

**Keywords:** Savings, Investment, Liabilities Behaviors, Risk

## 1. Introduction

Savings are also an important factor in encouraging investment. Economic development If one earns more than one, it will cause savings. Savings can be stored on their own or invested to generate income. Keeping your savings will not generate revenue. The value of money continues to decline over time as the current inflation is rising. The reason for this is that people with savings often bring their money back to their different forms of income (Treasure Treasure, 1997). People's savings are usually in the form of cash, property or items. But nowadays, the choice of savings and to expand the savings in various ways. The categories are as follows (PhanomKiti Wang, 2000).

1. Savings in Cash Most of the population has savings. Savings in the form of deposits, such as savings deposits, fixed deposits.
2. Savings in the form of securities, such as holding a house or land condominium shares in the stock exchange. Bonds and other financial instruments.
3. Saving money in other forms, such as buying life insurance. Buying life insurance fund, etc. In the current situation,

Thai economy is slowing down. Make everyone pay close attention to security, wealth, finance, savings, investment and financial management, and in the midst of the current economic recovery. One problem with the savings system is that the interest rate on deposits is reduced. This affects only the depositors. The Fiscal Policy Office has forecast that in 2018, deposit rates and lending rates will remain low. In addition, the Monetary Policy Committee is expected to keep interest rates low. To pass on low cost finance to support the sale of the economy. (The Fiscal Policy Office, 2561) So what savings and investments should people take to make decisions on saving or investing are savings, investments, risks and returns?

The importance of savings and investments that will help to develop sustainable growth of the country. At present, household saving is a cornerstone of the country, not only on future capital needs of the country. As a result, public and private sector organizations have been campaigning for people to change their consumption behaviors to create more popular spending, reduce unnecessary consumption, and save on trouble or rest. Use in the future for the stability of life.

### *Research Objectives*

From the source of the problem, the objectives can be defined as follows.

1. To study the factors affecting the savings and investment behavior of employees of financial institutions. In Bangkok
2. To study the size, purpose, savings and investment of employees of financial institutions. In Bangkok



## *Research Hypothesis*

Based on research concept. The following hypotheses can be formulated.

1. Employees of financial institutions In Bangkok with different socio-economic characteristics, size, form and purpose of saving and investing are different.
2. Employees of financial institutions In Bangkok, there are different accepting behaviors, size, form and purpose. Of savings and investment difference.
3. Employees of financial institutions In different financial literacy settings, different sizes, forms and aims of savings and investment.

## **2. Literature Review**

### *Concepts and theories about savings*

(Basic economics knowledge: Fiscal Policy Office Ministry of Finance said that savings will be said to full. It is a savings. Household savings are closely related to actual consumption and household consumption. Because of the fact that after the household income. When to deduct taxes. The income is considered a household income can be used to actually. Households will allocate this income for consumption.

### *Concepts and theories of investment*

(Jirat Sangkaew. 2001: 7; According to Reilly, 1992.) Investments. It is said that investment refers to a certain amount of money during a period of time to generate future cash inflows, which would compensate the money lender. This cash flow should be worth the inflation and the uncertainty surrounding future cash flows.

### ***The concept of behavior and decision-making process of investors***

(Siriran Sritrat, 1996). "Behavior (action)" of a particular person. The search function (Searching) made by acquisition. Purchasing, using, securities, or services. By predicting the results of the use and the money paid into the product. By that definition, the study of investor behavior is the way in which each person makes a purchase decision and uses the product. "Behavior in person searching, buying, evaluating, and disposing of products and services. It is expected that the results will meet his needs.

### *Concepts and theories about risk*

(Sukhothai Thammathirat Open University, 1986: 470) stated that risk is the condition that investors must face. In the event that return on investment is not as expected, the return may be higher or lower than the level. This is due to the uncertainty of future events.

### *Financial Knowledge Concepts*

Jaruwan Kongkaew (2013) studied factors affecting the behavior and size of savings and investment of private sector employees in UdonThani. Quantitative research uses survey research methods. The questionnaire was used quantitatively to estimate the multiple regression model. The result of this study was that the factors related to saving size and investment were sex, age, marital

status, experience level. Monthly Income Investment And the monthly debt. There is only risk tolerance that does not correlate with the size of savings and investment. When classified by the type of savings and investment, it is found that private employees invest the most money. The study found that the aim of savings and investment that private employees place on the highest priority is to build long-term self-esteem as a guarantee for families and earn a certain amount of income and return. The second priority is to educate yourself or your children to keep the old age for capital growth (profit). The low level of liquidity in trading, the distribution of money in the investment for social acceptance, the relationship test using the multiple regression models, the size of savings and investment. The savings and investments of private sector employees were explained by the 49.1% The hypothesis is that the size of savings and investment is positively correlated with income, age, education, and liabilities.

Poramate Wongwiriyapong (2001). The study of saving and investment of private sector employees studied the size, form, purpose and study factors affecting saving and investment. The study found that the size of the target model was found to be related to the size of savings and investment, is sex, age, marital status, education level. Investment experience income per month And the monthly debt. Only accepting risk is not related to the size of savings and investment, and has tested the relationship using the Multiple Regression model. It is found that the savings size and investment based on the savings amount. And investment of private sector employees. It can be explained by the economic and social factors together 17.4 percent and is based on the assumption that. The size of savings and investments is positively correlated with income and long-term investment experience.

By the study of recent research, the study on the Promotion of Workers' Savings by the Office of the National Economic and Social Development Board (2008), interviewed about 2,028 jobseekers nationwide. Savings were found to be 60.7% of savings and 39.3% of those with savings. 26.4% Unable to save money, spending out of pocket and 9.0% are unable to save money and still have to borrow money. In addition, there are about 3.0% of workers who have the ability to save, but not save.

The group can not save money. The main reason is the low spending and income levels. Savings, but not savings, are found in both high-income and low-income groups. And the reason for not saving is from the need to buy new products always. The results of this study lead to the policy issue. How does the government provide incentives for people who have jobs? In order to provide enough work for the elderly to survive. The savings group has not turned to savings and the potential to save more money, so it would not be too much to say. An empirical study of jobseeker determinants has been instrumental in determining the appropriate approach that government should focus on.

Wiley UaPiyachat (2017) studied financial knowledge: determinants and effects on saving behavior were quasi-experimental, two-group experiment, pretest and posttest. The purpose of this study was to develop the experimental group saving behavior by providing financial literacy and evaluation training. The results of the survey revealed that the financial knowledge in the financial literacy category was lower than the financial behavior and financial attitude categories using the OLS method. The demographic factors influencing the level of financial literacy and the level of financial literacy have increased the level of savings. The experimental group found that the mean score in the basic knowledge and attitude categories of housewives in the experimental group was significantly different from the control group except in the control group.

### 3. Research Methodology

The questionnaire was divided into 5 parts. The first part was a questionnaire. Or economic and social characteristics, including gender, age, status, education level, job position, monthly income Part 2: Identifying risk behaviors: identifying or highlighting the individual. Personality Believe in yourself, use reasoning in making decisions and be cautious. Part 3 Savings and Investing are questions, information, savings and investment habits. Part 4: Savings and Investment Objectives The purpose is to save and to survive in various ways. Part 5 Financial Literacy It is a financial knowledge factor.

Analysis of data and statistics used. Descriptive Statistics are the collection of data collected from the sample of respondents in Part 1 and Part 2 by analyzing the results to describe the patterns of frequency distribution tables. Frequency, Percentage, Means, and Standard deviation. 2) Inferential statistics by analyzing data to study the size. Style and purpose The savings and investment of financial institution employees. In Bangkok Inferential statistics were analyzed by using Ttest and F-test and Chi-Square test: ( $\chi^2$ ). The hypothesis was statistically significant at 0.05.

### 4. Results

The results of personal data analysis of respondents showed that 77% of the respondents were male, 23% were female. The majority of the respondents were aged between 31-40 years, 37.50%. Most of them were 59% Most of them have a bachelor degree. 49.30 Mainly staff / officer 68% of them have monthly income of more than 35,000 baht. 34.8 Most of the monthly liabilities are less than 10,000 baht or 37.8 percent.

The risk-averse analysis of respondents found that there was a risk tolerance for saving and investing those who accepted low risk. Mostly female. 79.8 % of them are between 31 – 40 years old, accounting for 45.7%. Most have single status. At 63.3%, the number of employees was 80.3%. The monthly income was more than 35,000 baht, accounting for 30.1%. The monthly debt was less than 10,000 baht or 41%. Those who accept high risk. Most of the females are 74.9%, mostly between 20 – 30 years of age, or 37% of them are single. At 55.5 percent, the number of employees was 58.6 percent. The monthly income was more than 35,000 baht, or 38.3 percent, and the monthly debt was less than 10,000 baht, accounting for 35.2 percent.

The results of the financial literacy analysis of the respondents found that the knowledge of financial literacy at a low level. Most of them are female, with low risk acceptance. The majority of them are aged between 20-30 years, accounting for 46%. Most have single status. At 60%, there are 78% of staff, 78% of whom have monthly income of more than 35,000 Baht, or 28%, and monthly debt of less than 10,000 Baht. 30 people with high level of financial literacy. The majority were female, as well as 77.1%. Most of them are between 31-40 years of age, 38% of them are single. 58.9% of them had positions in the staffing level. Officer as well Percentage 66.6. Monthly income is more than 35,000 baht as well. 35.7 and the level of monthly debt is less than 10,000 baht or 38.9 percent.

The analysis of size, savings and total investment in the personal data of the sample group showed that the total value of 434,207 baht was the highest proportion of savings and investment in the form of financial instruments and the second was the form of financial instruments and assets. 64.63%, 25.52% and 8.86%, respectively, were male, with savings and investment larger than females. The average value of investment is 532,652 baht, with the largest proportion of saving and

investment in the form of investment in money, accounting for 63.79% over 50 years, with the largest saving of 1,216,580 baht. Most of the money is 45.85 percent of the total. Married status is the largest savings and investment value of 721,727 baht. The largest proportion of savings and investment in money. 58.60 Higher education level, the highest savings and investment value of 1,263,636 baht, with the highest proportion of saving and investment in assets, monthly income of more than 35,000 baht, saving size and large investment. The highest proportion of saving and investment was in the form of 49.5%, with a monthly debt of over 25,000 baht. The value of 1.20612 million baht, with total savings and investments in the most money.

The analysis of size, savings and total investment in risk tolerance of the sample found that the different risk tolerance values of 443,033 baht accounted for the highest proportion of savings and investment. 60.13% if the risk is high. The size of savings and investment was higher than that of the low risk groups. The highest proportion of savings and investment in the form of money. Accounted for 63.87%

Analysis of the savings size and total investment in financial knowledge of the sample. The difference in financial literacy was found to be 311,032 baht, accounting for 70.26% of the savings and investment. If you have a lot of financial knowledge. The size of savings and investment is larger than the sample with less financial knowledge. The highest proportion of savings and investment in the form of money. This is 62.75%.

## 5. Conclusion

Assumptions about personal factors that correlate with size, form and purpose of savings and investment of the sample found that the socioeconomic factors. The level of education, the monthly income, the monthly debt, the only factor of sex is not related to the size of the savings and investment of the sample. Relative to savings and investment in money, namely, age, status, education income per month. Monthly Liabilities Factors Relating to Savings and Investments in Money Financial instruments and assets include gender

Behavioral Assumption Testing in Relation to Size, Pattern, and Purpose of Savings and Investment of Samples. It was found that the acceptability of risk behaviors was related to the size of savings and investment. The risk tolerance behavior was correlated with saving and investment in monetary form. Financial instruments and assets

The financial literacy hypothesis test was related to size, pattern and purpose of saving and investment of the sample. The financial knowledge was correlated with the size of savings and investment. Financial knowledge is related to saving and investing in monetary form. Financial instruments and assets

Based on the analysis of the savings and investment objectives of the sample, it was found that the main objective of investing in money was to build long-term confidence. 4.15 The main objective of investing in financial instruments is to create long-term stability. The average value is 2.92 and the key objective in the asset model is to create long-term stability. The average is 2.48.

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**Factor Affecting the Personal Saving Management**



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## Abstract

The purpose of this research is for studying the factors affecting personal financial management. The research sample group is private company employees in Bangkok for 400 people with Stratified Random Sampling method. The research instruments are personal financial planning questionnaires. The content validity index is 1.00 and the reliability of the whole questionnaire is 0.93. These are analyzed by using Chi-square test, T-test, and F-test (ANOVA) that set the statistically significant at the 0.05. The research found that: 1) personal Information: Gender, Age, Status, Education, Number of family members, Number of children or people under responsibility, Monthly income and monthly expenses affects the Savings Behavior, 2) personal information: status, educational level, Number of family member, Monthly income affects financial management. While personal data on sex, age, number of children, family member under responsibility and Monthly expenses do not affect financial management, and 3) savings behavior: savings rate, saving style, saving purpose, savings model selection, saving timing, Saving Source and Management for retirement funds affects a financial management. Except for savings behavior for the upcoming future will not affects a financial management.

**Keywords:** Personal Saving, Financial Planning

## 1. Introduction

At present, we are in a state of complexity which implies to the transition to a constant changing society in social, economically and political aspects. That needs to be adapted and developed. This makes us face difficult decisions, no matter where we are, what career we do and money is an important factor in living. It plays very important role because people need to spend in their daily lives that it comforts and facilitates people as well. Money is the great influence to individual living for achieving economically goals of stability.

The financial planning in family care is managing money to fit all financial goals from today to the last day of life that its beginning must come from a secure foundation initially. From Income-

Expense management, Debt management, Risk management, the next is to manage for retirement saving. After there is money left, then it is to invest. So for many people who are about to start a financial plan or think that we already have a financial investment plan and then have a selected way to plan money management for the future securely. Money is an intermediary to exchange goods and services and paying debt as a measure for value and service which use along with variables: currency units, time and fixed location The money used in the economy is divided into 3 types: coins, paper money and scriptural money (which called a current account ordered to do transaction with cheque by the account owner).

Personal financial planning is the process of assessing financial status, the well being of each person and to improve earning, expense and investment for better status. That enables controllability over the expense and do financial planning. Good financial planning should begin with a financial data gathering, considered to be self-examination to realize the present financial status by gathering all the information and documents related to self finance and it helps us to overview our financial status clearly and accurately.

Financial planning is important for people at all ages. A 23 years old fresh graduate from university plans to buy a car and do saving money to buy a first house. For life insurance cost calculation for a 35 years old one, it must be planing to invest in various types of assets. 50 years old plans to invest after retirement to have an enough fund to cover living. Then financial planning is a life-long activity and it can be seen that the financial objectives does not need to be steady all the time. There always are changes, both in style and importance such as a planning for retirement should be considered since the beginning of professional life and continue by savings and investment. Until the retirement comes, financial planning and legacy planning becomes more important. Planning for each individual may be different depending on factors such as the plan for 30 years old who have a family with two children and a plan for 65 years old will be different.

Thailand has an increasing portion of the elderly population. This is because success of family planning, medical advances and more emphasis on health care. This is similar with developing countries and developed countries. As can be seen that Thailand has more population of over 65 years old. What comes after is that the number of elderly people in the near future will go greater than the public sector capability to give a enough and covered care. Thus the retirement life's care to have good and happy living become personal issue that each has to have good financial plans to have enough money for living in the retirement life. The government has promoted saving for retirement through the tax incentives. This can be seen from the support through Retirement Mutual Fund - RMF by Asset Management companies.

So, from the knowledge of personal financial planning in this part, researchers study the data because it is a problem for the research to study of savings behavior and financial management. From the learned information, there are bringing many aspect of knowledge to apply in the research to compare and analyze outcome in the next chapter. It also is good information for one who needs to study saving behavior and personal financial management and to apply the studied knowledge for daily living.

### *Research Objective*

- From the importance of this research problem, following objectives are set.
- To study insight and perception of financial planning.
  - Study of savings behavior affecting personal financial management.
  - To study personal information affecting personal financial management.

## *The Benefits of Research*

- To understand savings behavior and personal finance management that will be useful to ordinary people and be able to apply for daily life.
- To understand the importance of the problem and guide personal financial management and to recognize the financial management element and choose multi-channel for financial management such as savings with financial institutions, life insurance etc.
- To help people understand the importance of savings and financial management that suits to life. First, people need to know your real savings objective. Then people can start financial management plan.

## **2. Literature Review**

### *Concept of saving behavior*

The purpose of saving It depends on personal needs (Boonlert Jitmaneroj and Veerachat Kiriwongthong, 2014: 6).

- To save for when get sick or being elder and not to be a burden to children.
- For education, careers and money creation in the future.
- To be the inheritance to children and society.
- Create a secure life and financial stability.
- For incentives such as interest etc.

### Type of Saving

There are 3 types of saving, each has different returns. (Supawan Maneepanawong, 2009: 14-18): Savings in the form of fixed assets that it is necessary to own and secure the future. Most people choose this type of saving because objective to prevent risk: land, buildings, housing, machine, metal, jewelery, etc.

Savings in the form of financial assets, even with high liquidity, it can exchanges into cash faster, such as cash on hand, treasury bill, debenture, stock share, bond, ordinary lottery, Insurance, provident fund etc.

Savings deposit at financial institution is savings type that plays the most important role such as commercial banks, savings banks, finance companies, life insurance, savings and credit cooperatives, Civil servant's pension fund, provident fund, cooperative Deposit etc.

### Factors related to saving behavior

Depending on 7 factors (Sirinda, Klinjamhom,, 2012: 16-17):

Increased income has led people to tend to save more money than that increased income, as a result of growing economic conditions. This includes the diligence and good responsibility of savers.

The number of dependents or those who do not have increased money results to the growing expense On the other hand, people in working age have high savings and if there are this kind of people, it will more saving.

The life cycle of general people has low income at the beginning of life, but in middle age, people have a stable consumption and a lot of savings because they need to save for essential expense and for resignation during retirement age.

Occupation can indicate sources of income. People who have high income job will have great savings. At the same time, low-income job people can result in little savings or savings.

Rural and urban area is an important factor that defines an ability to save. Increased savings are a consequence of the development of different consumer goods market that creates a positive impact on people's savings.

Good education affects both positively and negatively in savings, more saving. When people have good education, then they become good savers and cultivate and support the saving mindset.

### Saving Option

“Pay before Save” is the way most people do because they have been cultivated and be taught since childhood that you should bring the remaining snack money each day to drop the saving box or jar but, in fact, this method is a obstacle to savings for the nowadays environment that there are massive invitations to buy at all times. Those who hold this guideline will lack the ability of self control and will not be able to save as they intended. Another way to save which highly can cultivate the saving mindset money is saving before using. This approach is like self-regulation that money is just enough to use in the set amount. People who choose this approach may feel uncomfortable with their feelings because they feel they do not enough have money. But this method can create good discipline If do it consistently, it will make the savior feel familiar with the money and can live comfortably. The first mechanism to saving money before using is to make an agreement with the bank to automatically deduct the salary automatically. (Surirat Surachde, 2012: 1)

### Obstacle to savings

Many people are interested in saving money nowadays, but it is not always successful. While saving money, there will be events and necessities which cause saving does not go as planned. These events and necessities may not always be the cause of us. This may be family members. The obstacle for saving money is the lack of discipline. The obstacle that should be considered in inflation, unexpect events, greed etc. There are important issues to be aware of is the questioning and answering seriously and consistently. If you look at timing for saving, If you begin at the age of 25 and have a retirement age of 60 that means you have about 35 years to work and saving, for after retirement, for 60 years to take care yourself and your family. (Somtaya Khemiriwat and others, 2012: 11).

### *Wealth overview*

The wealth of people (Kris Daektrakul, ML: 15) consists of

- Period of saving and wealth creation. It happens at age of 20-35. This time is the beginning of a profession when people are trying to make money for their own needs in the short term such as buy car and house with down payment. They accumulate money to buy property. People in this age may adjust monet for the future as well such as if a person working for the salary from a private company, they may accumulate send some money to a provident fund or if be a civil servant. They will also apply for a long-term investment fund, such as buying a mutual fund for retirement that would be a secure investment and maintains the principal.

- Period of need for wealth or stability. In the age of about 36-55 years is quite stable. In general, those who are in this period will pay off their debts until they are almost gone. This is the period when earned income from work is higher than the expenses and it is the beginning to invest and the most is the long-term investment for retirement. This kind of investment has a securely and steady return and maintains the first capital.

- Period of wealth increasing or expense. It happens at age of about 56 years and over. This is a period of spending. This is a time for not working at all or some people may do but less work. At this time, it would be a time to pay only. They will bring saving money out to spend from Pension Fund or from Social Security Fund. The least risky investments is selected. The investment goal for people in this age is to beat the inflation rate.

-Period of delivering wealth or being giver. This is time to only give at same time of expense when we have an enough saving to live until death and also have an urgent saving, life insurance and health insurance. There are sharing extra to children, relatives or donate to charities to help society.

From the ages, that can be seen. If you have a long investment period, you can be very risky because there still is a time to earn and invest that can also accept fluctuation more than elder. In every age, there should be investment which is adaptable to the lower risk acceptance when being elder. We can invest through a less risk channel (Stock Exchange of Thailand 2015:3-4).

### 3. Research Procedure

This study is a survey by studying personal finance management. The researcher collect data using a method defining size of sample group by Percentage estimation in a case not knowing populatain by Taro Yamane's formula with realibility level at 95%.Discrepancy rate is not over 5%. Sample group quantity is 400 people. For this research procedure's convenience in data analysis, a tool is questionare using for data colleting. Questionnaire is created to cover and suit this research and divided into 3 parts:

1. Personal Information: Gender, Age, Status, Education, Number of family members, Number of children and person under responsibility, monthly income and monthly expenses.

2. Personal information: status, educational level. Number of family member, Monthly income affects financial management. Personal data on sex, age, number of children, family member under responsibility and monthly expenses. The questionnaire is a check-list.

3. Savings behavior: savings rate, saving behavior, saving purpose, saving model selection, saving timing, saving source of information and financial management for retirement affects financial management. Saving behavior for the upcoming future features into Rating Scale question that a criterion is based Five-Point Likert Scales for 20 units.

After the data has been collected, the researcher will run examination on every piece of questionnaire by themselves as soon as possible. The researcher analyzes the data statistically that data will be processed by an automatic program. These following statistics will used to analyze the data:

1. Descriptive Statistics: Frequency, Percentage, Arithmetic Mean (Average), Standard Deviation which is tools for this analysis.

1.1 General information for questionnaire participant is analyzed by Frequency and Percentage.

1.2 Assessing saving behavior's Frequency, Mean and Standard Deviation.

2. Inferential Statistics for testing the relation between an independent variable and variable in hypothesizes at reliability index at 95%. There are following tools to analyze:

2.1 T- test for comparing the difference between 2 variable groups and F-test with One-Way ANOVA to for comparing the difference 2 variable groups and over

2.2 Pearson's Product – moment Correlation Coefficient



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**Investment's Behavior and Motivation Affecting  
Decision to Invest in Stock Exchange of Thailand**



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# **Investment's Behavior and Motivation Affecting Decision to Invest in Stock Exchange of Thailand**

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## **Abstract**

This research's objective is to study Investment behavior and motivation affecting decision to invest in Stock Exchange of Thailand. Sample group is investors in Stock Exchange of Thailand for 400 people. The research tool is a questionnaire which will be analyzed by an automatic computer program and statistics all is recorded by these following measuring: Frequency, Percentage, Arithmetic Mean (Average), Standard Deviation and bring these statistics to run the procedure of T-test, F-test, One-way Analysis of Variance: One-way ANOVA, Multiple Comparisons and do Multiple Regression Analysis. The study indicated that The study indicated that Most respondents were female under 25 years of age, single status, bachelor degree, earning 15,000-35,000 baht. Investment behavior has influenced the decision to invest in the Stock Exchange of Thailand. The motivation to work influences the investment decision in the Stock Exchange of Thailand, with statistically significant at the 0.05 level.

**Keywords:** Investment Behavior, Incentives, Decisions

## **1. Introduction**

Thailand Stock Exchange have its beginning from the first "National Economic and Social Development Plan" (1961-1966) which encountered the growth and boosted the economic stability and population's living quality. Then the second "National Economic and Social Development Plan" (1967-1971) introduced to establish initially the organized Stock Exchange where the important duty is "fund raising" to support the economy and industries development.

The development of modern Thailand Stock Exchange is divided into 2 eras: the first is Bangkok Stock Exchange was a private organization and then became The Securities Exchange of Thailand (Stock Exchange of Thailand as the present official name).

The Stock Exchange of Thailand was found in July 1962 as the limited partnership and became, a year later, a registered company limited and rename to “Bangkok Stock Exchange”. Although it had a great basic management for a stock trading since being Bangkok Stock Exchange but did not gain much attention among people and create the annual trading value at 160 million baht in 1968, 114 million baht in 1969. Trading volume lowered to 46 million baht in 1970 and downed on to 28 million baht 1971. Trading value was up to 87 million baht in 1972 but still not interesting for people. Trading value at the lowest point downed to 26 million and finally Bangkok Stock Exchange was considered as a failure and closed the business because lack of support from the government and people did not understand enough in the financial market.

“Motivation” is from Latin “Mover” (Kidd, 1973:101) which means similarly “ to move” in English that the meaning is “To move a person to a course of action”. Thus “Motivation” is interesting topic in every industry.

“Behavior” means actions which happen to human or human acts and means reactions when human encounter the temptations. Mentioned Behaviors can be divided into 2 types:

1. Uncontrollable Behavior is the reaction such flinching when a needle pierces, winking when an intense light hit eyes, etc.

2. Controllable and Manageable Behavior. Because human has Intelligence and the emotion, when human hit with temptations, Intelligence and emotion will judge how to act.

Process of decision making means a decision step’s defining since the first step to the last step. Processed Decision is an action from reasons and rules which is organized scientifically and be a tool to find the conclusion in making decision. Step of decision process has many types, depending on different scholar’s perspective.

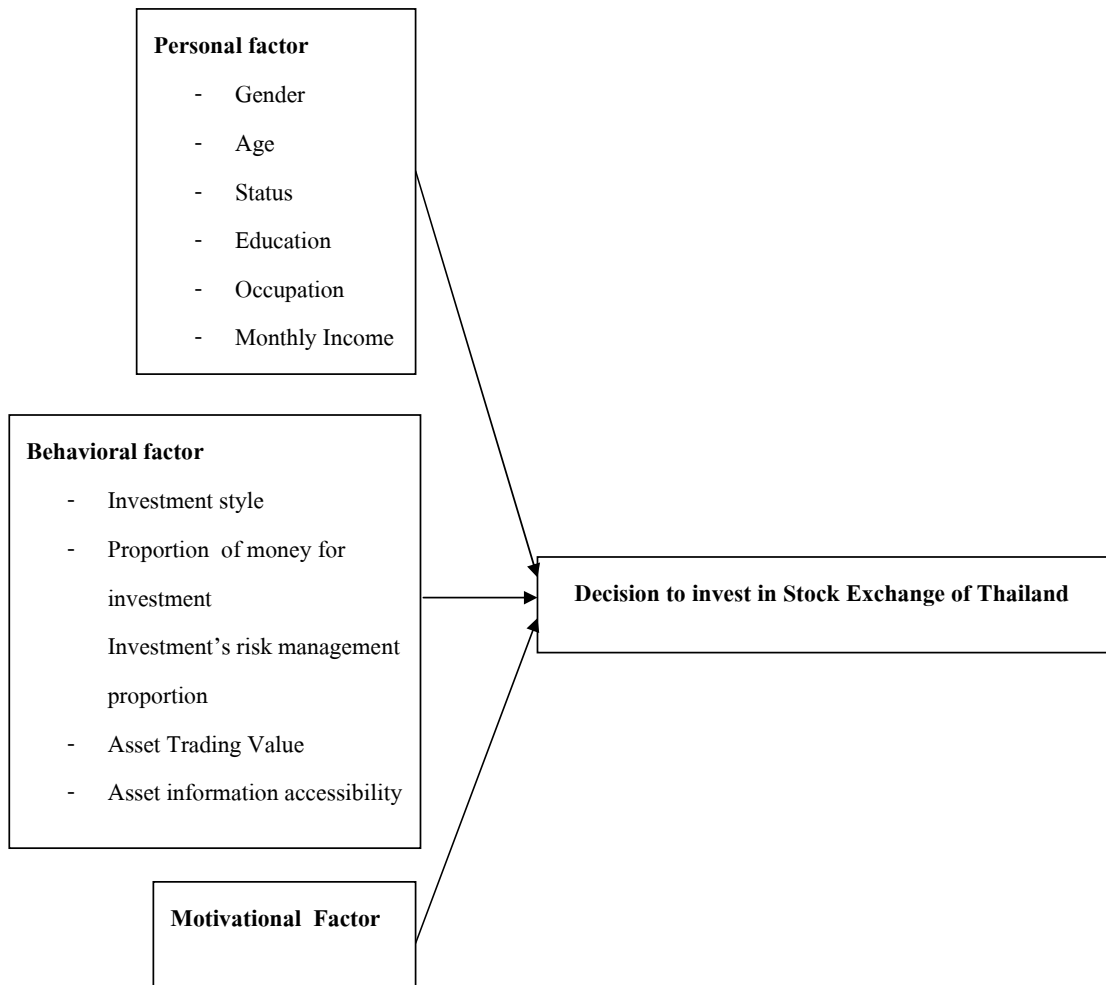
## **2. Research Objectives**

Define the following research objectives from existing problems:

1. To study behaviors affecting decision to invest in Stock Exchange of Thailand
2. To study the motivation affecting decision to invest in Stock Exchange of Thailand

## **3. Conceptual Framework**

It is able to write Conceptual Framework from this research’s objective to show the involvement to what we are interested to study:



**Figure 1** Conceptual Framework

#### 4. Research hypothesis

1. Different Personal factor affects a decision to invest in Stock Exchange of Thailand.
2. Different Behavioral factor affects a decision to invest in Stock Exchange of Thailand.
3. Different Motivational factor affects a decision to invest in Stock Exchange of Thailand.

#### 5. Expected Research Benefit

1. To be benefit to financial institutions which will bring the result to be a guide to create business strategies from a research about Investment's behavior and motivation affecting decision to invest in Stock Exchange of Thailand.
2. To be benefit to financial institutions to improve the system and be able to solve problems better.

## *Extent of Research*

### 1. Extent of population and sample group

Population to study is the number of people who invest Stock Exchange of Thailand at Bangkok with no exact quantity. Sample group of this study is groups of investor in Stock Exchange of Thailand, in the area of Bangkok with no exact quantity. Researchers calculate to find a sample group with no exact quantity by Yamane's ready-made chart which is a chart to find a sample group scale to estimate the population ratio. The ratio indicating the population's interest is 0.5 and trust level is 95% in that quantity is 400 people. The process collects data with Purposive Sampling. Location are a commercial buildings and office buildings in the area of Bangkok including "Modern Town building", "Silom Complex building" "Central World building" and "Central Ladprao building" and Convenience Sampling is to consider the sample group along the research objective and be pleasantly co-operate to do questionnaires.

### 2. Extent of Content

The study of Investment behavior and motivation affecting decision to invest in Stock Exchange of Thailand that researcher study factors such as personal factor, behavior factor and motivational factor for the investment

### 3. Extent of Time and Location

This research only collects data with population who live in the area of Bangkok.

There is a data collecting from sample group's given questionnaire. Researchers will collect data in defined areas that a time to hand questionnaire to a sample group is between 16<sup>th</sup> October 2018 to 31<sup>st</sup> October 2018

## *Statistic method and data analysis for this research is divided into 2 kinds*

- Descriptive Statistics includes Percentage, Arithmetic Mean and Standard Deviation.
- Inferential Statistics is the hypothesis analysis by researching statistic:

Hypothesis 1 will do T-test in case to compare outcome's 2 groups and will do F-test or One-way Analysis of Variance: One-way ANOVA. When difference is noticed, it must run Multiple Comparisons by Scheffe's method.

Hypothesis 2 and 3 will do Multiple Regression Analysis to find relation between variables.

## **6. Results Analysis**

Analytic outcome found that, for sample group of 424 people. Most participants have these following results:

- Number of woman is 300 people or 72.99%. Number of man is 111 or 27.01%.
- Participants mostly are under 25 years old for 192 or 46.72%, secondly aged 25-23 for 164 or 39.90%, aged 35-44 is 43 or 10.46% and aged 45-54 and over 55 is 6 or 1.46%.
- 13.38 Most participants are single or 356 persons or 86.62% and next those who is married for 55 or 13.38%.

- Participants who have bachelor degree are 302 persons or 73.48%, higher than bachelor level for 91 or 22.14% and lower than bachelor degree for 18 or 4.38%.

- Most participants are employees for 243 people or 59.12%, students for 56 people or 13.64%, Civil Servant or government employee for 55 or 13.38%, entrepreneur for 44 or 10.71% and others are 13 or 3.16%.

- Most participant have a monthly income at 10,001-35,500 Baht for 283 people or 68.86%, Under or equal 15000 Baht for 73 people or 17.76%, 35,001-55,000 Baht for 25 people or 6.08, 50,001-75,000 Baht for 18 people or 4.38% ,75,001-100,000 Baht and over 100,000 Baht for 6 people or 1.46%.

- The majority of respondents choose securities industry business group of 105 percent sample, real estate and construction group 25.50 number 91 example 22.10 percent consumer goods group 67 samples representing 16.30 technology services group group 52% 12.70 samples product group industry sample 51 percent, the number of farmers and food industry groups 12.40 25 example 6.10 per cent resource group 13 sample 3.20 percent other groups the number of sample 7 1.70 percent, respectively.

- Most respondents chose to purchase the securities by submitting orders via the Internet. number of 255 samples representing a 62.00 commands via phone number example 83 percent 20.20 getting orders that trading room themselves, the number of samples 66% others 7 16.10 example 1.70 percent, respectively.

- The majority of respondents chose that investment is the amount of savings the number of 363 percent sample, the number of loans in 42 88.30% and other six 10.20 example 1.50 percent, respectively.

- The majority of respondents decided to trade stocks by themselves, the number of 174 samples 42.30% family/friends/news the number 99 example 24.10 percent analysts/analysis number of 69 samples 16.80 percent Internet/newspapers/Radio/tv, total number of samples, 45% number of 24 10.90 blogger example 5.80 percent, respectively.

- Most respondents consider information in investment, Internet website, number of samples, representing 325 79.10 secondary investment analysis is the amount of 68 examples 16.50 percent and newspaper/the Gospel about investment, number of samples, representing 18 4.40, respectively.

- The majority of respondents holding of securities from 1-2 securities number 312 75.90 percent sample, the second holding a sample number of securities 3-5 69 percent to 16.80 holding 6 to 10 securities number of 5.80 percent, and 24 samples greater than 10 securities, up to the amount of six samples, representing 1.50.

Summary of spatial statistics approach assumes the (Inferential Statistics) which include an analysis of all three hypotheses by statistical research is used as follows:

-Personal factors consist of different gender, age, marital status, educational level, occupation, and income per month. Affecting the decision to invest in the stock exchange of Thailand Thailand. Significantly different at the 0.05 level of statistical Behavioural factors.

-Different investments consists To purchase the securities industry funds the person have influence in decision making. Sources of information on investments and securities Affecting the decision to invest in the stock exchange of Thailand Thailand. Significantly different at the 0.05 level of statistical.

-Motivation factors in different investments consists To increase revenue. To build a reputation of knowledge, news Knowing the various company activates a part of the obligations and fun entertainment. Affecting the decision to invest in the stock exchange of Thailand country differ statistically significant at the 0.05 level.

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**Factors Affecting on Decision Making towards Investment in  
the Stock Exchange of Thailand of Individual Investors in Bangkok**

**RCGR<sup>2nd</sup>  
2018**

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# **Factors Affecting on Decision Making towards Investment in the Stock Exchange of Thailand of Individual Investors in Bangkok**

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## **Abstract**

The purpose of the study was to explore individual investor's behavior in the Stock Exchange of Thailand and to explore the factors affect on decision making toward investment in the Stock Exchange of Thailand of individual investors in Bangkok. The samples of the study were 400 individual investors in the Stock Exchange of Thailand in Bangkok. The instrument used in the study was a questionnaire. Descriptive statistics consisting of percentage mean and standard deviation and inferential statistics consisting of Independent t-test, one way analysis of variance and multiple regression analysis. The majority of the study was female, age between 50-59 years old, graduate in bachelor's degree, working in the private companies with monthly income range from 20,001 – 50,000 baht, and having more than 9 year investment experiences. The study found that the behavior of the sampling investors were more than one year investing in each stock, invested in financial and technology sector, used Bualuang Securities Public Company Limited, invested per order between 20,001-50,000 baht , invested by saving money, decided the investment by themselves, studied internet/investment websites and held less than 5 securities in average. The highest average of investment motivation was an opportunity to increase income. For investment decision, individual investors prioritized on company financial status and company profit. The hypothesis testing revealed that age, educational level, income, occupation, and investment experience had different effects on the investment decisions in the Stock Exchange of Thailand. Therefore individual investors with different investment behaviors would have different investment decisions. Also found that different investment incentives have different investment decisions. Moreover, different investment incentives and behaviors resulted in different investment decisions. The study found that the factors that affect the investment decision were an opportunity to increase income, an updated news and information, and involved in society. The influenced rates were 0.376, 0.133 and 0.145, respectively.

**Keywords:** Investment Decision, Individual Investors

## **1. Introduction**

Investment is an important part of future planning. If you let the money is inferior to inflation. May have financial problems in the future. Especially when it comes to retirement from work, the costs are likely to increase, regardless of the cost of living, medical care or expenses for travel. Both public and private retirement savings systems do not yet have adequate support systems. Although there are old social security funds or provident fund or the government pension fund. But the amount of money that is expected from the savings. It is not enough to live in retirement. So if

we do not have a good plan for our lives right now. It is likely that it is possible. We will have to come back to work in the old age in order to nurture ourselves. Or may become a burden for our children to care for us in the future. Financial and investment It becomes an important part of every one's life planning. The investments that were first thought of were: Investment in common stock. Also known as stock trading or stock investing. The stock returns better than other investments. On average, stock markets around the world can generate returns of 7-10% per year. For the Thai market, The Stock Exchange of Thailand reported that the return from 2003 to 2013 was 17.31%. While deposit and debt instruments only 2-3% returns (The Stock Exchange of Thailand, 2558). Investors in the Stock Exchange of Thailand in 2008 amounted to 1,652,320 persons. In 2013, the number of investors increased to 5,059,549, an increase of 206.21%. In the year 2017, there were 17,213,568 investors, an increase of 240.22% from the previous year (The Stock Exchange of Thailand, 2560). Many investors who do not study and analyze the data and do not use the relevant technical tools before making a decision to invest make the value of shares in the trading account is not as expected. So-called stock losses. So many investor decided to leave the stock market finally.

From that cause, It is interesting to study “Factors Affecting on Decision Making toward Investment in the Stock Exchange of Thailand of Individual Investors in Bangkok”.

The information is a guide to securities company or The Stock Exchange of Thailand (SET) has set up training courses or guidelines to create the right knowledge for investors.

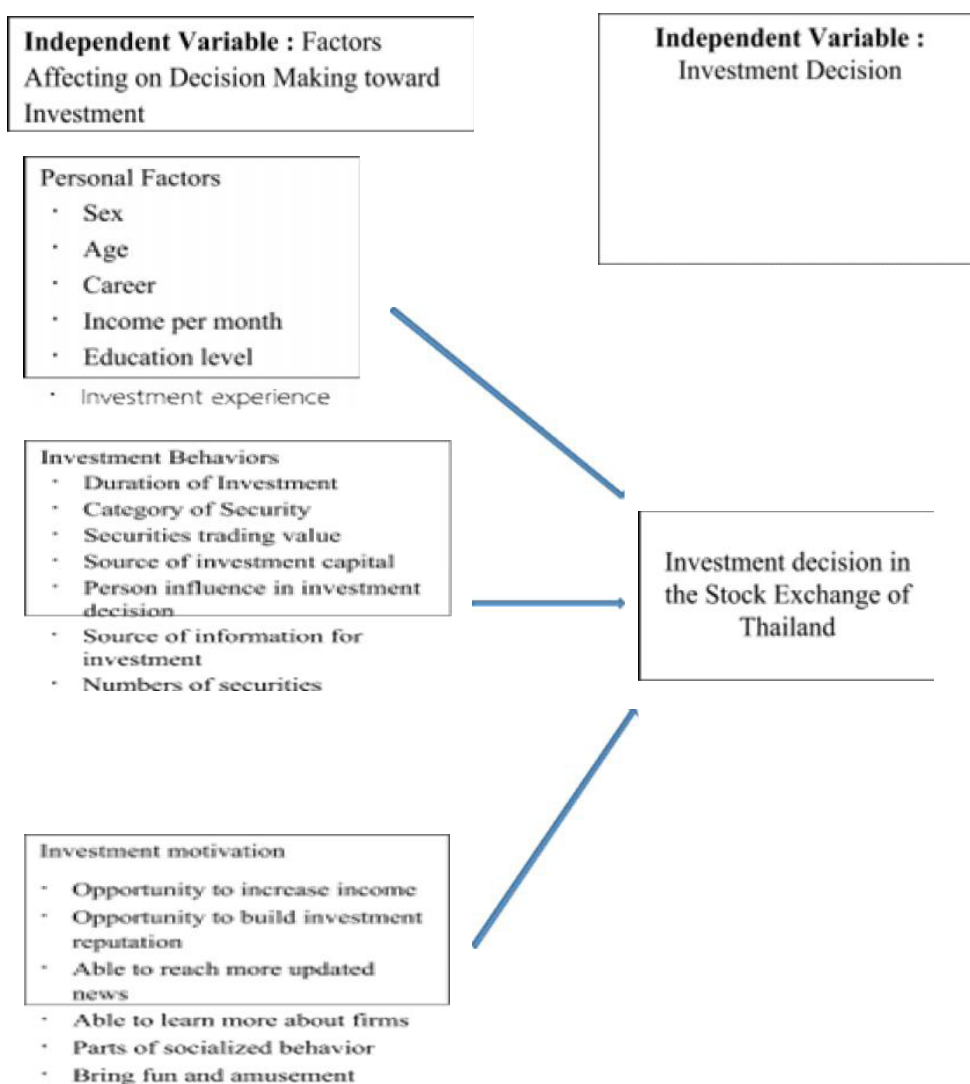
### *Objectives*

1. To study individual investors behavior in the Stock Exchange of Thailand
2. To study the factors affect on decision making toward investment in the Stock Exchange of Thailand of individual investors in Bangkok.

### *Hypothesis*

1. Different personal factors had different effects on investment decisions in the Stock Exchange of Thailand.
2. Different investment behaviors had different effects on investment decisions in the Stock Exchange of Thailand.
3. Investment incentives affect investment decisions in the Stock Exchange of Thailand.

## Conceptual Framework



## 2. Literature Review

The Securities and Exchange Act BE 2535 (1992) requires that the operations of the Stock Exchange of Thailand under the supervision of the Securities and Exchange Commission (SEC), the Board of Directors of the Stock Exchange of Thailand. It is the policy and control of the SET. The Stock Exchange plays an important role.

1. Act as a trading center for listed securities. Development of systems that necessary to facilitate the trading of securities.
2. Carry out any business. Securities trading involves the clearing house and Securities registrar or other related activities.
3. Other business operations approved by the Securities and Exchange Commission.

## **The performance of The Stock Exchange of Thailand in 2017**

Annual Report of The Stock Exchange of Thailand (2017, p.15) shows continued strong regional potential. At the end of 2017, the SET Index closed at 1,753.71 points, up 210.77 points or 13.66% from the end of 2016. Market capitalization of SET and mai was at 17.92 trillion baht, up 15.62% from the end of 2016, in line with the domestic economic recovery. Market capitalization of SET and mai was at 17.92 trillion baht, up 15.62% from the end of 2016, in line with the domestic economic recovery. Investors and the private sector are more confident in the growth of the domestic economy. As a result, the market value of securities fundraising through newly listed companies (IPOs), the highest in ASEAN-5 was at 426,349 million baht, with average daily trading value of SET and mai at 50,114 million baht, the highest liquidity in the ASEAN region. Since 2012, the average daily trading volume of SET and mai remains the highest traded volume in the region. ASEAN Continues from 2012. In the year 2017, the average daily trading value of SET and mai was 50,114 million baht per day. Trading of SET and mai securities by type of investors in 2017 consists of:

- 1) Local investors have an average daily trading value of 24,208 million baht, accounting for 48.31% of total trading volume, down from 53.81% in 2016.
- 2) Foreign investors have a daily trading value of 15,151 million baht, representing 30.23% of total trading volume, up from 25.57% in the previous year.
- 3) 3) The local institutional investors have a trading value of 5,517 million baht per day, representing 11.01% of total trading volume, up from 10.10% in the previous year. And
- 4) Group of Securities Companies with Average Trading Value Daily trading volume was 5,238 million baht, representing 10.45% of total trading value, down from 10.52% in 2016.

### **Concepts and theories about motivation**

Motivation (Chanisa Appamata, page 8) is the power to push people to behave. It also sets the direction and goal. That behavior. Highly motivated people will endeavor to reach their goals without reluctance. But people with low motivation will not show behavior. Or do not abandon the action before the goal.

The motivation (Siriporn Juntasri. 2550, p. 10) is the motivation or the motivation. The person who has internal motivation will be happy to do things because of his own satisfaction, no reward or praise. Individuals with external motives will do something to be recognized by others. Hope reward or reward.

Suchada Sukbumroongsilp (2553, p. 17) said that motivation is what is within the individual as a propulsion of power. Each person who completes one of the actions. There is a process by which all human beings have expectations, needs, and goals. To drive (Drive) to lead (Goals), so the incentive to influence the motivation. Show behavior in a certain direction and maintain it for yourself to get what you want or want.

Siriwan Sereirat (1999, p. 415-416) presented the concept of motivation or the theory of three basic needs:

1. Need for Power has found that individuals have a high power requirement. It is associated with influence and control. These people need leadership. He is the one who wants to work better than anyone else.
2. Need for Affiliation, People with this requirement will be satisfied from being loved. And tend to avoid the pain of resistance by members of the social group. He will maintain

good relationships in society. Pleased to cooperate rather than exploit. Try to create and maintain good relationships with others. To build a good understanding of the society in which he is a member.

3. Need for Achievement, person who need high success will have a strong desire to succeed, afraid of failure, want to compete, set a difficult goal for themselves, have a risky attitude but do not like gambling, pleased to analyze and evaluate problems, have the responsibility to complete the task or seek or try to find the best solution.

## **Decision Theory**

Decision theory is the use of rational ideas to make the best choices. There are two types of decision making: one for decision theory by decision method and Decision-making theories as decided by the individual. (Sukhothai Thammathirat Open University , 2548, p.263-264)

1. Decision theory by decision method
  - 1) Predictive Theory
  - 2) Descriptive Decision Theory
  - 3) Theory of decision theory.
2. Decision-making theories as decided by the individual
  - 1) Decision by a single person.
  - 2) Decision by group

## **The concept of investment behavior**

Investment means the purchase of real estate or securities of a person or institution. The return is proportional to the risk over a long period of about 10 years, but not less than 3 years. Investment is divided into three major types. (<https://salamanderr.wordpress.com/2008/12/09/Investment Theory/>)

1. consumer investment
2. business or economic investment
3. (financial or securities investment

Investment in the Stock Exchange of Thailand It is an alternative investment that gets the attention of those who have savings. It has a higher return than other types of investments. In addition, the SET has many listed companies. The stock market is ideal for those who want to diversify their investments.

## **3. Research Methodology**

### *Population and Sample*

Population is individual investors in Bangkok who Invest in the Stock Exchange of Thailand Sampling Method was convenience sampling. Determine sample size by using formula in case of unknown population. At the 95% confidence level(นราศรี ไวนิชกุล และชูศักดิ์ อุคมศรี, 2542). The sample size was 385 and add 15 sample size. So that the sample size used in this study was 400 samples.

## Research Tools

The instrument used in this study was a questionnaire developed by the researcher in accordance with the objectives of the study, and related literature. The questionnaire was divided into 4 sections.

Section 1 Personal information : 6 checklist questions

Section 2 Investment behaviors : 8 checklist questions

Section 3 Investment motivations : 6 Likert scale questions

Section 4 Investment decision : 6 Likert scale questions

Section 5 Other opinions : Open end question

## Statistics

Descriptive statistics consisting of percentage mean and standard deviation and inferential statistics consisting of Independent t-test, one way analysis of variance and multiple regression analysis.

## 4. Conclusion

The majority of the study was female, age between 50-59 years old, graduate in bachelor's degree, working in the private companies with monthly income range from 20,001 – 50,000 baht, and having more than 9 year investment experiences. The study found that the behavior of the sampling investors were more than one year investing in each stock, invested in financial and technology sector, used Bualuang Securities Public Company Limited, invested per order between 20,001-50,000 baht , invested by saving money, decided the investment by themselves, studied internet/investment websites and held less than 5 securities in average. The highest average of investment motivation was an opportunity to increase income. For investment decision, individual investors prioritized on company financial status and company profit.

**Table 1** Conclusion Analysis of Investment Motivation Data

Investment Motivation	$\bar{X}$	S.D.	Opinion level
1. Opportunity to increase income	3.93	0.83	very agree
2. Opportunity to build investment reputation	1.84	0.97	less agree
3. Able to reach more updated news	3.12	1.16	agree
4. Able to learn more about firms	3.27	1.21	agree
5. Parts of socialized behavior	2.22	1.11	less agree
6. Bring fun and amusement	2.34	1.20	less agree
Average	2.79	1.30	agree

The hypothesis testing revealed that age, educational level, income, occupation, and investment experience had different effects on the investment decisions in the Stock Exchange of Thailand. Therefore individual investors with different investment behaviors would have different investment decisions. Also found that different investment incentives have different investment decisions. Moreover, different investment incentives and behaviors resulted in different investment decisions. The study found that the factors that affect the investment decision were an opportunity to increase income, an updated news and information, and involved in society. The influenced rates 0.376, 0.133 and 0.145, respectively.

**Table 2** Investment incentives affecting investment decisions.

	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
(Constant)	1.466	.158		9.257	.000
1. Opportunity to increase income	.376	.041	.422	9.157**	.000
2. Opportunity to build investment reputation	-.028	.049	-.037	-.572	.567
3. Able to reach more updated news	.133	.042	.209	3.188**	.002
4. Able to learn more about firms	-.017	.039	-.028	-.438	.661
5. Parts of socialized behavior	.145	.044	.218	3.302**	.001
6. Bring fun and amusement	-.043	.031	-.071	-1.402	.162
F -test	31.254**				
R	0.568				
R <sup>2</sup>	0.323				

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**Factors of Financial Well-Being of Officer under Municipality  
of Bang Bua Thong District Nonthaburi Province**

**RCGR<sup>2nd</sup>  
2018**

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# Factors of Financial Well-Being of Officer under Municipality of Bang Bua Thong District Nonthaburi Province

by

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## Abstract

This research aims to study about personal factor, financial Literacy and personal financial planning for retirement of officer under municipality of Bang Bua Thong district Nonthaburi province by studying with sample 140 officers via using questionnaire as a tool to collect data. Analyze by statistic, frequency, mean, percentage, standard deviation, t-test (independent samples) and F-test (One-Way ANOVA) with statistic significant level at 0.05. The results show that the majority of sample is women between 31-40 years old, graduated in bachelor's degree, mean salary at least 20,000 bath, married with officer husband and fair knowledge with financial. financial well-being is measured by financial ratio, found that 50.7% of sample group has non appropriate liquidity, 87.9% has appropriate debt ratio, 51.4% has non appropriate saving ratio and measured by opinion found it is in intermediate level. They have a plan after retire since in work period. Compare to financial well-being classified by preparation, other income and monthly expense has difference in statistics significant level at 0.05.

**Keywords:** Financial Literacy, Personal Financial Planning, Retirement, Financial Well-Being

## 1. Background

Thailand 4.0 is a revolution of economic structure aim to build a stable and wealth condition from inside. Motivate by sufficient economy via innovation and fulfill with technology. Collaboration between government, university and company such as robot developing for solution of elderly society to powered elderly society (Ph.D Suwit Maesintharee, 2016). The retired life have to be plan because the majority of retired people don't have in come but all have expenses for daily life, so government and private organization start to support the idea about retired life planning since they're in work period. But in reality found that elderly people don't have a plan and have a debt after retired life in Thailand so they have to rely on family or government seriously. World has changed every day, one of important skill is financial literacy which relate to finance, concept and behavior. This will lead to good financial decision. (Mr. Darren Buckley, 2015). Financial literacy in Thailand is a vary importance skill but people don't have enough skill about it. This causes a big gap of income and also cause a inequality of citizen.

Financial well-being is an appropriate financial condition of themselves or daily life with financial management wisely. Freely to pay in each times, enough money for daily life debt and saving for future (Rath & Harter, 2010). Especially quality retired life.

Reasons to study about Factors of Financial well-being of officer under municipality of Bang Bua Thong district Nonthaburi province are because almost officers have a debt as a result of lower salary when compare with private organization and also at high risk to start a debt from credit card and private credit (National Statistical Office,2553) while cost of living still raised every year but the major problem is Thai people don't have a plan to deal with it.

With no financial plan which suit to themselves, not enough money for daily life and not enough saving money are a cause of unsuccessful in financial planning after retired. Lack of financial literacy is another one serious problem to live and improve daily life in nowadays. And the ideal of Thai people that elderly people are willingly to rely on their descendants it bring the burden to family and governments.

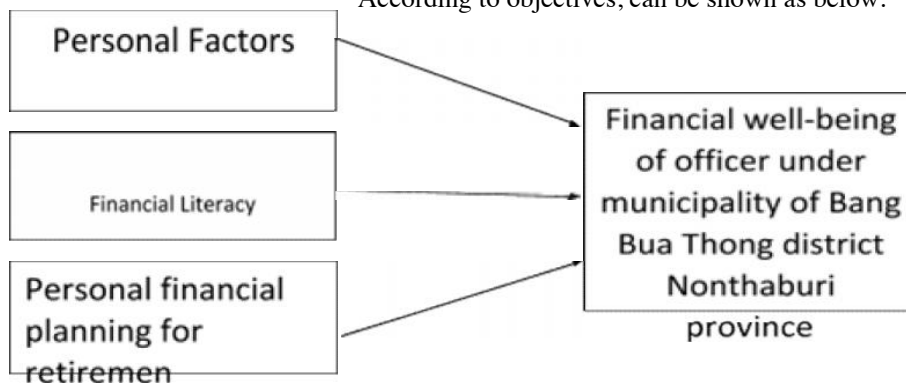
Point of view consist of personal factor, financial Literacy and personal financial planning for retirement all of these will affect to a life after retired and also a financial well-being of their own.

### *Research Objectives*

1. To study Factors of personal factor of officer under municipality of Bang Bua Thong district Nonthaburi province.
2. To study financial Literacy condition of officer under municipality of Bang Bua Thong district Nonthaburi province.
3. To study personal financial planning for retirement condition of officer under municipality of Bang Bua Thong district Nonthaburi province.

### *Concept Framework*

According to objectives, can be shown as below.



### *Research Hypothesis*

1. Different personal factors affect to financial well-being of officer under municipality of Bang Bua Thong district Nonthaburi province
2. Different financial Literacy affects to financial condition of officer under municipality of Bang Bua Thong district Nonthaburi province
3. Different personal financial planning for retirement affects to financial condition of officer under municipality of Bang Bua Thong district Nonthaburi province

### *Expected Benefits*

1. Use the results in this research to facilitate people about importance of personal financial planning for retirement
2. Use the results in this research to support government about knowledge training in financial of officer.
3. To give a knowledge of importance of personal financial planning for retirement

### *Scope of Research*

1. Scope of population: 140 from 178 officers in Bang Bua Thong, Nonthaburi.
2. Detail and variants:  
Independence Variable is personal factor, financial Literacy factor and personal financial planning for retirement factor  
Dependence Variable is financial well-being of officers in Bang Bua Thong, Nonthaburi
3. Scope of time and place to study from officers in Bang Bua Thong, Nonthaburi is 1 month (15<sup>th</sup> October 2018 – 15<sup>th</sup> November 2018)

## **2. Literature Review**

From study the literature review which relate to Factors of financial well-being of officer under municipality of Bang Bua Thong district Nonthaburi province, the data can be classified as below

1. Concept and theory of financial Literacy
2. Concept and theory of personal financial planning
3. Concept and theory of financial well-being
4. Concept and theory retired life's planning
5. Literature review

### *Procedure*

#### 1. Population and sample group

Population in this research is 178 officers in Bang Bua Thong, Nonthaburi

Sample group in this research is simple random sampling to limit size of sample by Krejcie and Morgan table. This is appropriate to population size 10 or more. Sample size is 123 samples and increase to 17 samples. Final size is 140 samples.

#### 2. Tools

Tools in this research is questionnaire with 5 sections.

Section 1 personal factor

Section 2 financial Literacy factor

Section 3 financial planning factor

Section 4 financial well-being factor

Section 5 recommendation

#### 3. Effectiveness of tools

To test questionnaire's validity and reliable by present a prototype of questionnaire to advisor for checking content validity from each question that have to be along with objectives in this research, then improve the questionnaire and test the reliability by spreading questionnaire to similar

sample for 30 pieces. The collected data was analyzed by Cronbach's Alpha Coefficient and receive a confidence value 0.80 which higher that acceptable at 0.70. Conclude that this prototype is appropriate to use as complete version.

#### 4. Data collection

Researcher use spreading questionnaire to each sample group as above within 15<sup>th</sup> October 2018 – 15<sup>th</sup> November 2018. After that researcher can collect all of 140 questionnaire from sample group.

#### 5. Analysis

5.1 Coding on each questionnaire.

5.2 Apply general coding form in computer.

5.3 Use instant program to analyze the data with statistics.

#### 6. Statistics methods

6.1 Descriptive statistics is a method to determine conclusion and attribute of population by conclude and interpret only group of sample with no use to other group of sample via frequency, percentage, central tendency, mean, measure variation and standard deviation for grouping the information

6.2 Inferential statistics use to test the hypothesis by t-test (independent samples) to compare 2 independent samples. F-test for analyze One-Way ANOVA at statistics significant level at 0.05

### 4. Results Analysis

Studying of personal factor shows that 72.90% is a women, 50.7% is 31-40 years old, 55% graduated in bachelor's degree, 30.7% has mean salary 20,000 bath or more and 54.3% is married.

Studying financial Literacy shows found that knowledge of sample group is good which means 88.6% can consider and decide to choose between ATM card and Debit card depend on their finance condition, 86.4% is a good debtor (pay back debt on time), 87.1% money value of now and 20 years after this is not equal and 93.6% has an inflation. The mean financial Literacy is 11.51% which is at intermediate from full score 27 points. Minimum point is 5 points while maximum is 15 points.

Studying of personal financial planning for retirement found that 67.1% has a plan after retired, 30.7% has no plan, 48.6% will start a plan when has 10 years left, 45.7% has a plan and following it, 59.3% has enough money after retire, 43.6% has more than 20,000 baht per month after retire, 54.3% has other income, 50% controlled expended money in limit and 30.7% keep in touch with economic news every week.

Studying of financial well-being measured by personal finance ratio, 49.3% has appropriate liquidity and 50.7% has non appropriate. 87.9% has appropriate debt ratio and 12.1% has non appropriate, 48.6% has appropriate saving ratio and 51.4% has non appropriate.

Studying financial well-being factor measured by population's opinion is at intermediate in every question. They have concern that saving money may be not enough for retired life. Concern about social expend money such as wedding, birthday and others. Each month if they can save money to the end of month they will fell that they can manage income for unpredictable expense.

Result of first hypothesis Different personal factors affect to financial well-being of officer under municipality of Bang Bua Thong district Nonthaburi province found that there's no difference when classified with sex, age, salary, status and spouse's job.

Result of second hypothesis financial Literacy affects to financial well-being of officer under municipality of Bang Bua Thong district Nonthaburi province found that there's no difference when classified with financial Literacy.

Result of third hypothesis personal financial planning for retirement affects to financial well-being of officer under municipality of Bang Bua Thong district Nonthaburi province found that there's no difference when classified with preparation after retire is different with statistics significant at 0.05.

## **5. Conclusion and Discussion**

The discussion of Factors of financial well-being of officer under municipality of Bang Bua Thong district Nonthaburi province shown as below:

Results show that the majority of sample is a women between 31-40 years old, graduated in bachelor's degree, salary was 20,000 baht or more, married and spouse was an officer.

Results show that samples has an intermediate knowledge about financial and can choose between ATM card and Debit card according to their financial condition. Saving money and inflation is related.

Results of studying personal financial planning for retirement found that majority has a plan after retired and following it, they has enough money after retire, they has more than 20,000 baht per month after retire, they has other income, they can controlled expended money in limit and keep in touch with economic news every week.

Results of studying financial well-being measured by finance ratio found that sample group has non appropriate liquidity, appropriate debt ratio and non appropriate saving ratio.

Results of studying financial well-being measured by opinion found in intermediate level including each question. Result sort by mean value from max to min is concern that saving money won't enough after retire, concern about social expense, concern about unpredictable expense management, feel save when have enough saving money and satisfied with money until the end of the month.

From testing first hypothesis, Different personal factors affect to financial well-being of officer under municipality of Bang Bua Thong district Nonthaburi province found that there's no difference that contrast with studying of Tawechai Chaysoongnern and Piyathida Khuhirunyarat (2011). They reported as there's a statistic significant in personal attribute factor such as education, status, daily care person and sick people in their life. All of these affect to personal life.

Result of second hypothesis financial Literacy affects to financial well-being of officer under municipality of Bang Bua Thong district Nonthaburi province found that there's no difference which contrast with Kornnika Varavichanee (2017) who studied about finance and life of financial institute's officer in SCB found that there're both appropriate and non appropriate.

Result of third hypothesis personal financial planning for retirement affects to financial well-being of officer under municipality of Bang Bua Thong district Nonthaburi province found that there's no difference when classified with preparation after retire is different with statistics significant at 0.05 that along with Charawee Bootdumrong (2011) who studied about finance and needed of knowledge in law affect to financial well-being of Salaya sub-district. Found that older of community accept that expense and saving are relate to financial well-being.

#### *Recommendation from results*

1. With these result such as loaning and owning credit card to be the one of learning course. This may be improve financial well-being of officers in Bang Bua Thong district Nonthaburi province

2. Should be facilitated the officers to start planning the income money all along until the end of the month.

3. Should to teach about importance of retired plan, salary management and other income for better financial well-being in future.

#### *Recommendation for further work*

1. Should be an In-depth interview or focus group interview for quality data about opinion in financial plan after retire of officer in Bang Bua Thong, Nonthaburi. That will support the quantity data from questionnaire which will make research has more depth in other dimensions.

2. Should be a study of internal and external factor of organization about retired plan such as economy, family and stress from duty.



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**Real Estate - Treasure of Richness**

**RCGR<sup>2nd</sup>  
2018**

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# Real Estate - Treasure of Richness

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## Abstract

This article discussed about the investment on real estates including lands, condominium, house, townhouse, commercial building, office building, and many more. In public eyes, they would think real estate is about rich and big proprietors who have enough money to easily buy it. In contrast, the reality is that real estate could be accessed by just anyone and there are more and more investors who put their interest in this kind of investment because it could yield very high profit with only little investment, if people know techniques of correct investment. There are actually many methods to invest in real estates. However, this article will only present 8 easy methods that will surely make people rich and fall in love with the investment.

**Keywords:** Real Estate, Treasure, Richness

## 1. Introduction

To become rich, three important elements are needed including 1) fund, 2) making return, and 3) time, which is also difficult to be able to have all 3 of them. However, in real estate, it could give people starting fund and constant profit as well as the added value. Moreover, real estate is also the answer for those who find financial freedom and time. Real estate investment is, just like other kind of investments, risky if the investor lacks knowledge. Especially for real estate investment, people need to know about location, marketing, finance, management, laws, design, sales, bargain, luck, and time (Rawirod Ampolsathian, 2017). Real estate is a valuable asset that will yield high profit if invested correctly along with high chance of success because people are investing on a human basic human need. In term of business, our life is undividedly connected with real estate. Real estate, the treasure of richness is thought to be successful and rich from real estate, 8 easy methods are required: 1) Investment on monthly rent, 2) Investment on daily rent, 3) Investment on repairing and selling, 4) Investment of profit speculation, 5) Investment that has no investment, 6) Investment as a manager, 7) Investment on the fund, and 8) Investment on big investors.

## 2. Methods

### 1) Investment on monthly rent

According to the concept of Pornnarin Chuanchaisit (2017), an investment on monthly rent is a popular basic investment because people would get a passive income starting with the investment on real estates such as houses, condominium, and commercial buildings, then open for rent every month with only a few days per month on the management. The heart of this investment is “location

and target group". The income from the rent is up to the location and invested cost. For example, the profit would be great if people invested with low cost on a good location and monthly income would be up to 8 - 12%. However, it should not be lower than the loan interest. In case of loan interest in case the cost is from the loan.

Therefore, it could be said that the investment on monthly rent could be done even if the economy is bad. What people can do is just lower the rent price or make promotions. With this, real estate investment could lead to success easily regardless of economic situations. Most importantly, real estate could gain more value with good management. When the rent rate is higher or the cost is lower, the value of the real estate would also be higher as well.

## 2) Investment on daily rent

In the past, rent on real estate such as house, condominium, apartment, and commercial building is usually collected monthly. However, there is the case where the location of the real estate is in high demand and there are many people want to stay there. Some tourists do not want to stay at a hotel or in an expansive room; they just want a place to stay. With demands like this, the investors have the idea and decided to make rental house or commercial buildings on good locations then decorate it, allocate the room, and make hostels. This is a good real estate investment that yields a very worthwhile profit, while the only thing needed is creativity, and the income would be day by day. The most important thing is creativity, tourism experience, and learning about your customer's demands. Find a good location, and people would create much profit (Anphat Sapyuenyong, 2016) as seen in Figure 1.



Source: [http://terrabkk.com/wp-content/uploads/2014/11/Hostel\\_COVER.jpg](http://terrabkk.com/wp-content/uploads/2014/11/Hostel_COVER.jpg) Retrieved on November 15, 2018

**Figure 1** Hostel

From the author's experience, people would usually come to stay at a daily rental real estate around Friday, Saturday, Sunday, and holidays. People who invested in daily rental could make profit easily. Anyhow, the rental price is up to the location. If the real estate is near important tourism site with convenient transportation, the price would be higher as well.

### 3) Investment on repairing and selling

Investment on repairing and selling is another way to make people rich from real estates. Many people found this method accidentally when they just bought a house for private use and decorate it beautifully. The next thing they know is there was someone offering them to buy that house with a profitable price. For investors who buy, repair, then sell again, the most profitable thing is to obtain the asset with the lowest price, which could be done in many ways such as through Legal Execution Department auction or when the former owner is in need of quick money. However, people must consider about the location, structure, and the price must also be lower than the market price as well. Moreover, people must also renovate and repair it back to be like new as a way to increase its value. After finishing the renovation, people could also immediately move out to prepare for selling and profit from that asset now (Anucha Kulawisut, 2016) as seen in Figure 2.



Source: [http://terrabbk.com/wp-content/uploads/2014/11/fixandflip\\_COVER.jpg](http://terrabbk.com/wp-content/uploads/2014/11/fixandflip_COVER.jpg) Retrieved on November 15, 2018

**Figure 2** Renovate

In the current society, world population is increasing rapidly, as well as the need of shelter and home. Still, the number of land is still the same. Therefore, renovating old houses with strong foundation and low price before selling is another way modern investors acknowledge widely because it could profit them greatly.

### 4) Investment of profit speculation

According to Robert T. Kiyosaki (2001), he mentioned that “A good investor would not let their money staying still. It’s a strategy called the movement rate of money. A true investor must always move forward; own a new asset and own more new assets” The investment with a speculation of profit is a basic investment of new amateur investors. All they do is to buy the preemption certificate and sell it to make profit. This seems easy, but in reality, there are also techniques required for this kind of investment as well. The most important thing that would help people make profit from the speculation is the knowledge of location. The location must be high potential, the project of investment must be famous and have experience. People also need to know everything about how to profit. This mean that people must know the time of the price, such as before presale, after presale 6 months, after presale 1 year, construction period, construction finished period, before money transfer, and after money transfer. Each period yields different profit and it would depend on each person how to deal with it. Additionally, just must not invest by following the news or your friends.

The concept of profit speculation investment is “real estates would only raise value in long term”, which is the top concept for investors in any era (Kittichai Techangamleod, 2017).

From the past experience, profit speculation investment suits with people who find profit with good thinking, planning, and research. They would buy, wait for time, and sell when they could profit from it.

#### 5) Investment without initial investing fund

The investment that uses nothing is an investment that people would act as an agent. It is the investment that acts as the connection between seller and buyer who have the same desire through yourself. Just you alone would profit from real estate. Most of the profit from agent commission is about 2 - 4% from the sale price depending on the contract. Just think about this, if people are lucky and got a hand on a 20-million-baht worth house, the commission fee of 3% would give them 600,000 baht. But, the important thing for being an agent is endurance, diligence, negotiation skills, real estate knowledge, and locations (Thanom Deesoi, 2016) as seen in Figure 3.



Source: <http://www.bloggang.com/data/greenpluss/picture/1265794369.jpg> Retrieved on November 15, 2018

**Figure 3** Land Broker

Currently, real estate agency is a job that could really profit, quick, and come in bulk. Everyone could also do it regardless of gender, age, and even professions. It is a job people could do as their main career or a part time job.

#### 6) Investment as an entrepreneur

Many people who invested on real estate for some time and know how things work would also want to be an entrepreneur themselves because the profit is even more than 80 - 100% so it is not strange that most investors started with a small land, build and sell commercial buildings, or build an apartment with 2 - 4 rooms then extend it further. Some investors are even sharper, they use their money as less as they can by contacting with the land owner without buying the land, just

funding the construction, then share the profit. This is also a way to be rich from real estates (Somkit Bangmo, 2015) as seen in Figure 4.



Source: <http://www.softbankthai.com/Article/Detail/1335/8.jpg>\_Retrieved on November 15, 2018

**Figure 4** Entrepreneur

To be successful in work, everyone must learn, practice, and improve themselves until they have experience by starting with being an employee of a big company. When proficient enough, everyone would want to be the manager or owner of their own business. Therefore, to be such person, people must learn, think, and do for success.

#### 7) Investment on mutual fund

Investing on mutual fund is another way to make people rich from real estates without getting headache from dealing with people. Property fund is a fund where the fund manager will raise the fund from us or general people by selling the fund unit then use the raised fund in real estates or assets related to real estates or the asset according to the law such as investing in accommodations, office buildings, hotels, commercial buildings, warehouses, exhibitions, malls, or the airport. Usually, the fund will manage assets to gain profit from the investment. After cutting out the cost, the mutual fund will share the divided profit with the investors at 6 - 10% rate depending on the fund (Anucha Kulawisut, 2017).

From the experience of investing in a fund, the author found that there are more pros than cons for investing in a fund even if people compare to the bank deposit or compare to each stock, or even compare to investing on your own business. The first step while people do still not understand investment enough is to open an account in a short-term fixed income fund, which has nearest similarity with the bank. When people are skillful enough and could sort each fund out, people could invest in the stock market in Thailand or other countries next.

#### 8) Investment on large investors

For investors who have experience, have good interpersonal skills, great at negotiation, have many networks, know many investors, creditable, and have creativity and idea, people could exchange your experience with money without investing even just 1 baht. It is a way to make people rich very quickly by just offering a business plan to big investors who have fund, but people have to be certain that your projects would profit your investor. The important thing is that people have to

know how to plan the financial budget (NPV, IRR), have a considerable amount of experience, know location, know target group, and other things required for the project to be able to make your plan attractive for your investor (Natee Masathienwong, 2015).

There are currently many investors who invest with big investors as it is a worthwhile investment where people could just think, suggest the idea, and sell the business plan to the big investors, and people would get the profit share without any physical investment. Anyhow, your plan must be effective and could really be used to make profit.

#### 4. Conclusion

From all 8 methods of investment, people would see that this is a business born from real demand of real estate. While the land is limited, the demand is higher and higher along with the growth of world population. Therefore, the value of real estate would only raise. This is why world-class billionaires are investing on real estates. It is an asset that will profit them indefinitely. Real estates are the heart of almost every business and almost become the heart of all billionaires. If people want to create stability and success, people must learn about real estates. Because real estates are the treasure of richness.

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**Factors Affecting the Decision Making of Customers on  
Choosing Life-Saving Deposit Service from Bank for Agriculture  
and Agricultural Cooperatives (BAAC) in Bangkok**

**RCGR<sup>2nd</sup>  
2018**

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# **Factors Affecting the Decision Making of Customers on Choosing Life-Saving Deposit Service from Bank for Agriculture and Agricultural Cooperatives (BAAC) in Bangkok**

by

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## **Abstract**

The study aimed at 1) studying factors affecting the decision making of customers on choosing life-saving deposit service from Bank for Agriculture and Agricultural Cooperatives (BAAC) in Bangkok; 2) exploring customers' understanding of the financial planning towards choosing life-saving deposit service; and 3) finding out the effect of financial well-being towards choosing life-saving deposit service. The sample included 381 customers who had applied for the insurance policy of BACC. The data were gathered by the questionnaire and statistically analyzed by t-test, F-test, One-Way ANOVA, Scheffe Test, and Simple Regression Analysis. The findings revealed that 1) the sample had mostly been female aged 30 to 39 years old, with the married status, the occupation as officer in state enterprise, the monthly income at more than 40,001 in Thai Baht, and the highest level of education at Bachelor's Degree; 2) the effect of the understanding of financial planning and the decision on choosing life-saving deposit service, including factors of information exposure, personal financial planning process, economic status, and social means, had entirely been in the HIGH level; 3) the financial situation in terms of financial well-being had been in the HIGH level; 4) the decision of customers in Bangkok on applying for the insurance policy of BACC, including factors of product, price, place, promotion, people, physical evidence, and process, had been in the HIGH level; 5) factors of sex, marital status, and income had not affected the decision on applying for the insurance policy of BACC whereas factors of age, occupation, and level of education had affected the decision, with the statistical significance at the 0.05 level; 6) factors of personal financial planning process, economic status, social means, and financial well-being had affected the decision on applying for the insurance policy of BACC.

**Keywords:** Life-Saving Deposit, Understanding of Financial Planning, Financial Well-Being

## 1. Introduction

Currently, saving in Thailand is in solely wealth people; increasing domestic saving seems not to be simple due to the higher cost of living bringing about to the inhabitants' troubles, as well as the consumption behavior leading to the people's uplifted expenditure and debts. One of the reasons causing the problems is the easy, convenient access to loan source, along with the government's assistance in terms of a welfare as the Health Insurance Project; people feel more secure in their life, and most households overlook the necessity to saving for emergency case. Saving is important for not only people in terms of future security but also the economic development which helps support the investment and the domestic production; the foreign capital is not required when the country has quite balanced saving and investment fund. (The Ministry of Finance Cooperative, 2011).

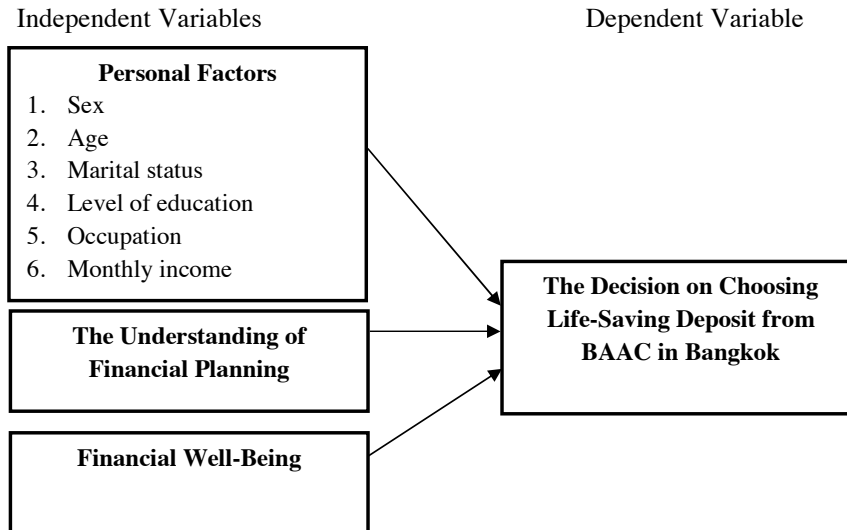
The state-owned Bank for Agriculture and Agricultural Cooperatives, known as BAAC, is also one of the financial institutions with the high role in business operation; BAAC supports the investment in any business types, leading to the Thai people's living conditions and cost of living, by launching such financial services as deposit, transfer, credit, government bond, saving lotteries, and currency exchange. Each of the financial institutions has competed under the high tendency of competition in the business term; the only way to the organizational survival is to develop products and services covering the demand of each customer group to respond customers' needs, as well as to offer high-qualified services based on the demand, bringing about to the customers' satisfaction and the organizational loyalty. Therefore, the organization should develop products and services to cover the disruptive technology and the changes in the bank's customer base in order to build the differentiation over any competitors, as well as respond the customers to the highest satisfaction, with the most important factor of developing complete, updated financial services to maintain the organizational stability, as well as to build the adaptation to the rapid changes in the business environment.

BAAC has been continually developed to be the competitive organization against other commercial banks; there is currently the product and service development to cover the demand of each customer group, as well as to increase the new target group according to the second strategy of BAAC stated the bank develops complete, updated financial services, contains the sustainability of complete products and services, maintains the level of customers' satisfaction in every channel, and comprises the increase market share of BAAC's target group. The bank has launched the life-saving deposit for assisting agriculturists and their family in terms of insurance; the depositor will pay life-saving deposit to the bank, based on principles and procedures stated in the insurance policy (Annual Report 2017, <https://www.baac.or.th/>), in order to increase the opportunity of the targeted customers to receive benefits and access to more services, achieving the project's strategic objectives and targets to strengthen the financial discipline and construct life immunity. The benefits the customers receive can decrease or alleviate family's troubles, gain the opportunity to reduce financial burden and access to the insurance, decrease the economic inequality of people in the microfinance level, as well as the social burden to respond the necessity and the customers' demand of loan, deposit, and transaction of general customers; the operation of life-saving deposit, being similar to the insurance company, can lead to the complete service of BAAC, providing the opportunity of customers to access the insurance, decrease the economic inequality, and complete the missions and respond the vision to absolutely improve life quality in the sustainable way together with the bank where the long-term funding source and investment capital, as well as credit risk management is included in the bank, leading to be more efficiently competitive. The operation in life-saving deposit is another new business channel to add the value of BAAC. (Division of Deposit Business Development, Bank for Agriculture and Agricultural Cooperatives, 2013: Online).

## 1.1 Objectives

1. To study the factors affecting the decision on choosing the life-saving deposit service from BAAC in Bangkok;
2. To explore customers' understanding of the financial planning towards choosing life-saving deposit service;
3. To find out the effect of financial well-being towards choosing life-saving deposit service.

## 1.2 Conceptual Framework



**Figure 1** Conceptual Framework

## 2. Research Methodology

This study was the quantitative research aimed at exploring the factors affecting the decision making of customers on choosing life-saving deposit service from BAAC in Bangkok, begun with the literature review and followed by data gathering with the questionnaire as the instrument. The research methodology was described as follows:

### 2.1 Population and Sample

The population in this research included 7,666 customers who had applied for the insurance policy of BACC, lived in Bangkok, and aged 20 to 60 years old.

The sample used in this study included 400 customers applying for the insurance policy of BAAC, counted by the formula of Taro Yamane (1967).

## 2.2 Analytical Statistics

Data were statistically analyzed by percentage, average, t-test, F-test, One-Way ANOVA, Scheffe Test, and Simple Regression Analysis.

### 3. Conclusion

1. The sample had mostly been female (66.40%), aged 30 to 39 years old (39.1%), with the married status (53.8%), the occupation as officer in state enterprise (37.5%), the monthly income at more than 40,001 in Thai Baht (22.3%), and the highest level of education at Bachelor's Degree (58.3%);

2. The effect of the understanding of financial planning and the decision on choosing life-saving deposit service of BAAC in Bangkok had been described as follows: *the information exposure factor* had had the HIGH level of effect to the decision ( $\bar{x} = 3.55$ ), *the factor of personal financial planning process* had had the HIGH level ( $\bar{x} = 3.68$ ), *the economic status factor* had had the MODERATE level ( $\bar{x} = 3.48$ ), and *the factor of social means* had had the HIGH level ( $\bar{x} = 3.78$ );

3. The effect of the financial well-being and the decision on choosing life-saving deposit service of BAAC in Bangkok had been founded that "the income which is enough to pay for monthly debt" had had the highest level of effect ( $\bar{x} = 3.97$ ), followed by "the customers are happy due to their good financial planning" ( $\bar{x} = 3.91$ ), whereas "special birthday or wedding gifts are provided, so the financial stress will not occur" had had the lowest level of effect ( $\bar{x} = 3.72$ ).

4. The factors affecting the decision on choosing life-saving deposit service of BAAC in Bangkok had been explained as follows: *product* had had the HIGH level of effect to the decision ( $\bar{x} = 3.85$ ), *price* had had the HIGH level ( $\bar{x} = 3.98$ ), *place* had had the HIGH level ( $\bar{x} = 3.90$ ), *promotion* had had the HIGH level ( $\bar{x} = 3.79$ ), *people* had had the HIGH level ( $\bar{x} = 3.98$ ), *physical evidence* had had the HIGH level ( $\bar{x} = 4.10$ ), and *process* had had the HIGH level ( $\bar{x} = 4.30$ );

5. According to the hypothesis test, it was revealed that 1) *sex*, *marital status*, and *monthly income* had not affected the decision on choosing life-saving deposit service of BAAC in Bangkok while *age*, *occupation*, and *level of education* had affected to the decision, along with the statistical significance at the 0.05 level; 2) the factors of *information exposure*, *personal financial planning process*, *economical status*, and *social means* had affected the decision on choosing life-saving deposit service of BAAC; and 3) the factor of *financial well-being* had affected the decision on choosing the service.

### 4. Discussion

1. According to the personal factors, it was found that the sample included 128 males and 253 females, with the age between mostly 30 to 39 years old, the married status, the level of education at Bachelor's Degree, the monthly income at more than 40,001 in Thai Baht, and the occupation as officer in state enterprise;

2. The analysis of the understanding of financial planning affecting the decision on choosing life-saving deposit service of BAAC in Bangkok was revealed that there had been the effect in the HIGH level, with the factors of *information exposure*, *personal financial planning process*, and *social means* affecting the decision in the HIGH level and *economic status* in the MODERATE level;

3. The analysis of financial well-being affecting the decision on choosing life-saving deposit service of BAAC in Bangkok was revealed that there had been the HIGH level of effect to the decision on choosing the service;

4. The analysis of factors affecting the decision on choosing life-saving deposit service of BAAC in Bangkok was revealed that there had been the HIGH level of effect to the decision on choosing the service, with the factors of *product, price, place, promotion, people, physical evidence, and process* all affected in the HIGH level;

5. The hypothesis test indicated that *sex, marital status, and monthly income* had not affected the decision on choosing life-saving deposit service of BAAC in Bangkok, which was irrelevant to the hypothesis, whereas *age, occupation, and level of education* had affected the decision with the statistical significance at the 0.05 level which was related to the hypothesis;

6. The understanding of financial planning in the factors of *information exposure, personal financial planning process, economic status, and social means* had affected the decision on choosing life-saving of BAAC in Bangkok with the statistical significance at the 0.05 level which was related to the hypothesis;

7. The factor of financial well-being had affected the decision on choosing life-saving of BAAC in Bangkok with the statistical significance at the 0.05 level which was related to the hypothesis.

## 5. Recommendations

### 5.1 Recommendations from Research Findings

1. Since the customers paid attention to the *product* factor which had the high effect to the decision on choosing the service, BAAC should develop various products of insurance policy to respond the demand of current customers;

2. Due to the high effect of the *price* factor to the decision on choosing the service, BAAC should hold the activities or arrange the project to serve for regular customers to respond the demand of both regular customers and newcomers;

3. The *place* factor had the high effect to the decision on choosing the service; therefore, BAAC should add more various channels to search for the information about services to respond customers' needs;

4. The *promotion* factor had highly affected the decision on choosing the service, so BAAC should continually and constantly supplement public relations and advertisement through various kinds of media;

5. The *people* factor had had the high level of effect to the decision on choosing the service, leading to the suggestion the bank that the standards, duties, and regulations of BAAC employees should be described clearly; training, meeting, and operational report should also be presented to the employees for mutual knowledge and understanding in their responsibilities that are concerned in the clear, correct response to the needs of both regular customers and newcomers;

6. The *physical evidence* factor had highly affected the decision on choosing the service; consequently, BAAC should construct and present the improved physical matters to build impression among the original customers, as well as to build newcomers for the bank.

### 5.2 Recommendations for Further Study

According to the study, it was recommended that:

1. The study should cover other factors for efficiently organizational development;
2. The study should explore the decision on choosing the investment policy by using the interview as the data gathering method.

## 6. Acknowledgements

The study would not have been achieved without the guidance and support from Dr. Natsapan Paopun, from whom the author received completed research ideas and concepts; furthermore, the author would like to extend the gratitude to all instructors who gave invaluable knowledge and enriched the academic experiences for research application during the study at Sripatum University.

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## A Study of Financial Management After the Retirement



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## Abstract

The objectives of the study were to investigate the relationship between the planning before the retirement and the financial management after the retirement and compare the personal factors effecting the financial management after the retirement. The 400 persons in Bangkok Metropolis who has more 60 years old were the sampling of the study. The survey research was employed in this study. The percentage, mean, standard deviation, t-Test and one way ANOVA were the statistical analysis. The result of the study found that the planning before the retirement was the low level. The different demographical characteristics effected to the different financial management after the retirement such as age, marital status, average income/month, the planning before the retirement, financial planning, social and lifestyle, the health and mind effected to the different investment, saving, payment and income earning of the financial management after the retirement.

**Keyword:** Behavior, Financial Management, Retirement

## 1. Introduction

Presently, the population structure changed to the “aging society”. From the survey of population by National Statistics Office showed the aging or the person who has more 60 years old will be increased continuously. The data between 2010-2017, the aging was increased 3-4% per year and will be 10 million in 2017. The retirement period the aging has no work then they have to pay from the saving replacement their self labor skills. The healthcare budgeting trend to increase as the body change. The people must use the self-saving or the children welfare as the before retirement. The mentioned problems effected to the various development of the country such as the decreasing labor, income per head of population and the aging society budgeting etc.

The changing of population structure is the most question depending on Thai economics growth continuously. The preparation of solving problem should be done the good quality of life in again society. The survey research of National Statistic Office in 2017 found that majority of income earning from the child (34.7%), the rest from the working (31.0%) and the official provident fund

such as aging provision and cripple fund (20.0%). The male aging has average income/year higher than the female. The sufficient income of aging by the self-evaluation found that more than half (50.3%) of aging has sufficient income, the rest (18.5%) has no sufficient income. The must money aging and has planned the life after the retirement has no problem. However, there is no security for the convenience lifestyle for the retirement. Majority of people considered the retirement has income for living, healthcare, and miscellaneous payment, therefore, they have to make the money for these activities. The past time of aging society has lower rate in saving which effected the quality of life after the retirement.

The research focused on general aging after the retirement more than 60 years old for the investigation after the retirement living. The planning before the retirement should be planned under the target setting. The financial management after the retirement should be done. All this, the development of planning living after the retirement efficiently, with higher quality of life.

### The objectives of the study

The study able to determine the objectives as follows;

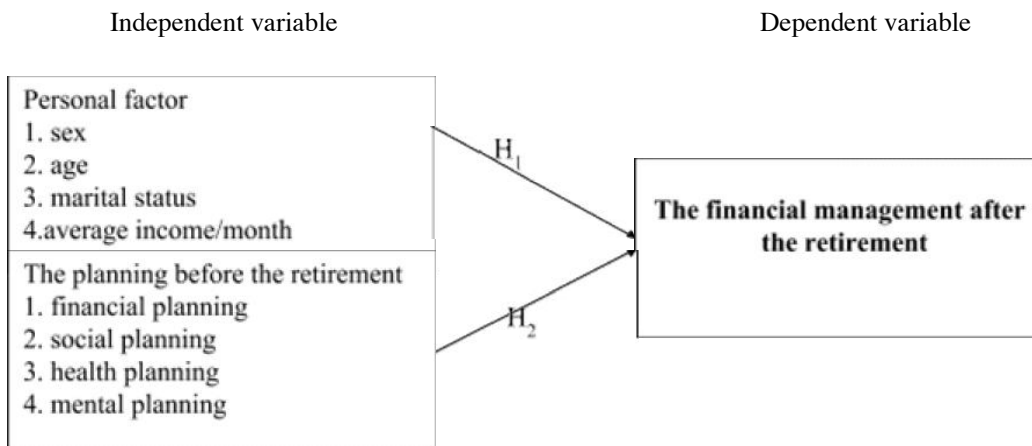
1. To compare the personal factor effecting the financial management after the retirement.
2. To investigate the relationship between the planning before the retirement and the financial management after the retirement.

### The hypothesis of the study

From the conceptual framework able to determine the hypothesis as follows;

1. The different demographic characteristics effect to the different financial management after the retirement.
2. The different planning before the retirement effect to the different financial management after the retirement.

### The conceptual framework of the study



**Figure 1** Conceptual Framework of the Study

## **The significance of the study**

1. Receiving and understanding concern the attitude and behavior of the financial management after the retirement of the aging more than 60 years old in Bangkok Metropolis.
2. Applying the result of the study as the problem solving guideline for the planning before the retirement concern the financial planning, health, lifestyle and social with the mental effecting to the financial management after the retirement.
3. Understanding the financial management after the retirement and applying for the problem solving guideline and policy improvement for problem decreasing.

## **2. Literature Review and Hypothesis**

Retirement means the cessation of work ever made in the recession. To exit the social group colleagues and follow the life time of the job because the maturity according to the particular agency, such as government agencies, Thailand will give civil servants due for retirement when, at age 60 years.

Financial planning means spending money, in compliance with the work plan established, and indicate the source of the money and the use of money in various activities.

Health planning meant to define the format of practice for health care that brings health brings to the complete health of body, mind. Emotional and social.

Personal financial management means organizing your finances efficiently recognizable individuals. Funding and spending go out properly. Targets are placed.

Behavior refers to the actions or verbs, symptoms of the thoughts and feelings of the individual. This paper discusses the behaviors in money management, retirement ages include savings, investments. To find additional income after retirement and spend the money.

Preparation means preparing themselves with premature retirement. This paper discusses preparedness include: financial, social and lifestyle or mental health.

### **The concept preparation before the retirement**

Leedy, Jack J. Wynbarand (1987) proposed that the preparation of retirement as below:

1. Health and mental, there should be a health care body and mind regularly.
2. Planning for financial goals, such as financial planning. Save receipts and financial expenditure estimates for each day
3. Preparing the housing
4. Preparing to participate in various activities, save the report to various social activities that interests you before the retirement

## **The concept of financial management after the retirement**

Chatchai Sirithewankul (2012) studied the appropriate investment allocation for the retirement by 4 investments of the property such as ordinary share, bond, cash and gold by Monte Carlo Simulation concerning the selection of 286 types of investment with maximum withdrawal rate. As well as the failure rate of investor was accepted as the duration of the retirement period. The summary of the research concluded that the retirement has average age after retirement not more than 10 years. Therefore, there was no need in the investment because the lower failure rate in every proportion in the investment. If the retirement has more age should distribute the investment to the planning after the retirement.

Viroj Jadesadalug (2518) The results showed that 1) saving behavior of the elders are in the fixed asset as house or land and have financial assets such as bank deposit, Government savings bank's lottery, life insurance, and savings cooperative in organization. Saving has started since working. Unequal Income and expenses in each person affect to ability of saving. 2) factor affecting saving of the elders founded that deposit interest rates is not the main factor that can appeal to saving but financial institution is stable and reliable for saving. Protection or benefits were received from life insurance under the policy that can avoid the individual risks in life, healthy, and asset. In government savings bank's lottery, depositor can withdraw in due date and was received deposit interest under the bank's policy, moreover, can look forward to win the jackpot. Elders who have saved in the savings cooperative in organization were received return of an investment in dividend or deposit interest under policy. Elders have saved because they want descendants can live comfortably, in addition saving for emergency or illness for living happily in the end of their lives. Most of elders thought saving is good and benefit for everyone and choose saving in financial institutions because of reliability and stability.

Stock Exchange of Thailand (2016) "Money must be planned" mentioned about technics for retirement money management as follows:

1. Expense and debt management includes prior expenditure plan, records of income and expense, no unnecessary money usage, stop making new debts and reduce expenses.
2. Investment management includes investment in fund markets and businesses.
3. Asset management consists of making money from owned assets by selling or for rent. Moreover, extra income can also be done by changing hobbies.

## **The planning after the retirement**

From the theory of good quality of life and need of the aging society the planning after the retirement should be focused. The review of literature showed the topic in the study as follows:

### **1. The financial planning**

The indicator measure the efficient financial planning after the retirement. The residue property provide the living, therefore, the preparation of the payment should set the priority. The retirement consider the continuous income earning. After the retirement the income will decrease which effect the retirement payment.

### **2. The health planning**

The healthcare must take the consideration continuously. The health problem is the main problem in the aging. The preparation and protection, the retirement able to help themselves. The ordinary exercise and feeding 5 groups of food should be done every day.

### **3. The mental planning**

The preparation and mental readiness should not neglect, because the mental situation of the retirement will worry after the retirement which effect the impact factors.

### **4. The social planning**

The preparation concerning the free time which is the appropriated planning with the aging. The free time will not use as the benefit. It will effect to the entirement.

## **3. Research methodology**

The research was the quantitative approach concerning the financial management after the retirement. The procedure of the study starting from the review the related literature, the data collection use the questionnaire and using statistics analysis. The researcher determined the study as follows:

The population of the study was the retirement in Bangkok Metropolis has age more than 60 years.

The sample of the study were 400 retirement more 60 years old in Bangkok Metropolis, determine by the size of sample from W.G. Cochran's formula with reliability at 95% the errorness at 5% (Kanlaya Wanitbancha, 2006).

### **The statistics use in the analysis**

1. The descriptive statistics such as frequency and percentage use as the basic data analysis.
2. The analysis of the planning before the retirement use the descriptive statistics such as frequency and percentage.
3. The analysis of the financial management after the retirement came from the 5 rating scale of 4 questions such as 1) investment planning 2) saving planning 3) reserve planning and 4) payment planning by using the descriptive statistics such as mean and standard deviation.
4. The hypothesis test reported by inferential statistics as follows;
  - 4.1 The t-test use for the comparison of 2 groups of the independent.
  - 4.2 The F-test use for the one way analysis of variance after found the difference will test by multiple comparison with scheffe method.

## **4. Result and Discussion**

1. There were 400 persons of sample size, who completed the questionnaire, responded the questionnaire. Majority of the sample were female, 60-65 years of age, married, with average income 10,000-20,000 baht/month.

2. The retirement planned before the retirement as low level. The respondents were planed in each aspects as follows;

2.1 The most of financial planning was monthly payment evaluation 275 persons (68.80%), the rest were ordinary saving 227 persons (56.80%) and training of the retirement 168 persons (42.00%)

2.2 The most of social planning was finding the hobby 306 persons (76.50%), the rest were the vacation activities 285 persons (71.30%) and teaching the children for the retirement respect 198 person (49.50%)

2.3 The most of health planning was regular exercise 304 persons (76.00%) the rest were selected food for healthcare 290 person (72.50%) and checking yearly healthcare 198 persons (49.50%)

2.4 The most of mental planning was entering the temple with dharma practice and good vision 307 persons (76.80%), the rest were the problem encounter and problem solving planning 255 persons (63.90%) and finding pet as friend 178 persons (44.50%)

3. The financial management after the retirement found that the investment planning, the saving planning and reserve for increasing income were less level, but the payment planning was moderate level.

4. The hypothesis test found that the different sex of respondent effected to the nondifferent financial management after the retirement. On other hand, the different age, marital status and income of respondent effected to the different financial management after the retirement at .05 level of statistical significance. The different planning before the retirement effected to the different financial management after the retirement (the investment planning, the saving, the reserve planning and the payment planning)

From the result of the study entitled a study of financial management after the retirement able to discuss as follows:

1. The demographic characteristics, the different demographic characteristics effected to the different financial management after the retirement such as age, marital status and income/month. Because of the various factors effected to the investment, saving, extra income, and payment which associated to the research of Khanittha tonsataweerat(2016). stated that personal factors such as age, marital status, and income/month was the factors effecting the multidimension of financial planning.

2. The different financial planning before the retirement effected to the different financial management after the retirement such as financial aspect, social aspect, health aspect, and mental aspect. Because of the planning effecting the financial management after the retirement such as the investment, saving, payment and income earning associated to the research of Surasee Prasitrat(2015)stated that the planning divided into 2 groups, first group provided the plan and second group no plan of financial planning. According to majority of respondent has no problem and after the retirement the problem will be occur the insufficient income, therefore, they have to find the extra job or the financial saving for the future. All this, beyond the money saving or extra business, they try to save and not loan anymore. The financial planning was the most important, because if effected 3 aspects, the mental aspect, social aspect and health aspect.

## **5. Conclusion and Implications**

Financial management is very important both before and after the retirement so should be planned prior to retirement such as financial aspect, social aspect, health aspect, and mental aspect because these will affect your lifestyle after retirement.



## **6. Suggestions**

### **The suggestion from the study**

1. From the research, presently, trending of aging society will increase and the next 20-30 years the retirement will increase continuously which will effect the welfare management concerning the retirement. The study found that the life planning must focus after the retirement. The main problems and obstacles effect to the planning. The retirement group lack of knowledge and understanding the planning especially, the finance and the investment. Therefore, the retirement are not able to manage the properties efficiently. So, the realization and highlight on the knowledge and understanding concern the planning after retirement for uplifting the good quality of life.

2. From the research, the retirement lack of financial management, they could not invest depending on the limited income. Therefore it should support the knowledge and the understanding. Because of the aging group increase in the future, if there are limited payment will effect the long plan of economic aspect.

### **The suggestion of further study**

1. The next study should collect the data from the retirement between the working retirement and nonworking retirement in order to measuring the group financial management depending on the different factors of the financial management.

2. The next study should study various variable effecting the financial management after the retirement such as economic situation and financial management after the retirement etc.

3. The next study may increase the knowledge test concerning the interests after the retirement such as the reserve fund, retirement allowance, social security fund in order to measurement the knowledge and the understanding of the various interest.

## **7. Acknowledgments**

This research was successful as a result of useful and great advice from Dr. Natsapan Paopun as my research advisor who provided me with knowledge, research guidelines, and review and correction of defects with care and dedication as well as with useful consultation for completing this research successfully. In addition, I would also like to thank all the faculty members for their kindness and helpfulness in all aspects of knowledge applied in this research. Finally, I would like to thank the owners and authors of all documents and research papers cited in this research, including the staff and students of the Master of Management Program, Sripatum University, for their helpful contributions to the success of this research. I would like to thank all of them here.

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## Factors Influencing Personal Financial Planning of the Generation Y in Bangkok



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## Abstract

This research study aims to study the factors that influence personal financial planning the Generation Y group in Bangkok and to collect data from a sample of the total number of 400 people, using a questionnaire to collect information. Data processing, analysis, using a computer program SPSS statistics and scene data analysis is the distribution, frequency, percentage, average, standard deviation, and test hypotheses using ANOVA (Analysis of Variance) to test the influence. The research found that the respondents, financial status, factors that influence the different financial planning channel of personal financial planning. The profession does not influence the objective, and individual patterns of influence in the personal financial planning of the generation Y group in Bangkok. Statistically significant, that which is not consistent with the hypothesis that set.

**Keywords:** Financial Planning, Generation Y, Financial Status

## 1. Introduction

Money is one key factor that will make the person receiving it. Therefore, the Learning to organize their own finances and family, effectively causing the effect. Starting from planning money for themselves and their families arrive early then surely everyone has the opportunity to succeed in life. Financial planning for themselves and their families in order to make them aware of revenue received and expenditure. When revenue is after deduction of the expenses, then it would be a substantial savings for yourself and family. The people know the personal financial management, it will make a person's financial status is stable, because it recognizes the use of money wisely also create stable lives in the future.

Savings per GDP of Thailand, compared to countries in the same region, located in the middle level, and likely increase slowly in the year 2558 savings per GDP increase of 30.3 percent from a year ago at 2557 27.7 percent, both this. Savings per GDP figures nearby countries Indonesia and Malaysia, but compared to the CLMV group, then Thailand has higher figures, up to 2 times,

however, there are also risks from household debt is high, and Government spending in the past, it will result in reduced levels of savings.

If you look back to see the overview of saving the country in the past fluctuated but with positive direction. The latest figures by the Office of the Director of the national economic and social development in recent years, domestic savings have quantity 2558 worth 4,146.2 billion baht. Increase from the previous year, with a value of 3,656.3 billion. The continuous expansion, increased from 13.4 percent a year earlier, and when representing the savings per GDP 30.3 percent all estimates of the numbers of savings offices, fiscal first quarter 1/2559 quarter-1/2560 have a positive direction by the first quarter of 1/2560 quantity in the country, with a value of 1,308.5 billion. 6.0 percent expansion, and the proportion of savings per GDP 34.5 percent.

For the saving of households during the past 5 years, (2554-2558) does not change much are approximately 600-670 billion. Last year, a slight shrinkage, 2558-1.1 per cent as a result of expansion at the rate of household income that is less than the expenditure grew continuously, and when we bring net savings and charged an average per person per year. It found that the income and expenses Tend to increase every year, savings that increase slowly or are called fixed income that year 2558. average 112,293 baht per person per year, average expenditure per person per year and 104,481 baht savings average about 9,820 baht per person per year.

The personal financial planning process financial status evaluation The well-being of the people and is the improvement of income. Spending and investment as the better. With the study of economic factors and processes in the financial decisions of individuals. Financial planning, personal, it will involve the financial activities which are necessary in a life that will need to learn how to make money and at the same time it must also learn how to save, Investment and expenditure management, achieve financial and life goals that they have set, and the results are there living and life as a priority.

The importance of the financial plan. The financial plan is very important for each person, because of the following reasons.

1) done, stability in financial planning, life, covering all financial activities related to each person. Called the Comprehensive Financial Planning, which consists of the insurance plans, investment plans, tax plans, and planning for retirement will help bring financial stability and stability in their lives. There is money enough economic cleanliness for each life cycle. For example, planning for retirement to help his life later retired. There is enough money for cleanliness, spending each month, and for health care, which is necessary to provide planning, saving and investment performance to bring the money to invest, make money is invested with a higher added value growth, to reduce costs and make the net income increase. At the same time, it must have good insurance planning to accommodate an event that not to expect such an accident. Have to lose money to a hospital or may even become a person with a disability, disability, cannot sustain's Assembly how-to? ...

2) can respond to the specific needs and goals of a financial plan, Special Needs Planning, which is called the financial plan in this manner will allow someone to accomplish a specific purpose, that each person needs to be a good financial planner and has to follow strictly financial plan, such as a plan to provide money for the students in University. Saving to buy a first home, or buy a car, etc.

Therefore, the Financial planning is an activity that occurs throughout life (a life-long activity), we can see that the financial objectives set. Does not need to be fixed at any time. To change both the appearance and the significance.

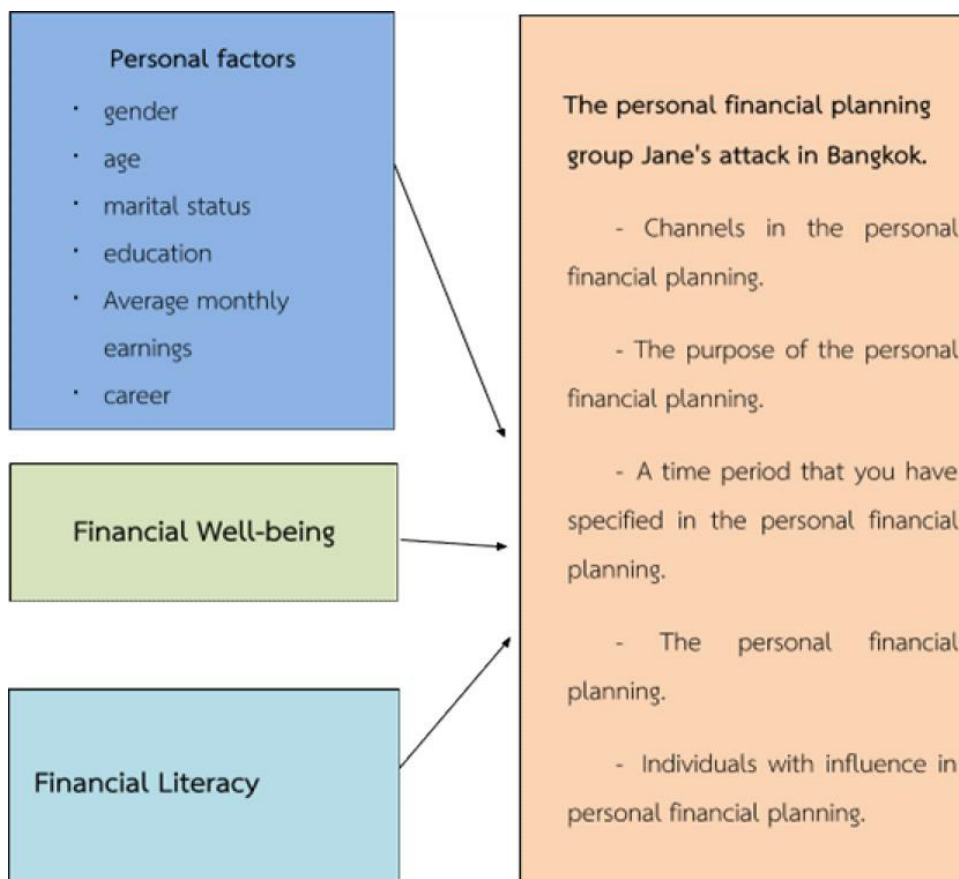
## 2. Educational Purpose

Study the factors that influence personal financial planning the generation Y group in Bangkok. The aim is as follows.

- 1) To study the Group's personal factors, Jane y in Bangkok for personal financial planning, such as gender, age, marital status, educational level, household income per month and occupation.
- 2) To study the financial situation affecting the personal financial planning the generation Y group in Bangkok.
- 3) To study the financial knowledge that affect personal financial planning the generation Y group in Bangkok.

## 3. Conceptual Framework in Research

The objective of research, so it is possible to define the conceptual framework of research that shows the connection between the variables at admission.



#### 4. Summary of Research Results

Educational information about factors which influence the financial planning the generation Y group in Bangkok. Summarized as follows.

The personal factor of information analysis, the respondent found that the respondents, the number of male 215 and female 185 people, mostly aged between 23 – 27 years old marital status single, there are Bachelor's degree average monthly incomes equal to 15001-20000 baht and professional employees of private companies.

Data analysis on the factors of financial aspects (Financial well-being) of the generation Y group in Bangkok found that in the field of financial status of respondents, most of which have moderate financial status. Inferior financially high and low income status, respectively, and considering the financial status of the respondent primarily as a text list, found that respondents have financial status.

An analysis of the level of knowledge/skills of the generation Y group in Bangkok found that most respondents degree/financial skills at a high level. Secondary Knowledge/skill level, financial level, middle level and knowledge/skill levels of finance, respectively, and considering the level of knowledge/skills of the majority of respondents found that the message as a list of respondents knowledge/skill levels of financial.

Testing hypotheses about factors include gender, age, personal status, educational level. Average monthly earnings and occupation Influence of personal financial planning group's Jane attack in Bangkok, which can be classified as follows:

Personal factors include: 1) gender, age, education, marital status. The average income of different influence personal financial planning the generation Y group in Bangkok 2) personal factors include marital status, profession, different do not influence the personal financial planning the generation Y group in Bangkok channel planning, personal finance, and the people who influence the planning, personal finance, personal factors, 3) include different occupations have no influence on the personal financial planning the generation Y group in Bangkok. Purpose and format of the personal financial planning.

Testing hypotheses about factors of financial status. Influence of personal financial planning the generation Y group in Bangkok.

Financial status, factors that influence different personal financial planning the generation Y group in Bangkok.

Testing hypotheses about the knowledge/skill level of the financial. Influence of personal financial planning the generation Y group In Bangkok.

Knowledge/skill level factors different financial influence personal financial planning the generation Y group in Bangkok.



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**The Study of Factors Affecting on Customers' Selection of  
Personal Loan Service from Commercial Banks in Bangkok**



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# **The Study of Factors Affecting on Customers' Selection of Personal Loan Service from Commercial Banks in Bangkok**

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## **Abstract**

This research includes three purposes: 1) to study factors of customers' selection for personal loan service from commercial banks, 2) to study the differences among customer groups and marketing factors of customers' selection for personal loan service from commercial banks; and 3) to study basic factors affecting marketing factors of customers' selection for personal loan service from commercial banks. In the study, the samples were 400 customers who used personal loan service from commercial banks in Bangkok. A questionnaire was used as instrument for data collection and statistical analysis was performed in percentage and means. The *t*-test was used to compare two group variables whereas the *F*-test was analyzed with One-Way ANOVA.

**Keywords:** Service Selection, Personal Loan, Customers of Commercial Banks

## **1. Introduction**

Financial institutions under the supervision of Bank of Thailand refer to institutions with functions to provide financial services such as financial deposit – withdrawal, loan, bill payments, and other financial transactions etc. They provide services for customers who are general people, companies, enterprises, or government sectors who do business under Financial Institutions Businesses Act, B.E. 2551. Four types of institutions under supervision of Bank of Thailand include financial institutions, foreign bank representatives, assets management companies, and non-banks. Bank of the Year 2016 includes 15 commercial banks as follows.

**Table 1** Rank report from Bank of the Year 2016

<b>No.</b>	<b>Bank</b>
1	Bangkok Bank Public Company Limited
2	Kasikornbank Public Company Limited
3	Siam Commercial Bank Public Company Limited
4	Krung Thai Bank Public Company Limited
5	Bank of Ayudhya Public Company Limited
6	Kiatnakin Bank Public Company Limited
7	Thanachart Bank Public Company Limited
8	TISCO Bank Public Company Limited
9	TMB Bank Public Company Limited
10	United Overseas Bank (Thai) Public Company Limited
11	Land and Houses Bank Public Company Limited
12	Industrial and Commercial Bank of China (Thai) Public Company Limited
13	Standard Chartered Bank (Thai) Public Company Limited
14	CIMB Thai Bank Public Company Limited
15	Thai Credit Retail Bank Public Company Limited

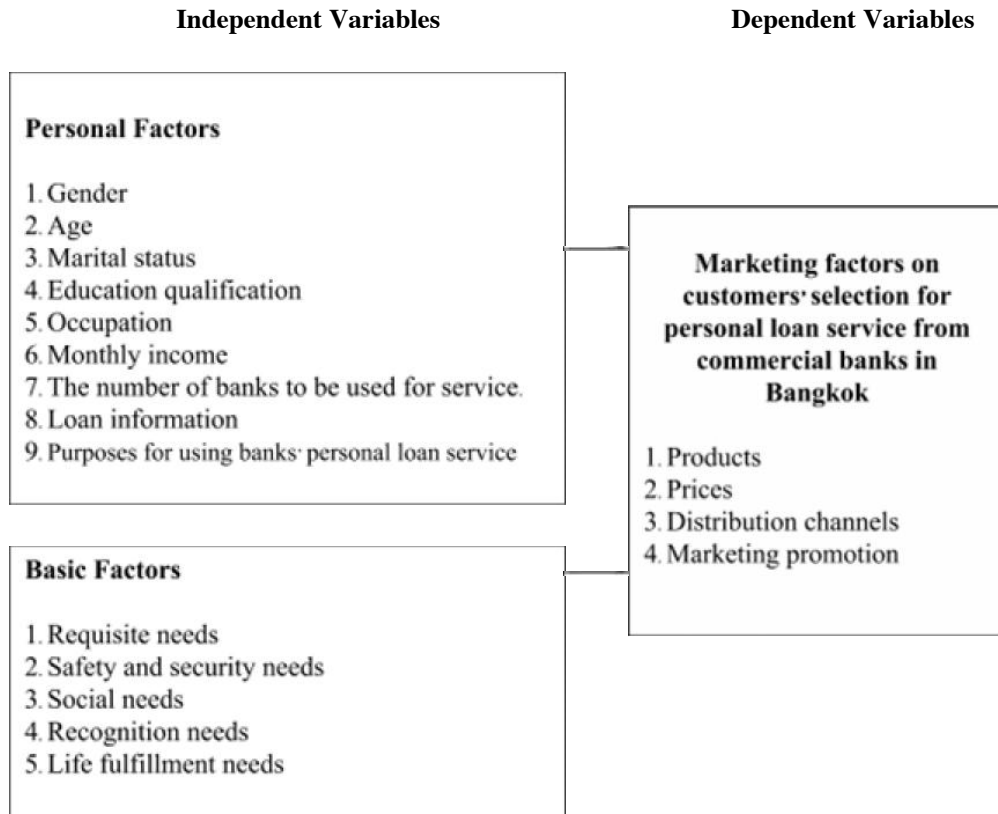
Source: Bank of the year 2016, Money & Banking Online, 14 September 2016  
Retrieved from <http://www.moneyandbanking.co.th/new/?p=4154>

The main services of these banks are for money deposit, cash withdrawal, and loans for customers classified by business size. Regarding Retail Banking, service products consists of deposit products, investment products, insurance products, card products, and personal loan products etc. For Business Banking, customer service is divided by the business size measured by the quantity of sales. Small business is within 20 – 75 million baht of sales, and Medium Business is about 76-500 million baht of sales. The service products include business loan products, business cash management products, international remittance products etc. Wholesale Banking is with sales more than 500 million baht, and the service products are business loans, business cash management service, products, international remittance products, global money transfer products, corporate trust products, investment products etc. Another group is Private Banking with investment products etc. This is to serve various needs of the target customers thoroughly. It is clear that loan service products are the main service of all banking groups of customers, and enable banks to make good income. Since consumers' behaviors and lifestyles change, commercial banks use new technology for financial services and manage for more cost effectiveness. Banks adapt themselves to support customers' changing behaviors by adding the service channel through mobile banking or using electronic devices for customers to do self-transaction. Because the expense is lower, the revisions are conducted on the number of branches and relocations. In addition, Commercial banks also adapt the branch structures to be in suitable sizes in an easy access location such as shopping malls, community halls. The bank tellers are trained to gain experience and be able to work in a more variety of way.

### 1.1 Objectives of the study

1. To study factors of customers' selection for personal loan service from commercial banks.
2. To study the differences among customer groups and basic factors affecting on customers' selection for personal loan service from commercial banks.
3. To study basic factors affecting marketing factors of customers' selection for personal loan service from commercial banks.

### 1.2 Conceptual framework of the study



## 2. Research Methodology

The present study was the quantitative research for investigating factors affecting customers' selection for personal loan services from commercial banks in Bangkok. In the study, related literature was reviewed and the questionnaire was used as instruction for data collection and analysis. The researcher planned the procedures according to the following details.

The population of the study included users of personal loan service from commercial banks in Bangkok.

The samples of the study were users of personal loan service from commercial banks in Bangkok. With unknown number of population, the researcher used W.G. Cochran's formulation with the confident level at 95 percent and an error at 5 percent (Wanichbancha, 2006) for obtaining 400 samples.

Statistical analysis was performed in percentage and means. The *t*-test was used to compare variables between two groups whereas the *F*-test was analyzed with One-Way ANOVA. If the statistical significant differences were found, pairwise comparison would be conducted with Scheffe method and Multiple Regression Analysis.

### 3. Summary of the Results

1. Most of the informants were single females (64.00%), at the age of 31 – 40 years (38.75%), graduated with bachelor's degree (61.75%), and worked for private enterprises (78.75%), with average income at 15,000 – 25,000 baht per month (39.50%). The informants mostly used the service from more than three banks (53.25%) for obtaining information about home loans mostly from the websites (29.25%). Their objective for selecting personal loans from commercial banks was for an investment purposes (46.00%)

2. The overall basic factor affecting on customers' selection of personal loan service from commercial banks was at the high level. When considering on each aspect, the factor of four requisite needs had the highest average score, followed by life fulfillment need, safety and security needs, recognition needs, and social needs

3. The overall marketing factor on customers' selection of personal loan service from commercial banks was at the high level. When considering each aspects, place had the highest average score, followed by products, prices, and marketing promotion.

4. According to hypothesis testing, it was found as follows. 1) The differences in genders, ages and occupations of personal loan service users of commercial banks had the effects on differences in opinions about marketing factor on selection of personal loan service from commercial banks at the significance level of 0.05. However, the differences of the samples in status, educational level, average income, the number of commercial banks used at present, media for obtaining information about home loans, and objectives for selection of personal loan from commercial banks did not make differences in opinions on marketing factor on selection of personal loan service from commercial banks.

5. The basic factors on four requisite needs and recognition needs affected the marketing factors on selection of personal loan service from commercial banks at the significant level of 0.05. The basic factors on safety and security needs, social needs and life fulfillment needs did not affect the marketing factors on selection of personal loan service from commercial banks.

### 4. Result Discussion

According to the findings, the discussion about factors affecting on customers' selection of personal loan service from commercial banks are as follows.

1. The basic factors affecting on customers' selection of personal loan service from commercial banks were ranked at the high level. The following ranks were on four requisite needs at the high level, followed by life fulfillment needs, safety and security needs, recognition needs, and social needs. This is because food, clothes, medicines and medical treatments are all necessities for a living whereas the purchases or rents of houses, condominiums, and apartments are also necessities for accommodation. The users of personal loan service from commercial banks gave the most



importance on four requisite factors, each of which can be explained as follows. 1) Four requisite factors were valued at the high level because food and clothes were necessities for a living. 2) Safety and security needs were valued by the users of personal loan service from commercial banks at the high level. This is because the purchases of life insurance, accident insurance, or other financial products are for building assurance and life security. 3) Social needs were valued by the users of personal loan service from commercial banks at the average level. This is because the users of personal loan service from commercial banks did not consider travel, relaxation, and experiences such as domestic travel and oversea travel etc. as necessities. 4) Recognition needs were valued by the users of personal loan service from commercial banks at the high level. This is because the use of personal loan service from commercial banks build assurance for the service users on their affordability. 5) Life fulfillment needs were valued by the users of personal loan service from commercial banks at the high level. This is because the use of loan service makes them to expand opportunities to buy things or do what they really want to do.

2. The marketing factors on customers' selection of personal loan service from commercial banks were ranked at the high level, mostly on places and followed by products, prices, and marketing promotion. This is because consumers' behaviors and lifestyles change according to technology with a role in a living to make consumers' lives easier, quicker and more convenient. The users of personal loan services from commercial banks mostly valued online service which can be used at any place and any time. Each aspect can be explained in details as follows. 1) Products were valued by the users of personal loan service from commercial banks at the high level. Most of the service users gave the most importance on recognition and reliability of the organization. 2) Prices were valued by the users of personal loan service from commercial banks at the high level. Most of customers focused mostly on installment payments. 3) Places were valued by the users of personal loan service from commercial banks at the high level. The users of personal loan service from the commercial banks mostly valued online service which can be used at any place and any time. 4) Marketing promotion were valued by the users of personal loan service from commercial banks at the high level. The users of personal loan service from the commercial banks mostly valued advertisements and other public relation media such as brochures, websites on the Internet and official lines which are comprehensive and continuous.

3. The differences in genders, ages and occupations of personal loan service users of commercial banks had the effects on differences in opinions about marketing factor on selection of personal loan service from commercial banks at the significance level of 0.05. However, the differences of the samples in status, educational level, average income, the number of commercial banks used at present, media for obtaining information about home loans, and objectives for selection of personal loan from commercial banks did not make differences in opinions on marketing factor on selection of personal loan service from commercial banks. This findings are similar to the findings in the studies of Wongweerakul (2010) investigating factors on selection of home loan services form commercial banks. In his study, the samples with different purposes for loan requests did not have differences in decision-making to choose home loan services from commercial banks.

## **5. Suggestions**

### *5.1 Suggestions from the study*

1. The present study found that the marketing factors on selection of personal loan services among customer groups of commercial banks were on products. The users of personal loan service from commercial banks gave value mostly on recognition and reliability of the organization. Therefore, stakeholders should emphasize on continuously and constantly maintaining reliable images and fame of their organization.

2. According to the findings, the marketing factors on customers' selection of personal loan services from commercial banks were on prices. The users of personal loan services from commercial banks gave value mostly on installment payment. Therefore, stakeholders should focus on arranging the installment payment in the most appropriate way.

3. The findings of the study revealed that the marketing factors on selection of personal loan services from commercial banks were on places. The users of personal loan services from commercial banks gave value mostly on online service which can be used at anywhere and anytime. Therefore, stakeholders should consider to include more personal loan online service for providing service at anywhere and anytime.

4. The results of the study show that the marketing factors on customers' selection for personal loan services from commercial banks were on marketing promotion. The users of personal loan services from commercial banks gave value mostly on advertisement and other public relation media such as brochures, websites on the Internet or Official line which are comprehensive and continuous. Therefore, stakeholders should consider to increase more advertisements or other public relation media such as brochures, websites on the Internet or Official line in a more comprehensive and continuous way.

### *5.2 Suggestions from future research*

The suggestions from the present study are as follows.

1. Other factors affecting on customers' selection for personal loan services from commercial banks should be studied.
2. Factors affecting behaviors on selecting personal loan services from commercial banks should be studied.

## **6. Acknowledgments**

This research was successful as a result of useful and great advice from Dr. Natsapan Paopun as my research advisor who provided me with knowledge, research guidelines, and review and correction of defects with care and dedication as well as with useful consultation for completing this research successfully. In addition, I would also like to thank all the faculty members for their kindness and helpfulness in all aspects of knowledge applied in this research. Finally, I would like to thank the owners and authors of all documents and research papers cited in this research, including the staff and students of the Master of Management Program, Sripatum University, for their helpful contributions to the success of this research. I would like to thank all of them here.

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**Factors Influencing Personal Financial Planning of  
Employee's in Dindaeng District, Bangkok**

**RCGR<sup>2nd</sup>  
2018**

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# **Factors Influencing Personal Financial Planning of Employee's in Dindaeng District, Bangkok**

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## **Abstract**

In this study, researcher investigates employee's personal financial planning in Din-Daeng District, Bangkok oh 400 people. The study was survey research, a questionnaire was applied as a research instrument for data collection. The analysis result of this study may be approach to financial planning in the future. The finding showed personal factor influence on financial plan. It was found that the upper middle class samples are doing their financial planning as carefully, mostly is making a deposit, maybe because lack of investment knowledge. The tendency of them avoid risky alternative investments. Information perception is an influencing factor of employee's personal financial planning in Din-Daeng District, Bangkok; consequently, government sector should have knowledge of financial planning should be used to achieve success.

**Keywords:** Financial Planning, Employee

## **1. Introduction**

In modern day financial planning It is a concept that allows us to prepare ourselves and lead our lives to financial security. It should start with cultivating a habit of saving and using good money. Discipline from the children, because at work. Need to know how to plan and allocate enough money to spend on daily basis. Future spending includes retirement savings. Financial planning is an important concept that can be implemented in each life span Good financial health. (The Stock Exchange of Thailand, 2558).

Personal financial planning means creating, implementing, updating and editing. To achieve the financial planning goals of a particular person Therefore, financial planning is an important concept that will allow you to carry out each stage of your life. Have good financial health. A good financial planner must be aware that at present their financial status. The net asset value and liquidity of the Company can be determined as follows:

1. Protecting revenue means that revenue is not going down in the future. In the next 10 years, the value will be reduced to half the value if inflation is still present.
2. Use the income that is most effective means the income that is produced by. Keeping up with interest-bearing savings may have a relatively low return on investment. There are many other ways to invest, but there is a high risk involved. The higher the return, the risk is even higher.
3. Increase the total revenue means that the current income that is already there may be a way. Earned the full amount. No need to go to work. But it may come by improving the channels of money flow. Normal savings (Samkhutisin, 2009).

Personal finance of Thailand is taught at home. Each family has savings, money management is different, and millions more families do not teach savings, money management. For this reason While goods and services can be easily extracted from the pockets, there are a number of them. When lowering personal financial management Human salaries are mostly paid. Moreover, the burden of human salaries is both a burden and a burden in the past. These loans are repayable regardless of home loan. So, the money trend is often used to spend money or to extinguish the debt in the past. More than planning to save for the future. Life after retirement of working people in the next 10-20 years. Descendants accompany the economic cycle tendencies that often crises every 8-10 years. It is very risky for those who do not plan financially (MR Wealth, 2561).

### *1.1 Research Objectives*

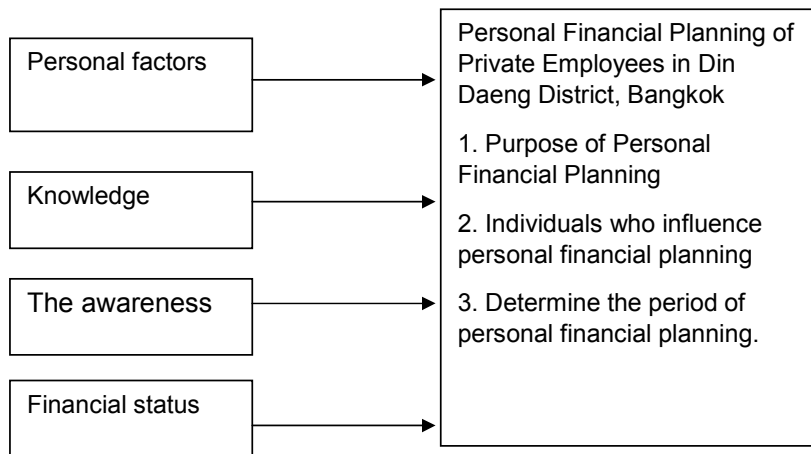
- 1 to study personal financial planning of private employees in Din Daeng, Bangkok.
- 2 to study factors influencing personal financial planning of private employees in Din Daeng District, Bangkok Metropolis.
- 3 to study the personal financial planning knowledge of private employees in Din Daeng, Bangkok.



## 1.2 Conceptual Framework

(Independent Variables)

(Dependent Variables)



## 1.3 Research Hypothesis

1. Personal factors: gender, age, status, education And average monthly income. Influence of Personal Financial Planning on Private Employees in Din Daeng District, Bangkok Metropolis.
2. Knowledge of financial planning influenced personal finance planning of private employees in Din Daeng district.
3. Information perception influences the personal financial planning of private employees in Din Daeng district.
4. Financial status influences the personal finance planning of private employees in Din Daeng, Bangkok.

## 2. Literature Review

*Concepts about personal financial planning.*

Poonsap Ramanat (1983) argues that the concept of personal financial planning is based on the income that individuals have been afforded for living necessities such as food, clothing, housing. Medicine. In addition, it is a convenience, which often depends on necessity and satisfaction.

## Financial Well-being

Fulfillment The life of a person. Through the administration. And financial planning is designed for each person. It involves financial information gathering. Targeting Checking current financial position Including the strategy. And the financial plan to achieve such goals in the future, the elements of well-being. It can be divided into 7 areas, which cover life in all dimensions as follows (Chirawut Wongchai).

## Concept of awareness

Seeking news or information. In addition to supporting existing attitudes and understanding, It is also seeking to use other uses, such as to provide knowledge. Used as a solution. To respond to personal needs and interests. Also, enjoy the entertainment. In addition, any person decides to seek information. Chill Or try to avoid exposure to it. It depends on the assessment, the comparison, the effort to be made and the return on which to receive the information. (Mr.Surapong Sangsumlee (2545)

### **3. Research Methodology**

Use of questionnaire is a tool to collect data. The questionnaire will divide the questionnaire into five parts.

Part 1: Personal Facts of the Grill Group: Gender, Age, Status and Average Income The question that is used is the closing question. Closed-ended questions.

Part 2: Knowledge of personal finance planning 11 items, then set the scoring criteria. Financial Literacy Factor Measured from 11 question sets to calculate financial literacy scores. The researcher will calculate the score of each answer. Then calculate the financial literacy score as a percentage of the full score. Which is equal to 22 points, with a scoring scale.

Part 3 Financial status, 11 items, then set the scoring criteria. Financial status Measured from 11 question sets to calculate financial status scores. The researcher will calculate the score of each answer. Then calculate the financial status score as a percentage of the full score. Which is equal to 22 points.

Part 4 Information on financial information is the source of information. And investment news. The question that is used is the closing question. Closed-ended questions.

Part 5 Information on personal financial planning, including the period of personal financial planning. Individuals who influence personal financial planning And financial planning purposes.

#### 4. Analysis of Data and Statistics

When the questionnaire was collected, the researcher will review the completed questionnaire. A complete questionnaire was used to analyze the data using the SPSS program.

1. Editing The researcher examined the completeness of the questionnaire responses and the incomplete questionnaire.

2. Code (Coding) to bring the correct questionnaire. The code has been defined.

3. Data processing The data is encrypted and saved to the computer. Processed by SPSS for Windows. Involved in hypothesis testing. This research uses a statistically significant level of 0.05 (Level of Significance)

4. Analysis of the data of the questionnaire. The statistics are analyzed as follows:

##### 4.1 Descriptive Statistics Analysis

Facts about personal factors Personal Financial Planning Insights And financial information perception. The data was analyzed by Frequency and Percentage.

##### 4.2 Inferential Statistics

Inferential Statistics Analysis is the statistics used to test the hypothesis. Researchers have chosen to use. Chi-square test to use in this study.

#### Statistics used in data analysis

Descriptive Statistics Analysis is the basic statistics used to analyze the general information of the respondents. The data were analyzed by using statistic. Frequency distribution Finding Percentage

Statistics used to test the hypothesis. Test the difference between the mean scores of two or more variables using one-way analysis of variance to test the hypothesis (Chusri Wongratana 1998: 236).

#### Summary of data analysis results

1. Results of general data analysis of respondents.

The majority of respondents were female (64.25%), aged between 31-40 years (51.00%), had status (68.75%) and average monthly income was over 30,000 Baht. 42.25)

2. The results of knowledge analysis on financial planning.

The respondents were knowledgeable about financial planning at a high level (51.50%), followed by the knowledge on financial planning at a moderate level (36.50%). Financial planning was low (12.00%), respectively.

3. Results of analysis of financial status

Most respondents had a moderate financial status (86.50%), followed by a very good financial status (8.00%) and a weak financial status (5.50%)

#### 4. Analysis of Financial Literacy

Most respondents received financial news from the internet (42.0%), followed by financial news from television (39.25%) and received financial news from employees. The lowest (2.75%), respectively.

##### Test results hypothesis

Assumptions 1 Personal factors have no influence on the personal financial planning of private employees in Din Daeng, Bangkok.

Assumption 2 Knowledge of Financial Planning Influence of Personal Financial Planning on Private Employees in Din Daeng District, Bangkok Metropolis.

Assumption 3 Financial status has no influence on the personal financial planning of private employees in Din Daeng, Bangkok.

Assumption 4 Financial literacy perception influences the personal financial planning of private employees in Din Daeng, Bangkok.

#### 5. Discussion

1. Personal factors influence personal financial planning of Bangkok residents. At the 0.05 level, which was consistent with the assumptions. And in the same direction. The ABAC Poll (2009) surveyed New Gen's behavioral behaviors, or new generation of people with money. With life and financial planning in a recession. The sample size is 75,000 baht per month and 30-49 years old. The majority of the high-income population is planning to spend a lot of money. And be careful in using more money. In most cases, there is a form of saving by depositing with a bank. And with no understanding of other types of investment. Avoid the risk of investing in other forms.

2. Knowledge and understanding of financial planning had no influence on personal financial planning of people in Bangkok. Which is not consistent with the assumptions set. And conflict with Standard Chartered Financial Planners Board of Standards Inc. of the United States (Viwatara Hirunchote, 2009)

Americans are divided in financial planning into three groups: the independent group, the anxious And groups that need help This is a group that needs help. Because of financial insecurity. Make sure you seek professional financial planning advice.

3. Financial status has no influence on personal financial planning of people in Bangkok. At the 0.05 level, which was consistent with the assumptions. And in the same direction. MFC Asset Management Public Company Limited (MMF) has stated its plans for retirement. The topic of determining the amount of capital that can be obtained in the future. Individuals with different financial health will have different financial plans in the future.

4. Information perception Influence of personal financial planning of people in Bangkok. At the 0.05 level, which was consistent with the assumptions. And in the same direction. The ABAC Poll (2009) surveyed New Gen's behavioral behavior or new generation of money. With life and financial planning in a recession. The sample size is 75,000 baht per month and 30-49 years old. Information will help ensure the financial planning of the new generation.

## 6. Suggestions

1. The research found that. Information perception Influence of personal financial planning of private employees in Din Daeng district. So, the agencies. There should be public relations in the area of personal financial planning for those who need financial planning. They have the information to use in financial planning to succeed.

2. The research found that. Agency With personal financial planning services. It should have a high level of knowledgeable staff. To provide advice and advice to those who want to use the service to understand more about financial planning. In addition, individuals should have a better understanding of financial planning to make financial planning more effective.



# Business and Marketing Management

**RCGR<sup>2nd</sup>  
2018**





0003

**The Passengers Satisfaction for Using Bus:  
A Case Study (Yellow Bus) In Sakonnakhon Province**

**RCGR<sup>2nd</sup>  
2018**

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# **The Passengers Satisfaction for Using Bus: A Case Study (Yellow Bus) In Sakonnakhon Province**

by

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## **Abstract**

The purposes of this research were to examine the passenger's satisfaction for using bus (yellow bus) in Sakonnakhon Province. The objectives were to: 1) survey and analyze the customer who uses bus (yellow bus) in Sakonnakhon Province. And 2) to study information which concern with the customers' satisfactions on bus services and customers' opinions through bus services at yellow bus in Sakonnakhon Province. The researcher used survey research for analyze by quantitative methods were applied. Data were collected by using questionnaire with 100 clients. The study found that there was 1) Satisfaction levels of users were bus ( Yellow bus) in Sakonnakhon Province all aspects were average level, so users has high level satisfaction was the driver. 2) Users opinion and requirement for using bus (yellow bus) in Sakonnakhon Province satisfy on service quality were timetable, public relation and recommendation from staff. In addition, capacity and cleanness inside bus. Furthermore, bus station has area waiting and sitting support for user and this area was safety.

**Keyword:** Satisfaction, Quality of Service, Yellow Bus

## **1. Introduction**

Sakonnakhon Province is located in the Northeastern Region of Thailand. This is a community from prehistoric times to the present. As a result, Sakon Nakhon is an ancient city with many important and diverse areas. Especially in the natural environment. History, society, politics, religion and culture both nationally and locally. Sakon Nakhon province has been dubbed. "The religion of Isaan" evidenced of ancient history temples. Show the prosperity of Buddhism in the past. Sakon Nakhon also has a variety of attractions. Especially in Muang District, which has natural attractions, Thai wisdom and history to travel. There are many types of public bus and Personal car etc.

Currently, there are many types of public transport services. The people who come to the service of public transport also have a variety such as career, age, income include of different attitudes. Therefore, Individual is a difference in demand for public transport. While some cases the service not meet the demand. As a consequence for the public transport service has decreased. Specially, require perfectly to travel at Sakon Nakhon Province. Development of transport quality use to support the travelers and tourism Development.( Transportation and Traffic Development Plan year 2000- 2020 , Office of transport and traffic police and planning, Ministry of Transport, 2011).

For the reasons mentioned above. The researcher chose to study the satisfaction of A Case Study (Yellow Bus) In Sakonnakhon Province, educational area routing around Sakon Nakhon bus terminal to use as the guide for satisfying. As well as, the data information has developed to improve public transport of Sakon Nakhon in the future.

## **2. Research Objectives**

1. Survey and analyze of The Passengers' Satisfaction for Using Bus . A Case Study (Yellow Bus) In Sakon nakhon Province.

2. Survey opinion and demand of The Passengers' Satisfaction for Using Bus . A Case Study (Yellow Bus) In Sakon nakhon Province.

## **3. Research methodology**

### **3.1 Population and sample**

500 Passengers using Bus (Yellow Bus) In Sakonnakhon Province. The sample size of the passengers satisfaction for using bus a case study (yellow bus) in Sakonnakhon Province by substitute a value in a formula Know the population.

### **3.2 Verification of tools.**

The researcher used a questionnaire for research tools. Questionnaire is looks like open questions. The check list can be answer with only one answer divided into 4 parts:

Part One: General information

Part Two: Information data about passengers using bus (yellow buses).

Part Three: Information data about passenger's satisfaction (yellow buses) In Sakonnakhon Province. Divided into driver's satisfaction, Service satisfaction of employees, passenger bus satisfaction , bus condition satisfaction and Management satisfaction. It is a measure of value.

Part Four: Information data about comments and passengers needs for use bus (yellow buses) In Sakonnakhon Province.

The researchers examined quality verification of tools by checking accuracy of language content and consistency by experts and find reliability with computer software.

## **3. Data collection**

Data collection includes Primary Information. The researcher collected data by interviewing the passengers use yellow bus in Sakonnakhon province. For the secondary data, the researcher collected data from relevant agencies of government and private company.

Data analyze by Computer software and Statistics in this research: frequency, Percentage, average and standard deviation

#### 4. Data Analysis

Satisfaction level passengers satisfaction (yellow buses) In Sakonnakhon Province. The overall was moderate. When considering each side it was found that Driver's, Management have satisfaction level is very high. The service of the driver, bus condition and bus station have satisfaction level is medium.

1.1 Driver: The passenger have satisfaction level is very high of human relations friendly with the passengers ( $x = 4.21$ , S.D. =0.64). Ability to work effectively ( $x = 4.17$ , S.D. =0.55). Honorably and friendly with passenger ( $x = 4.10$ , S.D. =0.63).Uniform to be neat and tidy ( $x = 4.06$ , S.D. =0.57). Etiquette in service ( $x = 3.98$ , S.D. =0.71)

1.2 Management: The passenger has satisfaction level is very high of management. Time for bus routing ( $x = 4.21$ , S.D. =0.52).Ticket prices compare to service ( $x = 4.10$ , S.D. =0.56).Ticket prices compared with the economy ( $x = 4.08$ , S.D. =0.71). Punctuality for bus routing ( $x = 3.88$ , S.D. =0.69)

1.3 Service: The passenger have satisfaction level is the middle of service. Convenience to pay the fare ( $x = 3.51$ , S.D. =0.44). Public Relations Services for bus routing ( $x = 3.41$ , S.D. =0.63). Advice to passengers ( $x = 3.29$ , S.D. =0.75). Employee Speech to passenger ( $x = 3.19$ , S.D. =0.61).Convenience and fast service ( $x = 3.16$ , S.D. =0.48).

1.4 Bus condition: The passenger has satisfaction level is the middle of bus condition. Bus safety ( $x = 3.25$ , S.D. =0.66). Seat cushions inside the bus ( $x = 3.21$ , S.D. =0.89) and other service. The wind inside the bus ( $x = 3.16$ , S.D. =0.65). Clarity of the sign or the symbol inside the bus ( $x = 3.14$ , S.D. =0.54). Clean up in the bus ( $x = 3.09$ , S.D. =0.71).

1.5 Bus stations: The passenger has satisfaction level is the middle of bus stations. Prepare a seat while waiting for a bus ( $x = 3.11$ , S.D. =0.63). Drinking water for passengers ( $x = 3.01$ , S.D. = 0.79). The clarity of signs or symbols ( $x = 2.61$ , S.D. =0.54).

1.6 Comments and Requirements: The passenger has satisfaction for using bus. A Case Study (Yellow Bus) In Sakon nakhon Province. 1)Service for using must be provide public relations when bus put into bus stop by employee staff to advise publicize that sound on the line or publicity boards. To facilitate the service. 2) Bus condition using must be interior of the bus is not too small size . Clean and odorless inside the bus. 3) The bus station using must be to provide seating for the passengers while waiting.

#### 5. Conclusion and Discussion

The results of the research The Passengers Satisfaction for Using Bus: A Case Study (Yellow Bus) In Sakon nakhon Province. Discuss the results in each of the following areas. From the first objective to study driver function. Passengers satisfaction level is very high to Have a human relationship, smiling, friendly, knowledgeable, competent and efficient. Honorable and friendly with passenger, uniform to be neat and tidy and etiquette in service consistent with the concept by Tanuta jantarakat (2009) : Research satisfaction of service users on the quality of bus services of Transport company at Passenger Terminal Saraburi Province . It found that the quality of passenger service on the touchable. Reliability response to needs the recipient. Assurance and access to the minds of others is at a moderate level. Satisfaction in service provision, personnel service and facilities were

moderate. Customer satisfaction varies according to age. The average monthly income for education is about the quality of service. Reliability The response to the needs of the user confidence. And the other side of the mind. The relationship between satisfaction and satisfaction of car service users in the process of personnel service and convenience. The second , Management function users are satisfied with time routing and punctuality for bus routing consistent with the concept by Kultanon Tanapongsatong (refer to Tanuta jantarakat :2009) Principles of service management (1) The principle of consistency with the customer needs of individuals the benefits and services provided by the organization. It must needs of the most of all personnel not a particular group. (2) The principle of consistency use the service. (3) The principle of equality service is always available to all users and equally not special privileges are granted to individuals or groups in a manner different from other groups. (4) Safety principles (5) Convenience provided to service recipients must be in a manner is easy to operate. Information on the importance of bus services. When considers the passenger are important in the medium to high on all sides. And when considering the importance. It is found that most bus users are most sensitive to safety and punctuality of buses. The most important safety in using the bus is most students. Because the bus users are often required to use the bus service, it is very important to be safe. Those who focus on getting out on time are mostly groups. With moderate income middle age there are butlers, housekeepers, and agricultural workers, as these people are hustling to use public transport. Service function of staff Bus users are satisfaction. Public relations service when advising passengers Speak of employees and fast service consistent with the concept by Yupin Jaimesooktookpala (2017) 1.The trust. 2. The response. 3. The confidence. 4. The customer care. 5. The touch. The condition of the bus users are satisfaction with safety of the bus. The interior of the bus other services such as fan, the clarity of the signs or symbols in the car and clean atmosphere. Finally, the study object also reflects that service users pay attention to and are satisfaction with the service of the bus by reflecting the gap and service provider should give urgent priority. To solve the problem of the bus to be more useful, the research found that the gaps that users require the bus operators to solve most problems. Is a matter of routing time safety and the quality of the bus . So if the bus service provider can solve these problems or insist the driver does not have the behavior mentioned above. This may make the user more impressed by the use of the bus and perhaps increase the number of users

## 6. Suggestions

Study on the factors affecting the decision to the Passengers for using bus: a case study (yellow bus) in Sakon nakhon province. To serve as a guideline for operators and related agencies to improve the development of bus services to meet the needs of customers.

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0005

**Marketing Strategies Affecting Consumer  
Behavior in Selecting Fresh Coffee Shops**



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# Marketing Strategies Affecting Consumer Behavior in Selecting Fresh Coffee Shops

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## Abstract

This article aimed to study Marketing Strategies Affecting Consumer Behavior in Selecting Fresh Coffee Shops in Mueang District, Surat Thani Province and to analyze the level of marketing mix in the view of customers in the area. From the literature reviews, it was possible to analyze that most of the consumers chose to buy in order to meet their needs and desires. Nowadays, the behavior of consumers is turning to consume fresh coffee, so the business operators in fresh coffee should take into account with the adjustment of marketing strategies. The key is the strategy in the customer's perspective, according to the sections related to the service. (7C's) is the value customers will receive, consisting of cost to consumer, convenience, communication, caring, comfort and complete in meeting the needs. All of the above mentioned factors are important keys to the success of the coffee business by creating a unique identity, novelty in terms of products, and will result in the business by providing quality services, impression to customers and the highest satisfaction with the service.

**Keywords:** Marketing Strategies, Behavior, Coffee Shop

## 1. Introduction

At present, coffee consumption behavior of Thai people has increased from 0.5 kg per person per year and there is a tendency to extremely increase in the future. However, when compared to Asian consumers' consumption behavior, it was found to be higher, such as in Japan, the average consumption of coffee is 3-4 kilograms per person per year (Pasit Anukulthanakan, 2015). Consumption of coffee has been changed from time to time. In the past, people usually drank beverages in the ancient coffee shop, such as hot coffee, ice black coffee, etc. until the present day, it is called coffee shop. For customer service, most coffee menus available in coffee shops are Espresso, Americano, Mocca, Latte, Cappucino, and a variety of drinks. Today's Coffee Shop has made a difference in sales, using a variety of brewing techniques, creating new menus and creating a unique atmosphere for the customers to sit back, relax and choose to use the service.

There are two types of popular fresh coffee: Arabica Coffee which is unique in aroma and mellow taste, Robusta Coffee, which has an aroma consistent with the identity of the concentration. Both types of coffee are popular among consumers, and coffee shops usually use them to make hot and cold beverages to consumers (Kawi Sakulpipat, 2002).

Fresh coffee business had grown rapidly in 2018, generating a revenue of 17,000 million Baht (Justin Pow, 2018) to Thailand, thus many foreigners interested in investing business, as a

result, lots of coffee brands were brought into Thailand such as Coffee World, Starbucks Coffee, as well as today's popular brands in Thailand such as Café Amazon, Black Canyon Coffee, etc. The business of fresh coffee is growing more and more in both foreign and Thai brands due to the changing of consumer behavior. The continuous growth of the business has resulted in the increasing of competition in the market, so entrepreneurs have to adjust strategies to up with the changing market situation. However, in investing in a live cafe, it is necessary to study the market situation, the customer's perspective service (7C's), the consumer behavior and other factors in coffee shop business. In this article, the author aimed to study the behavior of consumers in selecting fresh coffee shop in Mueang district, Surat Thani province, and to analyze the level of marketing mix in the perspective of customers in the area as well as review literatures relevant to consumer behavior, marketing theory, marketing strategies, overview of coffee business growth trends, and the types of popular fresh coffee.

## **2. Concepts and Theories of Consumer Behavior**

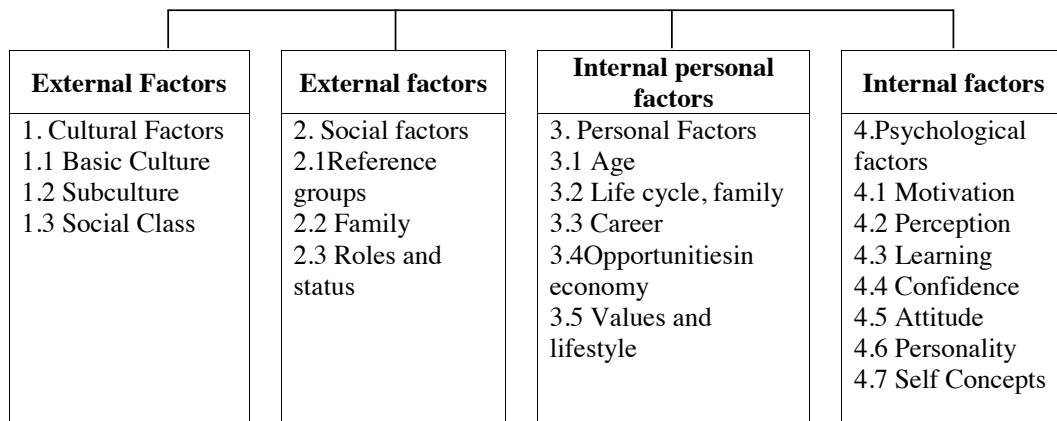
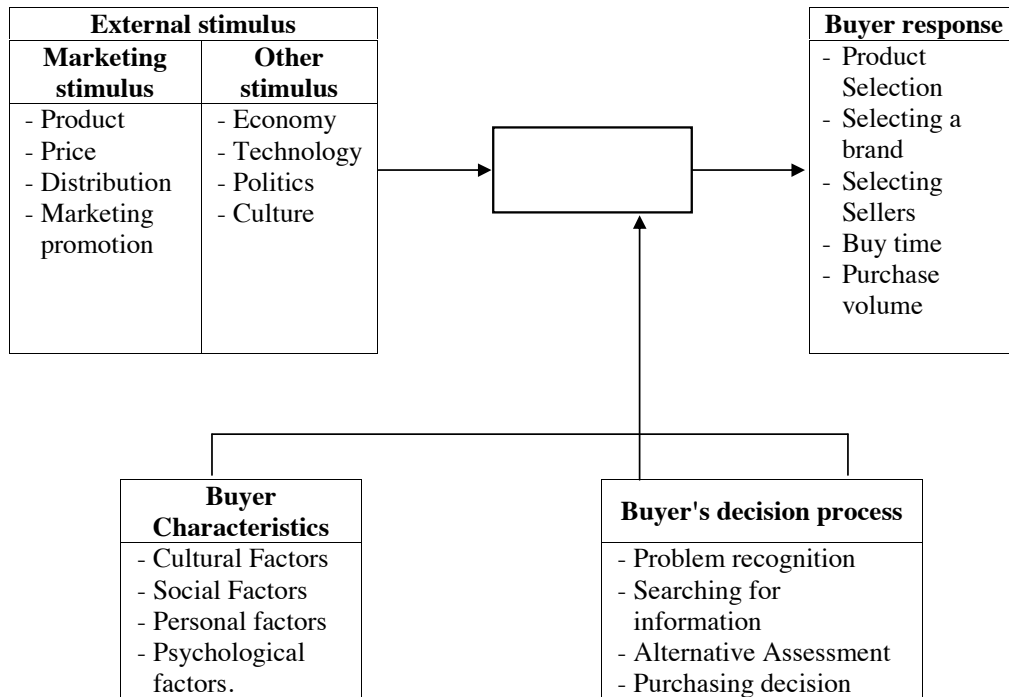
Consumer Behavior means the act of a person involved in the selecting, purchasing, using, and disposal of goods or services to meet the demand and their desires (Solomon, 2009). Consumers' behaviors are related to individuals or households who buy or need goods or services for personal consumption or decision-making behavior and consumer behavior related to purchasing and using products to meet their needs. The study in consumer behavior is a study of behavior in decision making to purchase goods and services to obtain maximum satisfaction from a limited budget (Wandee Rattanaguy, 2011)

### **Consumers**

Consumers are the persons who have needs and purchasing power, resulting in the occurrence purchasing behavior, and using behavior. To determine who the consumers are, the persons must need the product, but if the persons do not need it, they are not the consumers. The consumer's purchasing power is not only limited by the need. Consumers must have the power to buy. If there is only need, no power to purchase, they are not the consumer of goods. Therefore, the analysis of consumer behavior must be analyzed to the consumer's money as well. Purchasing behavior will occur when consumers need and have the power to purchase, the questions used to find purchasing behavior are 6Ws and 1H, consisting of Who? What? Why? Where? When? and How? to find 7 answers: 7Os, which include Occupational, Objectives, Organization, Occasions, Outlets and Operations (Seri Wongmontha, 1999).

### **Consumer Behavior Model**

Consumer Behavior Model: It can be explained that consumer behavior model is a system that arises from stimulus causing the needs. The buyer's influence is influenced by the buyer's response, the buyer's purchase decision, the internal and external and external stimulus. Marketers are focused on creating controllable marketing stimulus and other uncontrollable stimulus. Buyer's black box is like a black box, which manufacturers or sellers can not know, they must try to find out what's inside the black box, influenced by the nature of the buyer, the buyer's decision process, and buyer's response or decision. Then consumers will make decisions on issues themselves (Kotler Philip, 1997).



## Concepts and Theory of Service

Service is a behavioral activity that an individual makes or delivers to another person with the goal and intention to deliver it (Veerapong, 1996). The core of the service is, it must be able to meet the needs of most people, but at the same time, it must be carried out on a consistent basis equally to everyone, and also provides comfort, not waste of resources and does not make it too difficult to use by users. The most effective and beneficial service to the customers is the provision of personalized service or a service without emotion (Pongdee, 2003).

## Service Characteristics

The service has four important characteristics that influence the design of marketing operations: 1. Intangibility: The service is not visible or sensible before purchase and can not be predicted the outcome, so to minimize risk, buyers look for signs of service quality from place, person, communication device and price. Therefore, the service provider must create these as collateral for the buyer. 2. Inseparability: The service is production and consumption at the same time, there is no product that can be stored, sold, and consumed later. One service provider can only service one customer at a time, causing problems about the limit of time. The strategy to solve the problem is the service providers may expand the user base to a larger and adjust the standard of service time to be faster, so they can serve more customers. 3. Variability: The nature of the service is highly uncertain, depending on many factors. Service providers, service intervals, service locations, so service providers need to control the quality of service. 4. Can not be kept (Perishability): The service can not be stored in the same way as another product, which can cause problems. When the demand is unstable, the service is not available or there is no customer. Service businesses must use marketing strategies to tailor their buying and service needs, such as adopting different pricing strategies to achieve a steady demand or hiring temporary staff during times when the number of customers exceeds normal to be able to provide services quickly (Kotler, 2010).

## Guidelines and theories on marketing mix

Marketing mix: marketing mix is the marketing tool used by businesses to achieve their marketing objectives. This marketing tool is called 4P's (Kotler, 1997). Later on, there is the presentation of the service marketing mix concept. The concepts related to the service business, which is different from consumer goods, and need to use the marketing mix (7P's), which is important for determining the marketing strategy of a business, which must be aligned with each other to suit the environment of the business and the industry. In order to successfully manage the marketing of a business, the marketing mix must be considered in the customer's perspective (Siriran Serirat, 1998). The 7C's include the following:

1. Customer Value: The customer will buy the product or service. What customers consider primarily is the value or benefits they receive compared to the money they pay. Therefore, businesses need to offer only products or services that truly serve the needs of their customers.

2. Cost to Customer: Cost or price that customers are willing to pay for the purchase of goods or services. It must be worth the product or service to get. If customers are willing to pay high prices, the expectations in the goods and services are high as well. In setting the price of a product or service, service providers should set a price that the customer is willing to pay and acceptable.

3. Convenience: The customer will purchase goods or services for any business, the business must be convenient for the customer, whether the contact information and if the service is not convenient enough for customers to buy or use, business must act to facilitate the customer.

4. Communication: The customer needs to receive business news. At the same time, the customer wants to contact the business to provide feedback or complaints, so businesses need to provide the right media or channels for their customers to get their feedback.

5. Caring: The customer buys goods or services, whether it is buying or using the necessary or extravagant services, such as coffee service business. They need care from the service provider for the first time or any time of service.

6. Comfort: The environment of service such as buildings, service counters, toilets, corridors, publicity signs must be comfortable for the eyes and peace of mind.

7. Complete: Thing that customers expect is they are perfectly fulfilled, no matter what the customer needs, the product or service needs to meet the needs of the customer completely.

### 3. Conclusion

Based on the literature review, it was found that the behavior that most consumers choose to use a fresh coffee shop is composed of three factors, both internal and external stimulus and uncontrollable stimulus. These 3 factors affect buying decision to meet their own needs. Consumers have a tendency to be increasing, so the coffee business operators have adjusted marketing strategies, customer service strategies (7C's) and service strategies. The most prominent feature of the service business is that the service delivery strategy is the most important factor for the service business, as it provides a comfortable, happy, and satisfying customer experience. Therefore, customers are satisfied with the decision to use the service. The second is customer service strategies (7C's): 1. Customer Value 2. Cost to Customer 3. Convenience 4. Communication 5. Caring 6. Comfort and 7. Complete. This concept is an important factor in determining the strategy that will make the coffee service business successful. If we study the strategies that consumers want, it will optimize the service to create a unique identity and impress the consumer. Finally, consumer behavior, creating strategies for novelty or differentiation. Business owners need to study the changing trends of consumers to adapt strategies in many aspects of the coffee service business.

For the general information of fresh coffee business, it is an economic crop that generates good income for Thailand. Thai people grow two types of coffee: Arabica and Robusta. These two varieties are popular among coffee consumers and the coffee shop business to choose. Both varieties give a different taste. Arabica to give a taste of mingling, Robusta gives a rather sour taste and bitter. Mostly, Robusta will be mixed with Arabica to create a mellow drink menu. There are two methods of production: Dry Coffee and Wet Process or Wash Method.

### 4. Suggestions

1. Fresh coffee shop operators should focus and improve the marketing mix in every aspect of the customer's perspective, in terms of. Customer Value, Cost to Customer, Convenience, Communication, Caring, Comfort and Complete in meeting the needs to create customer satisfaction and for business advantage.

2. Fresh coffee business operators should strategically create unique, innovative and good customer service to create competitive advantage both directly and indirectly. It also impresses consumers to tell and return to use the service again.

3. Fresh coffee business operators should study the changing patterns of coffee consumption in order to create strategies and develop novel products to meet the needs of consumers.

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0007

**Factors Affecting the Decision to Purchase Goods Online in  
the Digital Age, Consumers in Bangkok, and Prim million**

**RCGR<sup>2nd</sup>  
2018**

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# **Factors Affecting the Decision to Purchase Goods Online in the Digital Age, Consumers in Bangkok, and Prim million**

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## **Abstract**

This research is aimed at studying the purchasing behaviour of online consumers in the Greater Bangkok. BY demographic information and factors that influence purchase decisions online, in digital era. And the factors of the marketing mix factors, and technology adoption. Population and sample used in this research is that consumers, both male and female. In Greater Bangkok the online purchase in the digital era. The instrument used in this study was a questionnaire. Data were analysis using computer software Statistics on the frequency, percentage, average, standard deviation. And compare the difference of the T-Test and set the size of the sample in the confidence level of 95% of the sample size of 385 and a backup sample to prevent medication errors by 25 people, accounting for a total of 400 people, period. The information collected from 1 September to 30 November 2561, total the period of 4 weeks

**Keywords:** Online Product, Purchase Decision, Digital Age

## **1. Introduction**

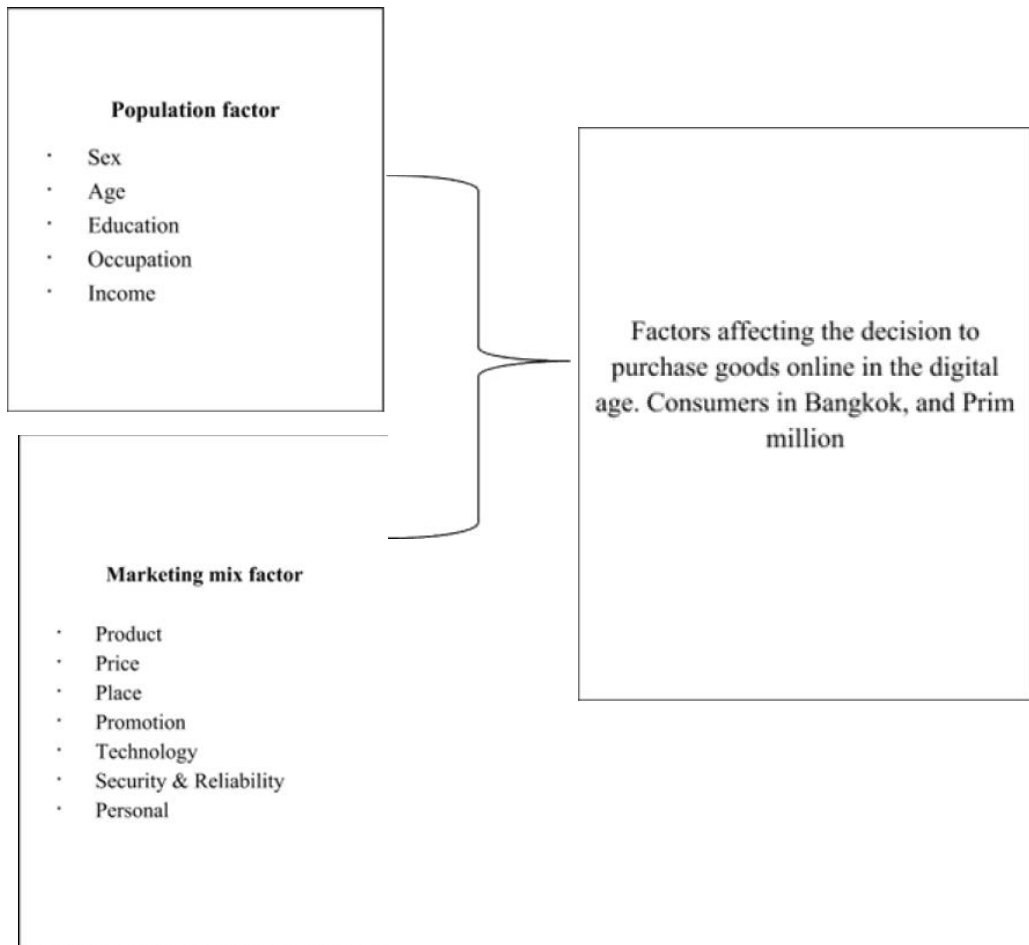
In today's world of online commerce is growing steadily. Due to technological advancements. Making access to the Internet, consumers quickly and easily, just fingertips. To Information or purchase products via the Internet, whether Channel Website, Facebook, Instagram or other mobile Application is not a novelty anymore. When we step into the digital age Digital infrastructures, everything has changed dramatically. To leap Digital technology makes a new business model. Both in terms of economy, can affect the value of the products or services available such as online shopping, watch movies online, providing services through online. And this will make the adjustment sooner. Smith was replaced by a business online in the digital age. Some businesses have closed down. Such as booksellers, and book rental stores as well as business magazines with lower sales. Because consumers can go through the online channel. Such as websites, Application, which is convenient and fast. Thus, consumers have a wide choice anytime, 24 hours a day and there is a surcharge. Consumers are turning their attention to more traditional forms offline.

The trend of using online services in the digital age more. Statistics from Internet users in the year 2560 found that 61.1% of the increase of up to 3 hours, while 30.8% is still available online on average per day unchanged. Compared to last year, but only 8.1% of applications declined by an average of 2 hours 24 minutes per day. The use of online services in this age of digital. Most are using Social Media with many applications like Facebook, Instagram, Line, watching online TV, movies on the site. Or even listen to music online on youtube and so on.

The use of online services in the digital age. And shop online it is part of the online service in the digital age more. A survey last year, apart from the use of Social Media, Search, Email and music also. "Goods and services" that were in the top 5 of the service, which was previously ranked 8th last year, with the use of more than 50.8%, which means that Thailand bring the service online. Utilization in the economy, not only for entertainment purposes only. Another factor that makes consumers turn to buy products or services online. It is easy, fast and convenient, we do not need to go out and buy the product itself. Simply purchase through various online and wait for your order at home. You can also choose how many payment channels. Making it more comfortable Meet the needs of the consumer.

### *Research Objectives*

1. To study the purchasing behavior of online consumers in the Greater Bangkok. BY demographic information
2. To study the factors that influence purchase decisions online, in digital era. Marketing mix factors and factors of technology adoption.



**Figure 1** Conceptual Framework

*Expected Benefits of Research*

The anticipated benefits to be derived from the research. Researchers expect that this research will be aware of the factors that influence the decision to buy the product online in the digital age. Via online channels such as Facebook, Instagram, websites, and apps on mobile applications and for the benefit of operators who are interested in using online marketing or application functionality. As a way to sell products and services. It has led to the development of online marketing and application functionality. To meet the needs of most consumers.

## 2. Literature Review

### 2.1 Theory and Definition

#### Concept and theories about demographics

Yubon Bengunkraki (1999, 44-52). Discussed the concept of demography. Human behavior is caused by external factors. It is believed that people with demarcated characteristics will had different behaviors.

Siriwan Sareerat and others. (1995, 41-42) Discussed that the demographic aspect (Demographic) consists of sex, age, education level, occupation, income, as well as criteria used in market segmentation. The details are as follows:

1. Sex: Males and females differ in many aspects, from the body, the mind, and even the emotional state of feeling.

2. Age: Age will determine how much individual an individual experiences. Difference of age will make people different. The age will affect both mind or the behavior in different aspects of the Individual.

3. Education: Education is another thing that influences an individual's thoughts or attitudes. People have different education levels. It makes the mind and attitude are different. Highly educated people tend to have better ideas and attitudes than those with lower education.

4. Income: Income levels are what determines behavior or lifestyle patterns. Choosing products such as low income people will buy cheaper products than people who have a lot of income.

From the concept of demography mentioned above. Can be concluded. Demographic factors are important factors for marketers to use as a basis for market segmentation such as gender, age, education level, income, etc. Individuals with different demographic characteristics. There are different ideas, attitudes and behaviors.

#### 2.2 Concepts and theories of consumer behavior

Leavitt (1993, p.183) said that human behavior will come out at a time, often with reason, to cause the behavior before the cause is called. "The process of behavior" (Process of Behavior) There are 3 ways.

1. Behavior to occur, there must be a cause
2. Behavior to occur, there must be incentives
3. Behavior that would happen would be geared towards the ultimate goal.

Consumer behavior refers to actions of individuals. Directly related to the supply of goods and services, including decisions which have already also (Engel Kollat and Blackwell, 1968).

Concluded that the behavior of consumers (Consumer Behavior) refers to the expression of each individual factor is related to the goods and services that way. The decision-making process a decision affects the expression of the individual.

Consumers (Consumer) means the person or persons who want to express themselves and consumers may purchase T Nat name. In order to meet the needs of their own families or referring to satisfy the social living. However, the idea of marketing it can not be concluded. Everyone is a consumer business. Therefore, determining the composition of the consumer can choose a target market are 4 reasons: (a fight for every Thana, 2541, p. 5).

1. Consumers must be a requirement (Needs)
2. Consumers must have the purchasing power (Purchasing Power)
3. Consumers must be those who have a habit of buying (Purchasing Behavior)
4. Consumers will. Those who have the habit of consumption (consumption behavior).

### 2.3 Concepts and theories on the purchase decision

From the above data the decision means or compare what is needed from several options. Taking into consideration various reasons, to get what they want most (Schiffman and Kanuk, 1994, p.660) purchase decision process has 3 main elements.

1. Factors influencing the purchase decision (Input) external factors (External Influences) is any information about a product. Which is related to behaviors, attitudes and values that influence consumer behavior by these factors come from 2 sources.
2. The purchase decisions of consumers (Process) is the process of purchasing decisions of consumers, including factors such as personality, learning, awareness and potential in ways that reflect the needs of the user. Consume
3. The process of decision (The Act Making Decision) before consumers will buy.

### Concepts and theories about online marketing in the digital age

Marketing through social networks is a form of marketing communications services for free. When an Internet social networks like Facebook, Instagram by each social network will have an influence on customers, which may come from someone famous. People with experience the story very interesting. And reliability have made the track a lot. The techniques used for this type of marketing tool. Namely the need for establishing a good relationship with these people. And consumer participation is always (Aaker),(2016).

1. Presentation by increasing the value of your product or service.
2. The offering support and adoption.
3. Extensible platform to build other brands. The dimension and contribute more.
4. Centered on customer interest and customer engagement. If they are not aware of the differences of these objectives will not be effective digital marketing.

### The concept of application functionality (Mobile Application)

Mobile Application is one channel quality and accessible to potential customers. Or use it effectively. A modern image to the product. Service as well for the business sector, and Mobile Application can be developed to meet the requirements, such as financial transactions, Application, Application for real estate, Application for Sales, Application, or even playing games. Which are both online and offline. With a growth rate of user devices, making the company the leading mobile phone companies. The focus in developing applications and applications on mobile devices for applications where the benefits of growth obviously Mobile Application, depending on the needs of the user. At present, consumers are paying attention, and many of the so-called. "Apple Applications" or "Apps" is widely used. Which is a type of software that allows consumers to fulfill some requirements. When consumers use apps function. It will run under the operating system all the

time until we finalize it. Within the same time, there may be multiple applications and applications running simultaneously on the system. This process is referred to as "Multitasking" (Perm Vasin and victorious Wirot data, 2548).

### The concept and theory of marketing mix (7P's)

Siriran Serirat (1998) cites Philip Kotler's concept of service mix as a concept that is relevant to a service business that has a marketing mix. 7Ps to formulate marketing strategies, which include:

**1. Product** is what the seller must give the customer. Must meet the needs of customers. And customers will have the benefit and value of the product. In general, the product is divided into two types: tangible products and intangible products.

**2. Price** means the price of goods. Customers will compare the value with the price of the item. Therefore, product pricing should take into account the appropriateness of the benefits and the value to the customer.

**3. Place** means activities related to atmosphere or environment to present or sell products to customers. This affects the perception of customers on the value and benefits of the products that the seller wants to offer. The entrepreneur will have to consider both the location and the way to present or the way to sell goods.

**4. Promotion** is an important tool in communication between the seller and the buyer. The purpose is to inform the news. Encourage the buyer to have a positive attitude towards the product and the shop. And to make the buyer more interested in the product.

**5. Person or Employee** means the owner or distributor. It must be able to satisfy the customer differently and above the competition and must establish good relationships with customers on a regular basis.

**6. Physical Evidence and Presentation** Creating and presenting physical characteristics to customers. To impress customers. By trying to build overall quality. Whether it is a beautiful storefront. Negotiation must be gentle. And fast service. Or other benefits. The customer should receive.

**7. Process** is an activity related to the way and practice in customer service. To impress customers.

### *2.2 Literature Survey*

Piyamaporn help raise Rat (2559) has studied the subject. Factors influencing the decision to purchase through the online social experience that the majority of respondents were female. Aged between 26-33 years, online social network Facebook is used most frequently purchased product categories most often purchased by fashion buy 2-3 times a month.

Ratana Rittirong Constitution Act (2544) has studied the trust to electronic commerce case study of retail trade of consumers who are highly educated in Bangkok. Found that gender and age range of different goods on the internet does not apply to the purchase.

Manassanan Mahanonda (2556) studied the factors that were associated with the purchasing behavior of consumers via e-commerce site. Found that the occupation has resulted in the purchase by arguing that selling online channels, thus diversified. Able to meet the needs of consumers with different careers.

Pornpun tons sublime (2559) The influence of digital marketing in the purchasing decisions of consumers E-commerce business in Thailand found that most of the respondents were female,



single undergraduate professional / student Hobby Internet to shop. And through its e-Commerce for the promotion of interest.

### **1. Method**

The population for this research is that consumers who have purchased products online. Which does not know the exact How to determine the size of the sample, the estimated percentage. Unknown population of recipes using Taro Yamane at a confidence level of 95% with a tolerance of no more than 5% of the sample size used in this study were 400 for ease of analysis.

**Part 1** The questionnaire was used to collect general information of the respondents, including sex, age, educational level, occupation and monthly income.

**Part 2** The questionnaire about the online shopping habits of live consumers is the online channel that used to purchase the product. Popular items purchased through online channels. Frequency of purchase through online channels. And the average purchase price per session. The questionnaire is a check list.

**Part 3** is a question about the evaluation of the purchase via online that there are opinions on factors such as product factors. Price factor Channel factors Marketing Promotion Factor Technology Adoption Factors Safety and reliability factors and personal service factors. Including decision level. Consumer buying the questions in this section were rated by the rating scales. The criteria for determining the weight of the evaluation were 5 levels according to Five-Point Likert Scales method.

After the data has been collected. The researcher completed the self-examination questionnaire as soon as possible. The researcher analyzed the data. Data processing by software. The statistics used to analyze the data.

1. Descriptive Statistics: Frequency, Percentage, Mean, and Standard Deviation. The data used in the analysis are as follows

1.1 General information of the respondents. Analysis by frequency, percentage,

1.2 Assess the importance of the marketing mix that influences the decision to buy the product online. And assess the frequency of the behavior of consumers who purchase products through product online. Analysis by means of Mean and Standard Deviation.

2. Inferential Statistics to test the relationship between independent variables and variables in various assumptions. The reliability of the data is 95%.

2.1. T-Test was used to compare differences between two groups and to test the F-Test with one-way ANOVA. There are two or more variables.

1.2 Find the Pearson's Product Moment Correlation Coefficient.

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0009

**A Case Study of Customer Satisfaction with Pest Control Services from Union of Unicor Group Co., Ltd. (Eastern Branch) in Chonburi Province**



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# **A Case Study of Customer Satisfaction with Pest Control Services from Union of Unicorn Group Co., Ltd. (Eastern Branch) in Chonburi Province**

by

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## **Abstract**

This research aims to: The purpose of this study was to study the general information of the pest control service of Union of Unicorn Group Co., Ltd. (Eastern Branch) in Chonburi Province which affected the customer satisfaction in Chonburi province. There were 100 insect controllers from Union of Unicorn Group Co., Ltd. (Eastern Branch) in Chonburi Province. The research tools were questionnaire. Data were analyzed by using software program, with frequency distribution tested by frequency, and descriptive statistics. It's a collection of facts. By frequency distribution Calculate the percentage mean ( $\mu$ ), standard deviation ( $\sigma$ ), and Co-Variance to rank each of personal information

**Keywords:** Service, Pest control, Satisfaction

## **1. Introduction**

Chonburi Province Tourism is growing. More than 16 million tourists visit Pattaya City, Thailand's Tourism Authority of Thailand (TAT) said on Friday. "Tourism is expected to grow five-10% of the year 2017, about 16 million tourists, generating revenue of 198 billion baht, Pattaya has more than 13 million tourists to generate revenue of about 1.6 billion.

Many entrepreneurs have the need to do business in Chonburi. Including pest control services. It is very important to food factories of Thais and foreigners who invest in Thailand. It is necessary to use the pest control service to meet the GMP standard (Good Manufacturing Practice), as well as housing, to the food and hospitality business, whether it be hotels, condominiums, restaurants, department stores. In Chonburi area I want to take care of hygiene and solve the problem of insects and animals, almost all stirred. The insecticide business in Chonburi area is very competitive. And customers have good service requirements as well as standard. To build credibility for customers in renewing service contracts in the coming years. And it also affects the introduction of other customers to use insecticide services, so it will compete in all aspects, whether it is.

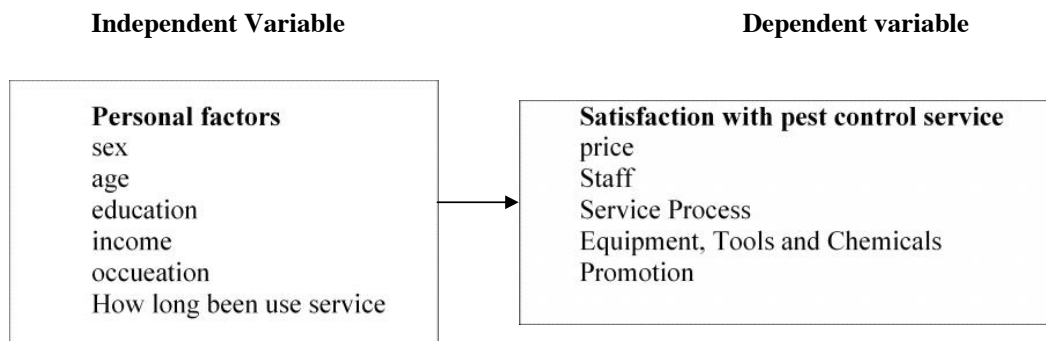
Quality of service, sales promotion, cost, and much more. Therefore, customer satisfaction is very important. Many insecticides are ineffective in service. Lack of trust. This is a serious consequence for other insect control companies.

For the above reasons. The researcher decided to study customer satisfaction in pest control services. Union of Unicorn Group Co., Ltd. (Eastern Branch) in Chonburi Province. in Chonburi The company is committed to the growth of the company by bringing the needs and satisfaction of its customers. To improve the service of the company. Union of Unicorn Group Co., Ltd. (Eastern Branch) in Chonburi Province. has a good track record of improving the quality of its products and services, as well as introducing new customers to the company.

### *Objectives*

1. To study customer satisfaction in pest control services. Union of Union of Unicorn Group Co., Ltd. (Eastern Branch) in Chonburi Province.
2. To study the level of customer satisfaction received from Union of Unicorn Group Co., Ltd. (Eastern Branch) in Chonburi Province.
3. To create satisfaction and reliability for customers using insecticide services.
4. To compare the satisfaction of customers with the service of the company. Union of Unicorn Group Co., Ltd. (Eastern Branch) in Chonburi Province. There are different demographic characteristics.

### *Conceptual Framework*



### *Expected Benefits from the Study*

1. Know the basics of decision making. Union of Unicorn Group Co., Ltd. (Eastern Branch) in Chonburi Province.
  2. Know the customer satisfaction with the pest control service. Union of Unicorn Group Co., Ltd. (Eastern Branch) in Chonburi Province.
  3. Know the difference in customer satisfaction. Union of Unicorn Group Co., Ltd. (Eastern Branch) in Chonburi Province.
  4. A guide for the company. Union of Unicorn Group Co., Ltd. (Eastern Branch) in Chonburi Province.
- To improve and improve the management of customer service. To further satisfy the customer.

## 2. Literature Review

### 2.1 Theory and Definition

In other words, the term "hospitality" is used to mean "hospitality". Go with help Help Action for the benefit of others.

Kotler (1988, p. 477) states that "service refers to any activity or activity. A group of individuals can be presented to another group of individuals. It can not be tangible and does not affect the ownership of anything. Gang actions may or may not be included in tangible products. "

Lehtinen, 1983, p. 21) describes "service is an activity or set of activities that arise from interaction with one person or device. The customer satisfaction. "

Gronroos (1990, p. 27) states that "service is one activity or activity that is less or less intangible. Which is generally not required. All cases arise from the interaction between the customer and the employee, service and / or customer, with the company, the product and / or the customer, with the service system provided to help ease the problem of the customer. "

Siriran Seratat and his team (1994: 142) say in similar terms that Service is an activity. For example, schools, theaters, hospitals, hotels, etc.

Supanit Chokratanachai (1993: 13) said, "Service is the action of a good heart. Help each other Generous Thank you. Quickly To be fair and equitable "

Chinchana Hansuu (2534 : 3 Quote from: Chachai Thaippaan, 2538 : 27) Meaning of service means all kinds of work that can not be touched by the five senses: ear, nose, throat, nose, tongue, touch, with the mind, which results in the appearance of satisfaction, impression.

#### *Concepts and theories about customer/customer satisfaction*

Based on the concept of organizational psychologists. Job satisfaction will be effective. The success of the work. Many scholars have given the meaning of job satisfaction as follows.

Locke (p.1300) defines "job satisfaction as a positive emotional expression resulting from worker value and work experience."

Porter 1975 (pp. 53-54), and the team defines "job satisfaction as the performance status of a job and its assessment of the difference between the amount of return and the return. The person expecting to receive "

#### *Service satisfaction enhancement approach*

Satisfaction of service providers and service providers is critical to the success of service operations. Satisfaction of service needs to be carried out simultaneously with service recipients and service providers (Udon Photharam, 1994: 22 - 23).

## *Policy and service development of insect control companies*

To Ensure that Inside the building building It is free of termites, insects and animal carriers. This will cause damage to the disease as well as contamination into food and products. It also has a negative impact on the performance, hygiene and safety of consumers. Including those involved.

### *2.2 Literature Review*

Aday and Andersan (1978: 28) studied the public's satisfaction with the US healthcare service in the 1970s. The most dissatisfied people were the cleanliness of the service and the cost. By the six basic types.

1. Satisfaction with the comfort of the service. (Convenience)
2. Satisfaction with the coordination of services. (Coordination)
3. Satisfaction with courtesy of the service provider (Courtesy)
4. Satisfaction with the information received from the service (Medical Information)
5. Quality of Care
6. Out-of-pocket cost

Rittithi Boontham (1993: 47 - 50) studied the customer satisfaction on quality service. A study of customers' satisfaction with using services at Bangkok Bank Public Company Limited, Chumphon Branch, Nakhon Ratchasima Province.

Age, education and occupational variables correlated with satisfaction, ie, those with lower education levels were older, had more occupation, farmers, or traders than those with other characteristics. The relationship between these variables and Satisfaction can be interpreted as: The banks do not discriminate in providing services to each customer. In fact, it is unlikely. Another explanation might be: The difference in expectations of each group is not the same. Those who have high expectations of service. It is difficult to satisfy or satisfy more than those who have low expectations.

Narin Sangphan (1998: abstract) Study on customer satisfaction of library services: a case study of Khemarat Pittayakom school Ubon Ratchathani Province

75.9% of the samples were female, and 57.8% were female and 42.2% were male. 72.7% were male and 16.4% were male. The sample size was 41.4%. Library users have 2-3 times a week. Most of them find books in the library 79.9%. Library users were satisfied with the service of the library at a moderate level, ie, the mean was 3.34, with a mean of 5.00. For the satisfaction of the individual, the descending order was as follows: 1) 2) media service, information material (average 3.43), 3) book lending (average 3.40), 4) book preparation. Borrow up (average 3.37) 5) characteristics of librarians and library staff (average 3.25) and 6) Premises and equipment (average 3.19) compared satisfaction. Teachers - teachers and students to the service.

Concepts and theories about the marketing mix (7P's) that affect the service business.

Siriran Serirat (1998) cites Philip Kotler's concept of service mix as a concept that is relevant to a service business that has a marketing mix. 7Ps (People, Product, Price, Promotion, Place, Process and Physical Evidence)



### **3. Research Methodology**

#### *3.1 Data collection*

1. Editing by reviewing the completeness of the questionnaire. And split the incomplete questionnaire. To obtain a complete questionnaire for data analysis.
2. Coding: Take the questionnaire to separate for processing and coding as predefined.
3. Computer processing (Computing). The data from the questionnaire was recorded using the computer. To process Using statistical packages. For Social Studies (SPSS)

#### *3.2 Data processing*

The researcher has processed the data. The questionnaire was collected from the questionnaire. Follow these steps.

1. Data validation (Editing) by reviewing the completeness of the questionnaire. And split the incomplete questionnaire. To obtain a complete questionnaire for data analysis.
2. Coding: Take the questionnaire to separate for processing and coding as predefined.
3. Computer processing (Computing). The data from the questionnaire was recorded using the computer. To process Using statistical packages. For Social Studies (SPSS)

### **4. Data Analysis**

The data collected from the population were analyzed by means of statistical program for social sciences, with frequency distribution tested by frequency, and descriptive It's a collection of facts. By frequency distribution Calculate the mean percentage ( $\mu$ ), standard deviation ( $\sigma$ ), and Co-Variance to rank on each side of personal information and for social studies.

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## The Situation of Thai Fruit Export in Vietnam Market and Trends

**RCGR<sup>2nd</sup>**  
**2018**

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# The Situation of Thai Fruit Export in Vietnam Market and Trends

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## Abstract

Thai fruit are one of the most recognized products in the world, There are several major export markets, namely China, Vietnam and Hong Kong, respectively. Although Vietnam is a major source of fruit in the world, it is also an important competitor of Thailand in exporting fruit. At the same time, it is also a major importer of fruits, as Vietnamese consumers really like Thai fruits because of their good taste and quality, and can be stored for a long time, the trend of Thai fruits and vegetables export to Vietnam is likely to increase every year.

**Keywords:** Export, Thai Fruits, Vietnam

## 1. Introduction

Fruit is one of the major agricultural products in Thailand since Thailand is a country with a favorable climate and for the production of various tropical fruits, and the seasons also yield different kinds of fruit in each area of each region, so it is one of the advantages that Thailand has a variety of fruit to rotate the world market year. Each year, the products are exported in the categories of edible fruit and nuts according to Harmonized Code 08: Edible fruits and nuts, HS Code 08 in January-July, in 2018, more than 1,235,436 tons, worth more than US \$ 1,714.34 million in 2018 (Bureau of Trade and Agricultural Promotion, Department of International Trade Promotion). Thai fruits are recognized by consumers around the world, and the demand for fruit is increasing due to the growing population and the growing interest in health-conscious people. In the past, largest the export market for edible fruits and nuts in HS Code 08 was Vietnam, in terms of value and quantity. (Bureau of International Trade Promotion, Ministry of Commerce). Although Vietnam is a major source of fruit in the world, it is also an important competitor of Thailand in exporting fruit. At the same time, it is also a major importer of fruits, as Vietnamese consumers really like Thai fruits because of their good taste and quality, and can be stored for a long time. (National Bureau of Agricultural Commodity and Food Standards). In the field of culture, fruits also play a very important role for Vietnamese as well, not only to eat fruit to balance the body, the fruits are used for important festivals such as in Tết âm lịch festival, people will buy fruits for the ceremony, as well as giving fruit as a gift. This is a great opportunity for Thai fruit exporters to export fruit in Vietnam as many Vietnamese consumers have a change in consumer behavior, they have a positive attitude towards the Thai fruits Thai. One cause is that many Vietnamese consumers have a chance to travel to Thailand, and have a chance to taste fruit in Thailand. In addition, Vietnamese consumers love to eat fresh fruits. Thai fruits most commonly consumed by Vietnamese are longan, Khiaosawoe, mangosteen, rambutan and durian. From the above mentioned reasons, this is an opportunity to increase the export volume of Thai fruits as well as to be accepted by consumers in Vietnam. This is a great opportunity for Thai entrepreneurs to access the fruit market in Vietnam since imported fruits

and vegetables from Thailand are more secure in terms of chemical safety, toxic residue than Chinese fruit, and fruit quality is better than fruit in Vietnam.

### *Fruit Export Situation in Thailand*

Thai fruits are one of the most recognized products in the world, with major export markets including China, Vietnam and Hong Kong, respectively. Chinese market has produced a lot of income to Thailand. Thailand's export situation in June 2018 expanded at an 8.2 percent growth rate, or US \$ 21,780 million. Exports continued to expand in major markets, including the United States, Japan and China. In addition, high potential markets, especially the Indian and CLMV markets, have continued to grow and expand; only the exports of agricultural and agro-industrial products, have expanded by 4.5 percent, with good growth in exports of rice, vegetables, fresh fruits, canned and processed products, fresh and processed chicken.

Export value of agricultural and agro-industrial products is slightly increased at 4.5 percent (YoY). It also expanded well, with rice, growing by 5.6 percent. (Expanding in Indonesia, US, Philippines, South Africa and Angola, but shrinking in Benin and Malaysia). The export of vegetables, fresh fruits, frozen, canned and processed has growing at 8.6 percent (Expanding in China, Vietnam, Hong Kong, South Korea and Taiwan, shrinking in the US and Japan). The export of fresh, frozen and processed chicken has growing by 5.9 percent (Expanding in almost all markets such as Japan, the Netherlands, Laos and Singapore, but slightly shrinking in South Korea and Germany). The export of sugar has expanding at 9.6 percent (highly expanding in Myanmar, Indonesia and South Korea, Shrinking in Taiwan, China, Japan and Cambodia). Major agricultural commodities have shrinking, including rubber, shrinking by 10.6 percent, which is due to price factor, but the export volume is still expanding (Office of Trade Policy and Strategy).

Thailand's fresh fruits and vegetables are a potential product that is one of the most recognized products in the world. There are several major export markets, namely China, Vietnam and Hong Kong, respectively. The Chinese market is a major export market and generates revenue for Thailand. Although China is the export markets of Thailand, the export volume of the fruit of that exported to the markets of CLMV (China, Laos, Myanmar and Vietnam) has grown and continues to grow, especially in the domestic market in Vietnam, which has a continuous increase in both value and volume of export. The export of fresh vegetables, chilled, frozen, and dried fruits, year 2016, had the value of \$ 511.93 million, increased by 69.1% compared to the same period last year, accounted for 28.54%. In the year 2017, the export value was \$ 1,036.35 million, increased by 104.29% compared to the same period last, accounted for 40.97%. And during January 2018, the export value of fresh, chilled, frozen and dried fruits was \$84.98 millions, increased by 23.3% compared to the same period last, accounted for 40.97% (Bureau of International Trade Promotion, Ministry of Commerce)

**Table 1** Exports of Thai fruits and vegetables to Vietnam in 2016-2018

<b>Export value of Thai fruits and vegetables to Vietnam</b>			
<b>Year</b>	<b>Value: MUSD</b>	<b>Growth rate%</b>	<b>Percentage</b>
<b>2016 (Jan. - Dec.)</b>	511.93	69.1	28.54
<b>2017 (Jan. - Dec.)</b>	1036.35	104.29	40.97
<b>2018 (Jan.)</b>	84.98	23.3	46.35

According to this information, the trend of Thai fruits and vegetables export to Vietnam is likely to increase every year, and from the analysis of the reasons for the increase of fruit and vegetable exports due to Vietnam has benefited from a leniency policy that China has agreed with bordering countries. (Department of East Asia Ministry of Foreign Affairs). This policy has resulted in Vietnam to be able to export more vegetables and fruits to China. In addition, one of the reasons for the increase in sales of fruits and vegetables from Thailand to Vietnam is that many retail chains in Vietnam are buying big Vietnamese retailers such as Big C and Metro. etc. Moreover, since 2015, Vietnam has reduced tariffs on nearly 100 percent of Thai common goods, including fruits, vegetables and desserts. (Business Relation Center, Department of International Economics, Ministry of Foreign Affairs), and it is forecasted that the export trend of Thailand in the year 2018 will expand more and more. The reason is that exporters still have a positive view and confidence that exports will continue to grow, reflecting the export business condition index which is still higher than level 50 in almost every metric. (Export value index, New order value index and employment index). In addition, the world economy has expanded significantly in almost all regions, helping to support Thailand's export growth. Especially the economy in US, the euro zone countries, than enhance their own employment sector, which contributes to stimulating spending. The Chinese economy and the Japanese economy are likely to grow and Thailand will benefit from a supply chain in technology. In addition, the export of Thai products has become more and more diversified. This will reduce the risk and impact of trade unrest in the superpower. Plus, in a situation where the baht is weakening, it is a good opportunity for exporters to accelerate exports and increase export earnings in baht terms.

#### *Fruit Market situation in Vietnam*

Vietnam is a country that produces 7 million tonnes of fruit annually, mostly sold in the country. Vietnam is also a potential country for export of fruits. According to the statistics of the Vietnam Customs Department, in May 2017, Vietnam's fruit export value reached \$ 275.34 million, increased by 42.8 percent compared to the same period in 2016. It is predicted that Vietnam's fruit export will increase (the Office of International Trade Promotion in Hanoi). Vietnam's major export markets are China, the United States, Japan, South Korea and the Netherlands; however, Thailand is the largest export market in Vietnam in the ASEAN market. In the past few years, Vietnam has had to import many fruits from abroad. To meet the needs of consumers in the country. Most of the imported fruits are sold in the high-income consumer market because they are two to three times more expensive than Vietnamese fruits. Imported fruits are sold in local markets not only in supermarkets, but also in wholesale markets, retailers and small communities (Information Centers, Public Relations Departments, Export Departments, Ministry of Commerce). Thailand is the most important source of fruit in Vietnam during May 2017. The value of Thai fruits imported from Vietnam is as high as \$ 286.86 million, increased by 143.31% compared with the same period in 2016.

**Table 2:** Imports of Vietnamese fruits in the first five months of 2017

*Unit: Million USD*

Country	Jan. – May 2016	Jan. – May 2017	Growth rate (%)
<b>Thailand</b>	117.9	286.86	143.31
<b>China</b>	64.46	79.5	23.33
<b>USA</b>	23.98	28.32	18.10
<b>Myanmar</b>	10.83	10.83	54.48
<b>Australia</b>	13.11	16.15	23.19

Source: Office of International Trade Promotion, Hanoi

According to Newmenucom statistics, Vietnam imported 351,000 tonnes of fresh fruit from Thailand, accounting for 94 percent of total fruit imports from Thailand, as well as dried fruit and frozen fruits totaling 22,120. The most popular fresh fruits imported from Thailand are: Longan, followed by durian, mangosteen mango.

In January 2018, the Vietnamese Customs Department reported a situation in Vietnam's fruit market that imported in January 2018, worth over \$ 167 million. The volume increased by 70% compared to the same period last year with an average of \$ 5.4 million per day. This was because at the beginning of January 2018, there was the festival called Tet in Vietnam, which people were buying fruit to pay homage. Imported fruit from Thailand which is popular with Vietnamese consumers are Langsat, Sweet Tamarind, Durian, Mangosteen and Mango. Although fruits imported from Thailand are more expensive than local fruits, but they are better in terms of quality and taste, such as the langsat of Vietnam are smaller than the size of Thailand. It contains the larger seeds, and the less meat, and the taste is sour, but Thai langsat is more sweet, so customers like it, even it is 3 times more expensive (50,000 VND per kilogram or nearly 80 baht). Many Vietnamese consumers buy a lot of mangosteen from Thailand as a souvenir for relatives and friends. Another reason why Vietnamese consumers do not like to eat local fruits is because Vietnam has used a lot of chemicals in fruit orchards in Vietnam, so Thailand is now the largest exporter of fruits and vegetables to Vietnam.

## **2. Opportunities of Thai entrepreneurs to reach the fruit market in Vietnam**

Although Vietnam is a potential country for fruit export, post harvesting and processing is a weakness of Vietnam's agricultural production. This is the reason why Vietnam's 10 biggest export products are exported as raw materials or processed in the preliminary stage. As a result, Thai entrepreneurs are also able to invest in fruit processing in Vietnam to take advantage of low cost raw materials and a large amount of production which will extremely reduce production costs. Moreover, fruits from China have not been trusted in hygiene since many kinds of fruits and vegetables from China have entered Vietnam by passing many border checkpoints without being hygienically tested. This could harm the consumer. Therefore, the Ministry of Agriculture and Rural Development of Vietnam began to be more strict with the import of fruits and vegetables from China, so the Thai fruits have the opportunity to increase the volume of exports, and they are well accepted by consumers. This is a great opportunity for Thai entrepreneurs to access the fruit market in Vietnam as the fruits and vegetables imported from Thailand are trusted in chemical safety, toxic residues. They are also better than fruit in Vietnam in terms of quality.

The Ministry of Agriculture and Rural Development of Vietnam had issued a technical standards for import of agricultural products in 2011 to reduce concerns about toxic residues in fruits and vegetables from abroad. The relevant agencies of Vietnam, such as Ministry of Health and Ministry of Science had would be in charge of setting the international technical standard as in the past, Vietnam only had control of algae, weeds and insects in imported agricultural products to prevent the damage to local plants, but there was no regulation for the detection of toxic residues that harm the consumer well enough. The enforcing of this regulation would be a strict control of all fruits and vegetables imported by sea, air and land at every checkpoint. The majority of this regulation was aimed at controlling the import of fruits and vegetables from China.

The situation in the eastern part of Thailand has been reduced from the year 2017 by the yield per rai. Mangosteen was reduced the most with 65.34 percent, followed by Wollongong with 27 percent, Rambutan with 8.94 percent and Durian, with 8.3 percent due to the weather variability from the end of 2017 to early 2018, the weather was fluctuating on each day, affecting the fruit trees,



resulting in the fall of the yield, the fruit trees can not be restored and the durian suffering from the outbreak of Phytophthora., damage from climate change in Thailand, import regulations, transportation costs, consumers' behavior are factors affecting the import of Vietnamese fruits. Therefore, when the yield is low, the price will have to improve. Therefore, it is a good opportunity for entrepreneurs.

### **3. Suggestions**

Although the global economy is expanding in every region, it contributes to Thailand's export growth. Thailand may face fluctuations in international trade measures from major economic powers, and even if the baht weakening will be a good opportunity for exporters; however, exporters will need to watch the situation and hedge against foreign exchange volatility and trade situation which may be changed at any time.

Vietnam's agricultural sector is also facing severe competition from other ASEAN countries when it began as the ASEAN Economic Community (AEC). This will result in the agricultural products of Vietnam vegetables and fruits to be more affected when vegetables and fruits imported from other ASEAN countries come to Vietnam tax-free, as announced on the 1st of January, 2016. Therefore, the Thai government should restructure the agricultural sector and accelerate the development of training for Thai farmers with skills in horticulture, so that they are ready to face severe competition. The Ministry of Agriculture and Rural Development of Vietnam had issued a technical standards for import of agricultural products in 2011 to reduce concerns about toxic residues in fruits and vegetables from abroad. The relevant agencies of Vietnam, such as Ministry of Health and Ministry of Science had would be in charge of setting the international technical standard. The enforcing of this regulation would be a strict control of all fruits and vegetables imported by sea, air and land at every checkpoint, and the majority of this regulation was aimed at controlling the import of fruits and vegetables from China. Although the goal is to control the import of fruits and vegetables from China, it will have an impact on Thai fruit imports as well. However, it is recommended that the relevant Thai authorities follow the rules of importation in order to consider the implementation in compliance with such regulations, not as an excuse to discourage imports and should promote to the manufacturers and exporters to know the movement to adapt to the situation.

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0011

**Factors Affecting Satisfaction of Using  
Thai Farmer Bank (Public) Co., Ltd.'s ATM Machine**



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# **Factors Affecting Satisfaction of Using Thai Farmer Bank (Public) Co., Ltd.'s ATM Machine**

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### **Abstract**

This study is aimed at studying the factors of Public Science that effect to the satisfaction of using Thai Farmer Bank (Public) Co., Ltd.'s ATM Machine, Central Ramindra Branch, Bagkhen District, Bangkok Metropolis as to study relationship between Marketing Mix (7 PS) and satisfaction in using ATM Machine of Thai Farmer Bank (Public) Co., Ltd., Central Ramindra Branch. The sampling group is 400 customers.

**Keywords:** Satisfaction, ATM Machine

### **1. Sources and Eminences of the Problem**

The financial institute is an organizational institute where maintains high role in all system of businesses starting from the community or local till international level. This can be interpreted that it supports, conjuncts and pushes to arouse businesses investment which is the consequence of both in domestic and international on the standard of human being and cost of living. Methods of financial services such as bank deposit, bank transfer, credit, safety box rent, state's bond, foreign exchange, bill of exchange including utility payment service that each financial institute like banks and trusts are doing in many ways of competition. Such circumstances occurred dumping resources of every institute to change its organization for a better service than competitors. Qualitative improvement of service is merely accountable particularly Electronics Machine service, ATM Machine will substitute staff in the future. In order to support Thai Farmer Bank (Public) Co., Ltd., Central Ramindra Branch, Bangkok Metropolis becomes to be an organization of excellence and able to compete with competitors, the studier as a staff in this organization is willing to study on the factors effect to the satisfaction of using ATM Machine of Thai Farmer Bank (Public) Co., Ltd., Central Ramindra Branch, Bangkok Metropolis and able to bring details of this research to adjust, improve and develop customers' service of using ATM Machine.

## 2. Objectives of Research

- 1) To study the factors of Demological effect to the satisfaction of using ATM Machine of Thai Farmer Bank (Public) Co., Ltd., Central Ramindra Branch, Bangkok District, Bangkok Metropolis.
- 2) To Study relationship between the factor of Marketing Mix (7PS) and the satisfaction of using ATM Machine of Thai Farmer Bank (Public) Co., Ltd., Central Ramindra Branch, Bangkok District, Bangkok Metropolis.

## 3. Frame of Research Concept

This research study of the factors effect to the behavior of ATM Machine of Thai Farmer Bank (Public) Co., Ltd., Central Ramindra Branch, Bangkok District, Bangkok Metropolis is based on the frame of Research Concept with independent variances which are sex, age, educational level, income level, occupation and average income. The studier has brought it up to use as a guideline of study. The satisfaction of customers in Marketing Mix (7PS) are products, pricing, distribution pathway, promotion, personnel, physical feature, procedure, were used as an instrument of research and guideline to meet the answers and designed enquiries to survey sources of the research on the target group of ATM Machine users of Thai Farmer Bank (Public) Co., Ltd., Central Ramindra Branch, Bangkok Metropolis.

**Table 1** Frame of Educational Concept

<b>Variances</b>	<b>Followed Variances</b>
<p><b>Personal Factor</b></p> <p>Sex, age, educational level, average income, occupation,</p> <p>Number of using Kind of using Amount of using</p>	<p><b>Satisfaction of Marketing Mix (7 PS)</b></p> <p>1. Products 2. Pricing 3. Distribution Pathway 4. Promotion 5. Personnel 6. Capacity 7. Procedure</p>
--->	

### *Educational Assumption*

1. The customers of Thai Farmer Bank (Public) Co., Ltd. are very satisfy.
2. Customers' Demography are related to the satisfaction of using service of Thai Farmer Bank (Public) Co., Ltd., Central Ramindra Branch, Bangkok Metropolis.

### *Educational Criterion*

The study of factors effect to the satisfaction of using ATM Machine of Thai Farmer Bank (Public) Co., Ltd., Central Ramindra Branch, Bangkok Metropolis is a survey study that focuses on the satisfaction of ATM Machine users of Thai Farmer Bank (Public) Co., Ltd., Central Ramindra Branch, Bangkok Metropolis and the customers' satisfaction in Marketing Mix (7 PS). Period of the study was during August 1<sup>st</sup>, - October 31th, 2018.

### *Benefits Expectation of the Research*

1. Use as a guideline to adjust and improve service of ATM Machine of Thai Farmer Bank (Public) Co., Ltd., Central Ramindra Branch, Bangkok Metropolis and extend capacity of the bank to be better.
2. Use to develop the factors of Marketing Mix (7 PS) that effect to the customers' satisfaction of using ATM Machine of Thai Farmer Bank (Public) Co., Ltd., Central Ramindra Branch, Bangkok Metropolis.
3. Use as sources for executives who plan to serve useful customers of the bank.

In this study researches the factors effect to the behavior of ATM Machine users of Thai Farmer Bank (Public) Co., Ltd., Central Branch, Bangkok Metropolis The researcher has studied the Conceptual Theory and the research is related to the educational variance which the carried out from scientific documents and researched work piece from many sources to determine assumption such as the history and the development of the bank, concepts and theory of qualitative service satisfaction, concept and theory related to the variance of the organizational image perception, concept and theory of the loyalty variance including the study from concerning researches below :-

Areerat Paisalnant (2550) had studied on the satisfaction of using ATM Machine of Thai Farmer Bank (Public) Co., Ltd., Siam Square Branch inside the Department Store.

Phudpong Tribubpha (2538) had studied on the relationship between the qualitative service perception and the service loyalty.

Chotechuang Pirom (2538) had studied on the satisfaction of customers on credit of Land and Housing Bank Co., Ltd., the head office and the branches.

Wisaka Laichuen (2548) had researched on the customers' satisfaction for qualitative service of Thai Security Stock Co., Ltd. in Chiangmai Province.

Duangkamol Kornmatitsook (2550) had studied on the relationship between the influence of image and the quality of service to the behavior of using banking service of Thai Bank (Public) Co., Ltd. of customers in Bangkok Metropolis.

Aaker (2004) had studied on brand's power and building, awareness of customers.

Pong & Yee (2001) had studied on the consumers' qualitative service perception related to the positive relationship with the loyalty of using service.

#### **4. Method of Study**

This research studies the factors effect to the users' behavior of using ATM Machine of Thai Farmer Bank (Public) Co., Ltd., Central Ramindra Branch, Bangkok Metropolis, is a survey research study. It emphasizes to survey the behavior of service of Thai Farmer Bank (Public) Co., Ltd., Central Ramindra Branch, Bangkok Metropolis.

### *Population and Sample Group*

The research studied with the service users of Thai Farmer Bank (Public) Co., Ltd., Central Ramindra Branch, Bangkok Metropolis, general people and shops around Ramindra Area totally 50,000 people/month. Size and sample was determined from the calculation method of Taro Yamane 1973:125 as follows :-

$$N = \frac{N}{(1 + Ne^2)}$$

by

n	=	Numbers of population
N	=	Size of population
E	=	Acceptable errors (was determined = 0.05)

Substitute

n	=	50,000
	=	(1 + (50,000 x 0.05))
	=	396.83

This study used 400 purposive or accidental sampling group to meet requirement of sampling population.

### *Instrument of Study*

Used questionnaires as an instrument in this study and classified into 4 parts below:-

1. Questionnaires of general sources or the background of answers which indicated sex, age, education, average income and occupation.
2. Information of satisfaction building of ATM Machine users of Thai Farmer Bank (Public) Co., Ltd., Central Ramindra Branch, Bangkok Metropolis.
3. Factors of Satisfaction Building of ATM Machine users of Thai Farmer Bank (Public) Co., Ltd. classified into 7 dimensions (7 PS).
4. Open questionnaires for customers to be able to comment bank's service.

### *Criterion of Rating Scale*

Before consolidate questionnaires should submit to the consultative professor to examine for final issue before actual research.

Rating scale determination of this end- closed questionnaires to determine level of satisfaction used Likert Method as follows :-

1. Analyzed information to describe the feature of sampling groups in percentage.
2. Analyzed information to describe the feature of using service in percentage.



### 3. Rating Scale Determination :-

Best Satisfy	=	grade 5
Very Satisfy	=	grade 4
Medium Satisfy	=	grade 3
Low Satisfy	=	grade 2
Lowest Satisfy	=	grade 1

### 4. Open questionnaires for comments of the customers.

#### *Consolidation of Sources*

The studier used collective sources method by self delivered and self collected.

#### *Sources Analysis*

1. Examined and rating questionnaires as determined.
2. Analyzed all the examined questionnaires by using statistical method and rating questionnaires analysis :-

**Stage 1.** Used percentage and frequency of sampling groups.

**Stage 2.** Used postage 1centage and frequency of sampling groups

**Stage 3.** Used analysis criterion and interpretation of rating value.

Rating Scale	Interpretation
5	Best Satisfy
4	Very Satisfy
3	Medium Satisfy
2	Low Satisfy
1	Lowest Satisfy

The satisfaction analysis is divided into 5 levels. The 5 rating scales were brought to classify ranks and used in the interpretation (Choojai Khuharattanachai 2538: 7-10). Rating scales are classified below :-

$$\text{Ranking} = \frac{\text{Top Rating Scales} - \text{Lowest Rating Scales}}{\text{Total Rating Scales}}$$

$$\begin{aligned} \text{Substitution} &= \frac{5 - 1}{5} \\ &= 0.80 \end{aligned}$$

Mean between 1.00-1.80	=	Lowest satisfy
Mean between 1.81-2.60	=	Low satisfy
Mean between 2.61-3.40	=	Medium satisfy
Mean between 3.41-4.20	=	Very satisfy
Mean between 4.21-5.00	=	Best satisfy

### *Statistic Used in Sources Analysis*

Used SPSS (Statistic for Social Sciences for Windows: SPSS/FW). The assumption used the following statistic :-

1. General analysis of service users of Thai Farmer Bank (Public) Co., Ltd., Siam Square Branch, Bangkok Metropolis.
2. Analysis of customers' satisfaction on staff and reception, servicing and location by calculated mean and Standard Deviation.
3. Studied personal factors of customers and composite factors of servicing.

Test assumption by using mean of the two kinds of population and variance analysis of Independent Sample T-Test, and One Way ANOVA.

0012

**Marketing Factor Affecting Buying Decision of Organic Vegetables and Fruits Snack: The case of Saun Sai Sorn**



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# **Marketing Factor Affecting Buying Decision of Organic Vegetables and Fruits Snack: The case of Saun Sai Sorn**

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## **Abstract**

The purpose of this study to find factor over decision in buying snack which is made of organic vegetables and fruits from Suan Sai Sorn by studying demographic factor: gender, age, education, occupation, income and mixing with marketing mix factor which includes (Price, Place, Promotion, People, Process and Physical Evidence). It is for entrepreneurs to apply this study to make the better marketing strategy which is more responsive to consumer demand. It would be competition advantage. The study will be conducted by online questionnaires and receive questionnaires data back by using 120 forms of researching tool as the questionnaire which all is going to be analyzed by the automatic program. Data used in this study are Frequency, Percentage, Arithmetic Mean (Average), Standard Deviation and comparison of T and F test with analysis over variance, Pierson's Correlational Coefficients, Multiple Linear Regression. P-vale is defined at 0.05.

**Keywords:** Marketing Factor, Buying Decision, Organic Vegetables and Fruits

## **1. Introduction**

Nowadays healthy food is more and more popular and the demand is growing continuously. This comes from booming healthy trend in lifestyle: healthy food and even exercising which is considered to be good for everybody who is more interested in their health. Consumers expect food to create health balance and reduce the possibility of having diseases. Finally it builds more marketing competition to create healthier product to encounter a growing demand while the government is encouraging agriculture sector and entrepreneurs to bring more valued and more competitive product to the market by innovation and applied technology in production (Thailand 4.0 policy). This would be another push which create more healthy products by entrepreneurs to support modern lifestyle and now natural product's a lot of success in the market is increasing and that indicates the potential. Healthy food is growing and answering the existing demand because changing lifestyle.

Processed vegetable and fruit industry is the government's target to boost export to create more cash-flow in the domestic financial market. Moreover this industry mainly can run the production by domestic raw ingredient. Processed vegetable and fruit industry is the process to bring vegetable and fruit be manufactured and lengthen the shelf life of product and keep freshness when it is out of harvest season. The last decade, processed fruit was becoming more and more systemized industry and brought the technology to vary product and able to export aboard to make more profit back to country as well.

## **2. Research Objectives**

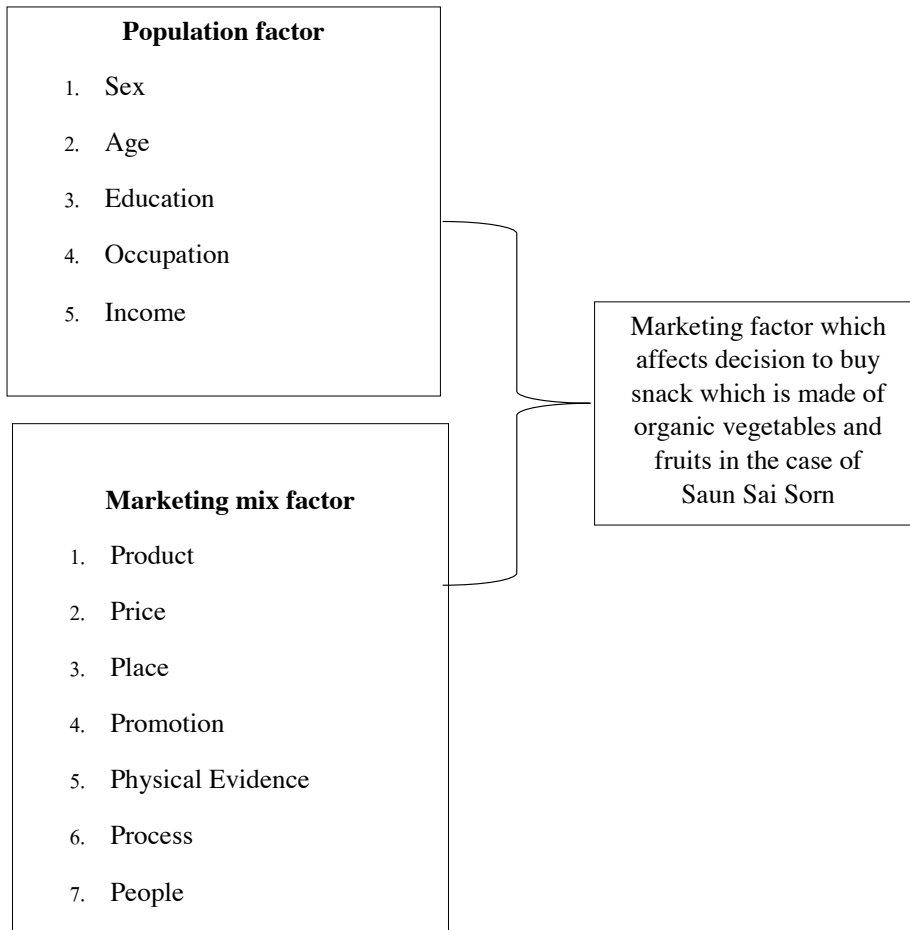
1. To study consumer behaviors in buying snack which is organic vegetable and fruit in Thailand snack's market.
2. To study what motivate to buy snack which is organic vegetable and fruit in the snack market
3. To study the relation between demography: (gender, age, education, occupation, income) and decision to buy snack which is organic vegetable and fruit.
4. To study the relation between 7P's: (product, price, place, promotion, people, process and physical evidence) and decision to buy snack which is organic vegetable and fruit.

## **3. Research Hypothesis**

1. Personal factor's difference causes different decision to buy snack which is processed of organic vegetable and fruit.
2. Marketing factor affects the decision to buy snack which is processed from organic vegetable and fruit.
3. Competition factor affects the decision to buy snack which is processed from organic vegetable and fruit.

## **4. The Expecting Benefit of Research**

1. Able to apply this study's information to continue the research involving the Marketing Mix which is relate to the decision to buy snack which is processed from organic vegetable and fruit.
2. Enable companies to realize the changing trend of consumer's demand and behavior.
3. Able to develop or improve product to be more responsive to the consumer's demand correctly.
4. Enable companies to realize the factor affecting the decision to buy snack which is processed from organic vegetable and fruit and analyze to develop the better competition strategy.



**Figure 1** Conceptual Framework

## 2. Literature Review

### 2.1 Marketing Mix

Marketing mix is a tool that organization implements to respond to the target group. McCarthy (1960) divided the marketing activity into 4 groups and called “4P” including Product, Price, Place and Promotion. Then Booms and Bitner (1981) revised and added People, Process and Physical Evidence.

Sriwan Sereerat (1998) mentioned about Marketing Mix for service business (Service Mix) by Philip Kotler that this concept involves service business and have Marketing Mix or 7Ps as the marketing strategy including:

## **Product**

It is what offers to customer and respond their demand. Customer must receive benefit and value from the given product. There are 2 types of product: touchable and untouchable.

## **Price**

It means price of product which customer compares between value and price. The product must have higher value than customer expect to make customer buy. Thus price setting must relate to benefit and value offering to the customers.

## **Place**

It is a process for moving goods or service from producers to customers or target market which is consisted of related activities: transportation, warehousing, storage, stock management etc. However there can be good moving service by outsource or broker for easier distribution.

## **Promotion**

It's an important tool to connect between sell and buyer. Its objective is for acknowledging or creating positive bias to buyer over product and shop and make buyer more interested in products.

## **People**

It's an important tool to connect between sell and buyer. Its objective is for acknowledging or creating positive bias to buyer over product and shop and make buyer more interested in products.

## **Physical Evidence**

It means physical environment of organization which indicate to the quality of service that is a cause to make customer comes to be served. Luxury, Clean and beautiful environmental elements can give customer more trust and more confidence in the quality of service such as building, equipment, office service, parking lot etc.

## **Process**

It is an important one in marketing mix. After having good staff, it must be a tool to make an effective implementation and deliver the quality service. Because generally service have many processes, that's why each process have to work and connect perfectly to satisfy customers

### *2.2 Demographic*

Demography means searching insight and knowledge about human in population behavior and changing in population phenomenal (Suntad Sermsri, 1996) The word "Demography derived from 2 ancient geek words. "Demo" is "people" in English. "Graphy" is "writing up" or "Description" in English which can compare with "science" in Thai. Then when this 2 words combine to "Demography" which means "Science of population". However scholars initially didn't to use that word. They were likely to use "Population Studies" which, in Thai, "Population factor" is a study of population by extent and content which is regarding scale, spreading and element of



population, population change and element of population change such as birth, death, place moving, social status change.

From meaning of Demography above, It can conclude that Demography means study of scale and quantity of people in each society, region and global level. It also include study the structure of spreading.

Siriwan Sereerat (2007, page 41) said that demographic feature include age, gender, income and education. Those are popular criteria in dividing market. Demographic feature is an important and measurable statistic of population to help to define the target group, easier to measure than other variable. Important demographic variable and people who have different features will have different psychological feature by analyzing from following factors:

1. Sex, different sex enable people have different behaviors and communication that means female tends to have a desire to send and receive information more than male. While male do not only want to send and receive information but have the good relationship for that sending and receiving information as well. Gender is a contrast variable to divide an important market. Thus marketer must study this carefully because now gender affects consumer behavior change. This change may come from the cause women work more.

2. Age, because product can respond the demand of consumer group differently by age, then marketer apply an age which is a demographic variable differently in the market. Marketer find Niche market by focusing a divided segment by age which also differentiate people thinking and behavior. Young people have more liberating, ideological thinking and more positive than elders. While elders is always more conservative, careful and pessimistic than younger people because have more and different life experience and use media differently. Elder use media to find news and information more than find entertainment.

3. Education, It is a factor differentiating thinking, value, point of view and behavior. Higher educated people have an advantage to have better information because have boarder view and insight in information but do not easily believe if there is not enough reason or evidence. While lower educated people are like to use media: radio, TV and movies. If higher educated people have enough time, they will use reading material, radio, TV and movies as well but if time is limit, they will use reading material more than other media.

4. Income is an important variable to define the market. Normally marketers are interested in wealthy consumer. However, low-income family is a huge market. The problem in dividing market by only is that income is an indicator to capability or incapability in expense. While real cause to buy product may be lifestyle, taste, value, occupation and education etc. Although income is the most-used variable, most of marketer connect income and combine other demographic variable to be clearer in defining the target market. For example Income may be related to age and occupation combined.

### 3. Research Methodology

#### Target population group, Sample group scaling and Sample group selection.

1. Target population group  
Population which is the target of this study is people who used to buy snack which is processed of organic vegetables, fruits from Saun Sai Sorn
2. Sample group scaling  
Sample group in this study is consumers who used to buy snack which is processed of organic vegetables, fruits from Saun Sai Sorn in quantity of population: equal to 120 people.
3. Sample group selection

Because researchers do not know the exact quantity, thus they choose “Judgmental or Purposive Sampling” method by giving questionnaire to particular group who used to buy snack which is processed of organic vegetables, fruits from Saun Sai Sorn in quantity of population: equal to 120 people by data collecting and using online questionnaire method for more accessible, faster and reduce time and cost in data collecting process.

### 4. Data Analysis

After collect data from sample group who used to buy snack which is processed of organic vegetables and fruits. Researchers analyze data and result to find the relation between factors in decision to buy processed of organic vegetables and fruits by statistic method which divides into 2 parts.

#### *Descriptive Statistics*

Analyzing data about demography and consumer behavior by explaining Frequency and Percentage and marketing mix factors, by explaining Mean and Standard Deviation.

#### *Inferential Statistics*

Analyzing data of sample group by using a statistic automatic program in Hypothesis Testing by following statistic tools:

1. Independent Sample t-Test
2. One-Way ANOVA is a statistic for analyzing difference between Arithmetic Mean (Average) of 2 sample groups which are independent.

When researchers gather and verify questionnaire and must be coded and input into Coding Form for computing into Statistic automatic program and, after that, can be brought to debate.

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**Tennis's Satisfaction Towards Service of K.S. Sukhumvit Tennis Court**



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# Tennis's Satisfaction Towards Service of K.S. Sukhumvit Tennis Court

by

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## Abstract

The purposes of this study were studied the general information and studied satisfaction of tennis players using the service at K.S.Sukhumvit tennis court. The sample was 300 persons of member or general persons and tennis players using the service at K.S. Sukhumvit tennis court. The instrument was a questionnaire, the data corrected by statistic such as frequency, percentage, means, standard deviation, T-test, one-way anova analysis of variance by F-test. The results showed that, tennis players are satisfied with the K.S.Sukhumvit tennis court in overall have the highest level of satisfaction. Tennis players with gender, age, education, monthly income level and career differences. There was no statistically significant difference in satisfaction with the use of K.S. Sukhumvit tennis court.

**Keywords:** Satisfactions, Personal Factors, Tennis

## 1. Introduction

At present, Thailand has promoted sports activities such as football, volleyball, tennis, basketball, futsal, swimming, or marathon, fitness, yoga, etc. All of these are useful for health and suitable for all ages. Playing sports is an exercise and it makes the body is fresh and strong, sport is also relief a stress and help to improve the mind, habit to the people are sacrificial, knowledge able, defeated, forgiveness and harmony with each other. In 1985, Thailand had the first athlete to win the 26th Olympic medal in the amateur boxing section, he was Somrak hamsing, then a Thai national athlete, earning more medals in the Olympic Games, Asian Games which has created a reputation for Thailand. It represents the importance of sport in Thailand.

Tennis was included in the Olympics for the first time in Athens (1896). Later in 1924 and then in 1926, Prince Bidyalongkorn, he has established the Lawn Tennis Association of Thailand and he was the first Lawn tennis association president. He makes the rules of the association for using as general standards until now. It can be seen that tennis has a long history and competition. It can be played at all ages and races as a sport that helps your body healthy. It also developed of both the mind, intellect, decision-making, sportsmanship, knowing winning, and forgiving. However, tennis in Thailand has not been developed as it should. The researcher is a tennis player and interested in doing research in this field.

The research "*TENNIS'S SATISFACTION TOWARD SERVICE OF K.S. SUKHUMVIT TENNIS COURT*", to know the satisfaction of the tennis court, the researcher is a tennis instructor so, it is important to know the needs of users and the researcher can bring that information to improve to be better.

## 2. Literature Review

### 2.1 Concepts and theories of service satisfaction

Factors affecting for satisfaction of service There are important factors as follows:

2.1.1 Service Products, Satisfaction of service will occur when receiving quality service and the level of service meets the needs. To care of the service organization in product design with the details what are customers want to use in daily life. How to use or where customers use each product or service and take into the quality account of offering service is important part in ensuring customer satisfaction.

2.1.2 Price Satisfaction of service recipients. It depends on the price of service accepting or considering that appropriate for the quality of service that customer's willingness to pay for the quality of service may vary, such as some people may consider that a high-priced product or service is a high quality product or service. Some customers will consider the price of the service based on the difficulty of the service.

2.1.3 Place of service is easy access to service when customer needs. The location and distribution of the service to the customers that is important.

2.1.4 Promotion- The satisfaction of the receiver is obtained by hearing the information or other persons talk about the quality of service in a positive way. If it meets the beliefs, it will feel good with the service. It is an incentive to drive the demand for services.

2.1.5 Service providers, operators / administrators, service providers and service personnel are all persons who play an important role in providing service to the satisfaction of service recipients. The importance of the customers will be able to meet the needs of customers to be satisfied easily as with any service or service staff that be aware to the customers with the service behavior and to meet the needs of customers with full attention to the consciousness of the service.

2.1.6 Service environment -The environment and atmosphere of service is influence to the customers satisfaction. The clients often appreciate the service environment that is associated with site design and the beauty of interior with furniture and color. The division of space as well as the design of materials used in the service.

### 2.2 Concepts and theories of service

Services are vital for daily lives of consumers, to produce good economic and social benefits to the current business and the importance of the service has two issues as follows:

2.2.1 The importance to the recipient. At the present, changing in lifestyle is hastened and competed all the time. The need to rely on others to help manage the various issues to be able to live in peace.

2.2.1.1 Help meet individual needs- Today's management is mostly a commercial management model to facilitate for the customer service business. There are many types of services that can meet the needs of consumers such as physical, emotional, intellectual and psychological consumer. It is necessary to study the standards of each type of service business and compare the quality of service that meets the needs as much as possible in order to get the service that they are individually satisfied.

2.2.1.2 Helps improve the quality of life when the customers receive the services that meet expectations, it will feel good for the services. Providing services must not be complicated and truly serve to the user.

2.2.2 The importance of service providers is divided into 2 types.

2.2.2.1 Importance of Entrepreneurship or Service Management Entrepreneurs need to adjust their marketing strategies are focus on the sale of goods only to pay attention to services related to

the product or to sell more direct services. To make the business successful against other competitors, especially profit and image service as follows.

2.2.2.2 Improve long-term profitability for good service businesses that will generate long-term profitability because consumers care about services and the businesses can create leads to make more profitable.

2.2.2.3 Helps to create a good image for service businesses - starting from providing information or advice to the buyer making a purchase, show respect, and see the importance of the buyer throughout the service period and offer the best service to the needs and expectations of the buyer. These things will satisfy customers and this makes it possible to talk to each other in the customer groups and creating a more credible image of the business.

2.2.2.4 Reduce the change of customers' minds from business. Always consider the importance of the service that makes the customers' satisfaction. Especially old customers will have to repurchase or introduce new customers as well.

2.2.2.2 The importance of service personnel- the expansion of the industry service in the past has increased service in many occupations. The aim is to meet the needs of more diverse consumers that is to help with the career and income. Business Service recognizes the importance of service staff in maximizing customer satisfaction. To train employees to be efficient in service for affecting a business profitable and it can pay for the right people.

### 2.3 Related Research

Chadaporn Chaktong (2014): Abstract) Studying about the passenger satisfaction with a quality of Service of Domestic Airline Employees with the 400 passengers. The questionnaire was used as a tool to collect the data. The statistics for frequency, percentage, standard deviation, comparison between the two independent variables. Independent-Samples with t-test and comparison of variables between two variables with One-way analysis of variance (ANOVA) F-test in hypothesis testing. The research found that the majority of respondents were female that used the service with Air Asia, their ages between 20-29, educations are Bachelor's Degree and income per month ₪ 20,001-30,000 most of them are businessman. Their frequency of travel once a year and Passenger Satisfaction on Quality of Service of Domestic Airline Employees. Overall of satisfaction, the average flight service satisfaction was 3.88, followed by satisfaction with the airline's average airline contact 3.87, service satisfaction, average flight schedule 3.80, and ground service average 3.75, respectively.

## 3. Research Methodology

### *Population and sample*

The population used in this study is Guests or athletes who use the K.S. Sukhumvit tennis court 2,000 persons from the statistics of the service from September to October, 2016.

The sample size used in this study was the general or athlete who used the the K.S. Sukhumvit tennis court by the formula of Taro Yamane (1967, p. 886) at the confidence level of 95% and the expectation of 5% the sample size was 333 persons. In this research, the sample size was 300 persons. (Theerapan Ananapakorn, 2006: 51-52)

### *Tools were used in the study*

The researcher constructed a questionnaire consisting of a closed-ended questionnaire. The study was based on theoretical papers and the review of relevant research reports. The research questionnaire was divided into 2 phases.

Part 1: Personal Factors questionnaire, Gender, Age, Education, Monthly income level and occupation

Part 2: The satisfaction questionnaire on the use of the K.S. Sukhumvit tennis court.

Part 3: Suggestion

Data analysis

This analysis was processed by the statistical program (SPSS) on data analysis include frequency, percentage, mean, standard deviation (SD), one-sample t- test, analysis of one way anova

## **4. Anticipated Results and Discussion**

### *4.1 Study results*

4.1.1 The results of personal data analysis showed that the majority of tennis players were 162 males or 54%. The age of tennis players was between 31-40 years old, were 115 persons or 38.3%. There were 238 students at the undergraduate level, 79.3% of them had monthly income of more than ฿20,000 or 87% and the majority of these occupations were 203 persons, or 67.7%.

4.1.2 The results of the mean and standard deviation of the satisfaction with services of K.S. Sukhumvit tennis court the average was 4.69, and when considered on the individual aspect, the highest level of coaching satisfaction was found the average was 4.79, followed by the service of tennis shops and equipment the average was 4.78 and the lowest was facility the average was 4.45.

4.1.3 Comparative analysis of tennis players' satisfaction with the K.S. Sukhumvit tennis court services was classified by personal factors.

4.1.3.1 Tennis players with different sex are satisfied with the K.S. Sukhumvit tennis court services. Overall, there was no statistically significant difference (Sig. .73). with different sex Satisfied with the use of different services at the .05 level.

4.1.3.2 Tennis players with different ages are satisfied with the K.S. Sukhumvit tennis court services. Overall, there was no statistically significant difference (Sig. = .75).

4.1.3.3 Tennis players with different educations are satisfied with the K.S. Sukhumvit tennis court, services. Overall, there was no statistically significant difference (Sig. = .10).

4.1.3.4 Tennis players with different monthly income levels are satisfied with the K.S. Sukhumvit tennis court services. Overall, there was no statistically significant difference (Sig. = .88).

4.1.3.5 Tennis players with different occupations are satisfied with the K.S.tennis courts, Sukhumvit services. Overall, there was no statistically significant difference (Sig. = .92).

### *4.2 Discussion*

Based on the results of the tennis player's satisfaction with the services of K.S. Sukhumvit tennis court, can discuss the results as follows;

4.2.1. The users with different sex -there was not difference in the level of satisfaction with the services of K.S. Sukhumvit tennis court. It was found that tennis players with different sexes were not satisfied with the service. This may be the tennis players who come to serve is a male and female expect to receive the appropriate service of the individual; according to the psychological concept of Rattana Siripanich, (Phakorn Harnsuwan 2558: 49; According to Rattana Siripanich, 1989: 64). She described sexuality and intellectual differences are abilities to recognize the general



more complex learning, remembering basic initiatives. Thinking quality is said; Men have intelligence in one thing above the female. On the one hand, and one female on the other.

4.2.2 The users with different ages -there was not difference in the level of satisfaction with the services of K.S. Sukhumvit tennis court. It was found that tennis players who had different ages were not satisfied with the services were not consistent with the research of Ms. Kanyanutt and colleagues (2004). they studied the satisfaction of patients using spa treatment. Case study at the Seri Center, Srinakarin Road. Different age groups were satisfied with the selection of spa services. The research found that people in the age groups of 31-40 years are most likely to use the service because they are working to maintain their health and look good.

4.2.3 The users with different education -there was not difference in the level of satisfaction with the services of K.S. Sukhumvit tennis court. It was found that tennis players who had different education levels did not differ in satisfaction with the results of the study on the satisfaction of the users of the Health insurance scheme program by Nursing Bangkok. (2007) It was found that subjects with different educational levels the satisfaction of using the Health insurance scheme program by Nursing Bangkok at the 0.05 of significance level, the samples with the higher or related education level of satisfaction general services medical equipment, quality of service And equality.

4.2.4 Users with different monthly income -there was not difference in the level of satisfaction with the services of K.S. tennis court. Overall, tennis players who had monthly incomes differed in the satisfaction of using the service, which was consistent with the research conducted by Phakorn Harnsuwan (2558). To study the satisfaction of using the fitness services of the members of Sripatum University. Saying that the user with different monthly income levels have the satisfaction with the use of equipment and price facilities , fitness location center, promotion, service process, personality / the dressing and response between staff and users are not different.

4.2.5 The user with different occupation- there was not difference in the level of satisfaction with the services of K.S. Sukhumvit tennis court. Overall, tennis players with different occupations were not satisfied with the service. It has covering and responding the needs of all professional tennis players. Do not focus on only side to make a professional tennis player satisfied the service of K.S Sukhumvit tennis court. In accordance with the study of Umpon Bang Phum (1999). It found that one gym member had different occupations have comments on member service activities with facility, Service and personnel are not different.

#### 4.3 Suggestions

Tennis courts should have additional security guards. Due to, there are many members in the evening. They also have small children, equipment and value properties put on beside the field,should have the trainers's pictures, public relations, teaching and rental rates are clearly announced for those who are interested in using other services.

#### 4.4 Suggestions for the next research.

Should study the marketing strategies of the leading sport clubs with tennis court. Then analyze the effective marketing strategies for the response from the subscribers and the satisfaction factor in the service and focus on the image, tennis court access and facilities because this is the least satisfactory factor.

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**The Effect of Herzberg's Maintenance Factor Influencing  
Employee Loyalty Towards Direct Selling Business:  
A Case Study of Thai Direct Selling Development Association**

**RCGR<sup>2nd</sup>  
2018**

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# **The Effect of Herzberg's Maintenance Factor Influencing Employee Loyalty Towards Direct Selling Business: A Case Study of Thai Direct Selling Development Association**

by

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## **Abstract**

In this paper we describe the level of loyalty of member in direct sales business which focused on a Case Study in the Direct Selling Development Association and to study Herzberg's Maintenance Factors influencing the loyalty of member in direct sales business. The samples were 351 members in the Direct Selling Development Association. The instruments used in this study were the questionnaires. The statistics used in this research were multiple regression analysis. The result showed that Herzberg's Maintenance Factors included participation in management policies, the nature of work, work conditions, responsibilities, salary, compensation and welfare, and freedom of action have significant relationship with corporate loyalty in Thai Direct Selling Association. The tested statistic was statistically significant at the 0.05 level.

**Keywords:** Maintenance Factors, Organizational Commitment, Direct Sale Association

## **1. Statement of Problems**

New corporate governance needs to focus on human capital, to achieve the objectives of the organization. It requires administrative resources. It consists of people, money, objects, management equipment is important. The most important administrative resource is people because they are the users of other resources in the organization. It depends on the cooperation of the workers in the organization. Cooperation in work reconciliation only when the corporate executives understand the needs of employee. And can be used to motivate the work effectively. The confidence and knowledge dedicated to the job, correctly due to the fact of work, the person has a mental life. There are different needs. This will affect the performance of some people will lead to the better performance or more satisfying than others. Corporate management is responsible for making all employees high performance. Most effective, in addition to having good leadership, will drive higher motivation (Aon Hewitt, 2013).

Organizational Loyalty is important to retain quality employees. Organizational commitment is where the person in charge of the organization is feeling loyal to the organization. It is one of the most importance and adhere to corporate goals. Try to work hard to support the organization, have no intention of continuing to be a member of that organization. Commitment to the organization it is important to the organization's operations. Because of the bonding is the link between human imagination and the purpose of the organization. Employees feel ownership of the organization. This will make the operator more compliant. More satisfied and motivated to perform work if the person. High commitment to the organization. It can lead the organization to the objectives or goals. It makes

management easier to manage and has time to improve the system. And performance to be more effective, the results of the work in the organization work effectiveness are accepted by the society. Individuals with corporate affiliations not only loyalty to the organization. But to be willing to give something of their own. To help the organization succeed (Chakri Inthisen, 2005: 2).

Direct Selling Association of Thailand was established on October 12, 2010 under the supervision of the Bangkok Trade Association. The three main partners are Somchai Chandlalak, Khun Anuwat Thamparatch and Khun Kwanchai Piyasat whose main objective is to promote and develop the Direct Sales Association of Thailand and is acceptable to the public. There are 10 members, 3,128 employees and more and more members over the past period. The Thai Direct Selling Association has always been preoccupied with the members of the association. Problems with team's mother has been out of the company for about 15 per cent (Statistics Association of Direct Development Association of Thailand, 2015), which the team mother become a marketer. The sales target is set by the company. The impact on the sales of each company in the Association of Direct Sale Development of Thailand, in this way, the Thai Direct Selling Association was interested and cooperated with the Graduate School of Management. If you have research Involved with loyalty to the organization. It can be applied to the research for the development of team mates, we will not leave the company to continue growing.

The importance factors that affect to the organizational loyalty in Direct Selling Association of Thailand in order to bring the information. The survey is a guideline for the development of the human resources management of the organization. In addition, the information obtained will lead to prevent and solve the problem of resignation. In order to retain personnel quality and to remain with the organization for a long term. And work effectively with the organization and maximum effectiveness. This is for the benefit of corporate development and management of the organization.

## **2. Research objective**

1. To study Herzberg's Maintenance Factors influencing the employee loyalty of direct sales business: a case study of Thailand Direct Selling Association.

## **3. Scope of Research**

3.1 The research population were selected the marketing leader in the Thai Direct Selling Association from 7 companies, 2,838 peoples

3.2 The research sample included seven marketing leaders of The Association of Direct Selling Development of Thailand, 351 people, came from the selection of a proportionate quota of the 7 population groups.

3.3 The content of study was emphasize of the Herzberg's Maintenance Factors included participation in policy management. The nature of work, work conditions, responsibilities, salary, compensation, welfare and freedom of action.

## 4. Literature Review

### Context of the Thai Direct Selling Association

Direct Selling Business Direct Selling is a business that markets consumer goods. In the form of personalized presentations. It's far from a permanent retail location, the entrepreneur presents business opportunities to independent salesmen. Direct Sellers use description or product demonstration as the main strategy in offering. According to the Association of Direct Selling from more than 40 countries, the definition of direct selling is the marketing of consumer goods in the form of direct sales to consumers at the consumer's residence or address. Living at the Consumer's Workplace or other locations away from permanent retail locations. Direct sellers use explanations or product demonstrations as the primary strategy for offering. For Thailand Tactical Direct Sales has been used for over 50 years. Life insurance sales and 10 years ago, the camp of Amway giant US to open business direct sales seriously. Then the other direct sale developed sequentially. Products using the method. Direct sales are many whether it is electrical appliances, water filters, clothes, toothpaste, mostly used in daily life (Dessler, 1993).

Differences of direct sales system. Direct sales will be unique, everyone is eligible become an independent distributor. The organization and allocation of benefits is divided into 2 systems.

1) Direct Selling-Single Level Marketing (SLM) This system is not complicated. There will be a district manager (Each company may have a different name). The company's employees will look for and supervise the sales representatives or independent sellers. There are no limits depending on the ability of the manager. When you apply for a sales representative, you will be. You can find the supplier of your product. The income you will get in the form of commissions or special discount on purchase. How much do you get in that proportion? And if you get higher, you will get a higher percentage. Be rewarded for your hard work and ability some companies may increase their sales motivation. The sales are very high. With special awards which is often to fly abroad or better position this one-of-a-kind direct sales agent. So do sales and get it alone. Companies using this system, such as Miss Avon Hanako is a direct selling disadvantage to this system. Can not deduct the percentage of other vendors. Come to my own and if you are a sales representative who loves progress. It may also cause you to change the view from what you saw. That independent sales job is a hobby. To become a regular job because you may not have time for a regular job (Hewitt Associates, 2004).

2) Direct Selling-Multilevel Marketing (KLM) are currently very popular. This is a direct sales model that is not an employee of the company. Everyone is an independent salesman or an independent distributor with both sales and find more members in multiple layers. Everybody is a whole seller. I will use the product itself, the salesman will have income (Steer, 1977)

### Theories and Concepts related to organizational loyalty.

#### Herzberg's Two-Factor Theory

Motivation Theory of Frederick Herzberg (cited in Somerset Naval, 2007: 143). Proposed dual element theory, which concludes that two important factors are related to preference.

1.1) Motivation Factor *is a direct factor to* motivate people encourages individual satisfaction in the organization. To work more *effectively*, the factors that can meet people's needs are:

1.1.1) The success of a person's work means that the person can work successfully and successfully. The ability to solve problems. Known issues prevented. When the work is done, the feeling of *satisfaction and ecstasy in success* of the work.

1.1.2) Obtaining respect means being recognized by the supervisor. This acceptance may be in commendation of congratulations. Encouragement any other expression that implies acceptance of talent.

1.1.3) The nature of the work to do is interesting. Creative work the challenge that must be done or a job that can be done from scratch.

1.1.4) Responsibility refers to the satisfaction that results from being assigned responsibility for new tasks and the power to take full responsibility.

1.1.5) Job advancement motivation or stimulus to achieve the satisfaction of work. The management should use the five factors above.

Employees have to encourage learning and motivates people to work as hard as they can.

1.2) Hygiene Factors are factors related to the working environment and can prevent the occurrence of job dissatisfaction.

1.2.1) Policy and administration is the management and administration of the organization.

1.2.2) Salary or wages means the satisfaction or not satisfied with the salary. Or wage and salary increase.

1.2.3) Relationship with supervisor means contact. It does not mean respect.

1.2.4) Relationship with subordinates means contact with the subordinate. Commanded by good relationships with each other.

1.2.5) Relationship with colleagues is the interaction between colleagues in the organization.

1.2.6) Work status refers to the physical condition that contributes to happiness in work.

1.2.7. Method of commanding means the knowledge of the competent authority. Command in the operation or justice in the administration.

1.2.8) Work security is a person's sense of security.

1.2.9) The status of a job means the nature of the work or its characteristics, such as the presence of a bus transportation etc.

### **The Concept of Employee Loyalty**

Pongchan Garudapanich (2008: 2) states that organizational commitment is important to the survival and efficiency of an organization. That is the organization must have the capacity to recruit and create commitment to each member of the organization.

To maintain human resources quality, organizational commitment is important to the organization in the following areas.

1) Organization commitment can be used to predict the rate of entry - out of work as well. More than satisfaction in the job, this is because corporate commitment is a more comprehensive concept than job satisfaction. And rather stable than job satisfaction.

2) Organization commitment can be a great way for people in the organization to work better. Because of the sense of ownership of the organization together.

3) Organization commitment is a link between the needs of the individual. In organization with corporate goals in order for the organization to achieve its goals.

4) Enhance the efficiency and effectiveness of the organization.5) Reduce external controls. This is due to the fact that the members of the organization have a love and commitment to their organization.

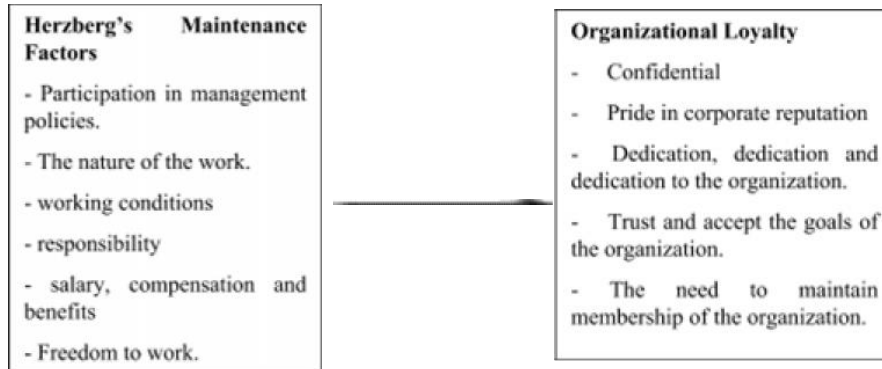
Pichit Tapawan (2011: 34-43) emphasizes the commitment of employees to the organization commitment is committed to the organization by organizations Employees need both employee engagement and organizational commitment. The employee's commitment to the organization is related to the turnover rate if the employee has a high organizational commitment. The resignation rate is low ,while engagement in the work of the employee is associated with unemployment rate. If employees have a high commitment the unemployment rate will be low. So organization employees



engagements and employee commitments are based on employee engagement concepts. The Gallup Organization study of employee engagement and classification of employees in three categories.

- 1) Employees who are engaged in the job engaged are employees who work with willingness and consideration of the organization.
- 2) Employees who are not attached to the job commitment. Not-Engaged Enthusiasm for work and / or work accidentally.
- 3) Actively disengaged employees are unhappy employees.

### Conceptual Framework



**Figure 1** The Conceptual Framework of Herzberg's Maintenance Factors and Organizational Loyalty

## 5. Results

Herzberg's Maintenance Factors included participation in management policies, the nature of work, work conditions, responsibilities, salary, compensation and welfare, and freedom of action have significant relationship with corporate loyalty in Thai Direct Selling Association. The tested statistic was statistically significant at the 0.05 level. The results of this study are as follows in Table 1.

**Table 1** Multiple regression analysis between job characteristics and employee loyalty.

Herzberg's Maintenance Factors	Coefficients		Standardized Coefficients	t	P-Value
	Unstandardized Coefficients				
	B	Std. Error			
1. Participation in management policies	0.293	0.047	0.327	6.279	0.000*
2. The nature of work	0.151	0.058	0.150	2.609	0.009*
3. The work conditions	0.022	0.045	0.025	0.498	0.619
4. Job responsibilities	0.006	0.060	0.007	0.102	0.919
5. Salary compensation and welfare	0.194	0.052	0.224	3.715	0.000*
6. The freedom of action	0.136	0.061	0.138	2.243	0.026*
R = 0.730 R <sup>2</sup> = 0.533 SEest = 0.435 a = 0.891 Sig. of F = 0.000					

\* Statistically significant at the 0.05 level.

Table 1 showed that job characteristics participation in policy administration of the agency, the nature of the work, payroll, compensation and welfare and work independence affect the organization's loyalty to direct sales personnel. Case Study in Thai Direct Selling Association with the significant level of observation (P-Value) ( $P < 0.05$ ), which is the factor of work done. The participation in the administration policy of the agency, the nature of the work, payroll, compensation and welfare, and freedom of action. Ability to forecast corporate loyalty of direct sales personnel. Case study of Thai Direct Development Association 53.30%

The correlation coefficients of the independent variables (R) were 0.730, the standard error (SEEST) was 0.435, and the predictive value constant in the form of raw scores (a). Is equal to 0.891 The factor of work done in terms of working condition and responsibility did not affect. Employee Loyalty to the organization of direct sales personnel were significantly higher ( $P\text{-Value} > 0.05$ ) than P-Value (P-Value). No, the ability to predict organizational loyalty of direct sales personnel. Case Study Company in Development Association Direct Sales of Thailand. The equation can be written as follows.

Forecast equations in raw score organizational loyalty =  $0.891 + 0.293$  (Participation in the administration policy of the agency) +  $0.151$  (on the nature of the work) +  $0.194$  (salary, compensation and welfare) +  $0.136$  (freedom of action work)

## 6. Conclusion and Suggestion

1). The results of the research showed that the opinions on the factors of work done: The participation in the administration policy of the agency on the opportunity to express opinions and suggestions. Solutions to solve the problems, therefore, the Association of Direct Selling Association of Thailand should provide opportunities for employees to have the opportunity to comment and suggest solutions to problems.

2) The results of the research show that the opinions on the factors of work done: The nature of the work to deal with the problem, how to perform the task assigned. Therefore, the Association of Thai Direct Selling Association have to consider adding training provide knowledge about the nature of work to personnel. To provide competent personnel to solve the problem and assigned a tasks.

3) The results of the research show that the opinions on the factors of work done: the working conditions in the workplace lighting in the workplace is not enough. Therefore, the Association of Thai Direct Selling Association consideration should be given to improving the workplace convenient and light enough.

4) Based on the findings, it is found that opinions on job characteristics: Corporate responsibility allows you to participate in decision making in a responsible job. Therefore, the Association of Thai Direct Selling Association should provide opportunities for employee to engage in deciding on the job that is in charge.

5) The results of the research show that the opinions on the factors of work done: Payroll, compensation and welfare in the organization are evaluated to fit the performance pay. Therefore, the Association of Thai Direct Selling Association consideration should be given to evaluating performance to provide the compensation to all employee.

6) The results of the research show that the opinions on the characteristics of work done: the freedom to work in the freedom of decision the job is in charge. Therefore, the Association of Direct Selling Association of Thailand should provide opportunities for employee, it is free to decide the work that they are responsible.

## **7. Future Research**

This research The researcher suggested the following research:

1) The next research should be a qualitative survey: In-Depth Interview may be used to develop the developmental staff of direct sales to offer opinions or give importance to factors of work characteristics. Work experience factor relationship between management and team mother. That affects loyalty to the organization the results of the study, the development of the human resources management of the organization. In addition, the information will lead to prevent and resolve the problem of resignation. In order to maintain quality personnel to stay with the organization for a long time. To work efficiently and effectively. This is for the benefit of corporate development and management of the organization.

2) Other factors should be studied, affecting the loyalty of the mother in the direct sales business case study in Thai Direct Selling Association

## **Acknowledgements**

Thank you for all support from Sipatum University, all the research fund and time to deal with the research, and the Dean of Graduate School of Business and to all of the helpful staff.

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**Marketing Mix Factors Affected to Sneakers Buying  
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# **Marketing Mix Factors Affected to Sneakers Buying Decision through Online Media of People in Bangkok**

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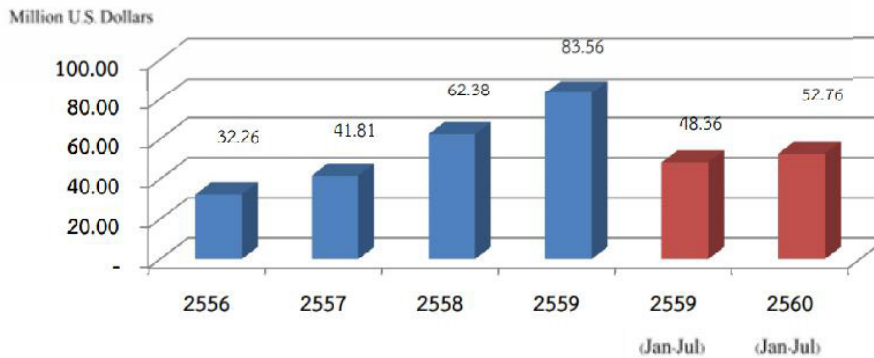
## **Abstract**

This research aims to investigate the influence of demographic factors and marketing mix factors affected to sneakers buying decision through online media of people in Bangkok. Sample group was 400 people in Bangkok who are interested to buy or used to buy sneakers through online media. Research instrument was questionnaire and data analysis methods were frequency, percentage, mean, standard deviation, t-test, One-way ANOVA, and Multiple Regression Analysis. The result revealed that opinions on the marketing mix factors of sneakers through online media in overall was important to the decision making in high level. The top three average were place, physical, and product aspects, respectively. The decision to buy sneakers through online media in overall was high level. The top three average decision-making process were need recognition, evaluation of alternatives, and information search aspects, respectively. Hypothesis testing result revealed that the difference of demographic factor in gender, age, marital status, career, and monthly income affected to sneakers buying decision through online media in different levels. Education, affected to sneakers buying decision through online media on the same level. Moreover, the marketing mix factors in aspects of product, physical, and process were affected to sneakers buying decision through online media of people in Bangkok at 0.05 significant level.

**Keywords:** Marketing Mix, Buying Decision, Sneakers, Bangkok

## **1. Introduction**

There were obviously and widespread sneaker trends in last 3-4 years. We found many people wear sneaker in public place and community mall in part of fashion trend. The reason is many people concern about exercise and carefully selected equipment including to sport company introduce sneaker innovation for modern lifestyle. Moreover, there is fabulous fashion design in market as global fashion revolution.



**Figure 1** Import value of sport sneaker shoes in Thailand between 2013 to July 2017.

There is an increasingly Import value of sport sneakers shoes in Thailand between 2013 and 2017.

Import value is 32.26 million U.S. dollars in 2013 increase to 83.56 million U.S. dollars in 2016. In 4 year the import value is increase for 1.5 times and likely to grow in 2017. Comparing currently import value is greater than last year for 9.10% counting from the beginning of year to July.

From the statement of problem, researcher interested in study marketing mix factor that affects to sneaker buying decision making of people in Bangkok through online media. The implication of research result can be value added to production line and distribution more effective and sustainable.

## 2. Objectives

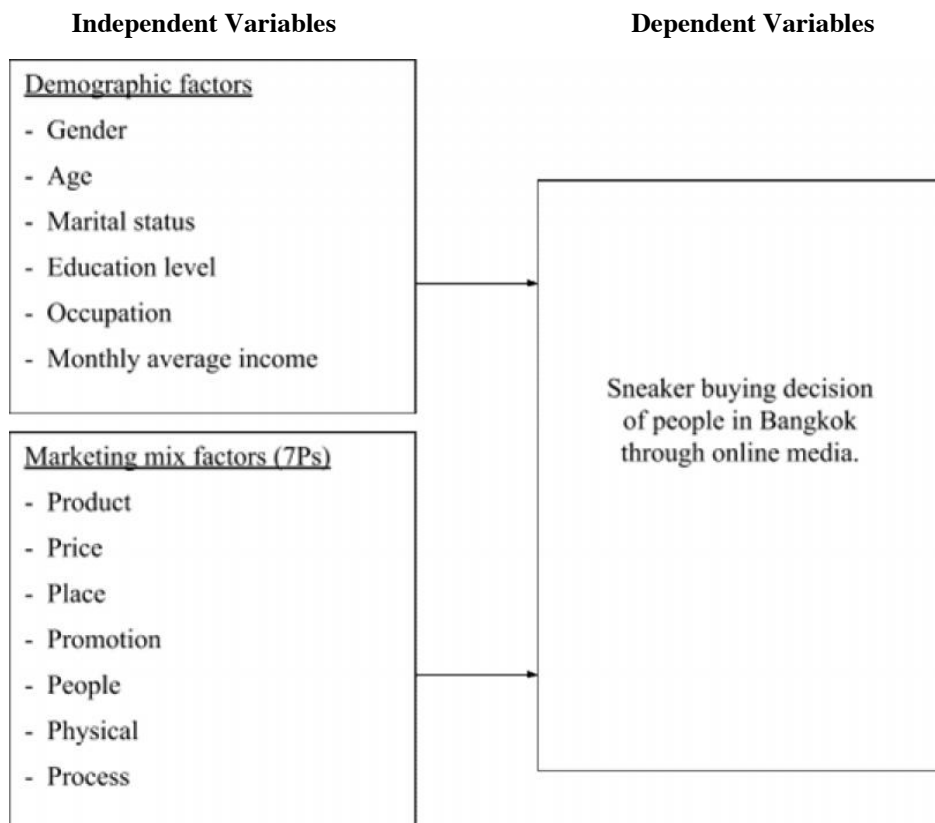
1. Investigate marketing mix factor of sneaker distribution on online media.
2. Investigate sneaker buying decision making of people in Bangkok through online media.
3. Study the influence of demography factor effect to sneaker buying decision making of people in Bangkok through online media.
4. Study the influence of marketing mix factor effect to sneaker buying decision making of people in Bangkok through online media.

## 3. Research Hypothesis

1. The difference of demographic is differently effect to sneaker buying decision making through online media.
2. The difference of demographic is effected to sneaker buying decision making of people in Bangkok through online media.



#### 4. Conceptual Framework



#### 5. Research Methodology

##### 5.1 Population and sample groups

Target population is male and female who are interested in buying or bought sneaker through online media in Bangkok area and whose age is over 18 years old. They can make decision by themselves, afford to buy the product and cannot predict the certain amount of population. Therefore, we decide to calculate uncertain sample group size with W.G. Cochran at 95% confidence level and 5% approximation error. An appropriate sample group size is 385 samples but we have reserved for more 15 samples to avoid the mistake that summarize to 400 samples.

##### 5.2 Research tools

Research tools for collecting data in this research is questionnaire.

##### 5.3 Data collecting

We distribute questionnaire through online such as email, facebook, instagram and twitter to sample groups then we revise all completeness of questionnaire, coding and analyze with SPSS program respectively.

## 5.4 Statistical data analysis

1. Revise all 400 collecting data for accuracy and completeness before analyzing.
2. Coding all accurate and complete data preparing for analyzing with statistical program by determining process and analyze data as follows:

2.1. Descriptive Statistics are used to describe fundamental data that collecting from sample groups that composed of Frequency, Percentage, Mean, and Standard Deviation (S.D.)

2.2 Inferential Statistics are used to test the research hypothesis for summarizing and reference to research population that composed of t-test, One-way ANOVA, and Multiple Regression Analysis

## 6. Results Analysis

1. Most of sample groups are male (50.50%) whose age between 20 and 30 years old (33.50%) , single (53.25%) , education level is bachelor degree (61.50%) , work as freelance (28.25%) , monthly average income over 30,001 baht (47.50%) , buying sneaker through its own website more often (43.25%) and the most popular brand is ADIDAS (34.00%)

2. Sample groups's opinion about marketing mix factor of sneaker through online media. In overall is very important to buying decision making in high level (average score is 3.90). When considering in each aspect, we found the highest average score is place (average score is 4.10), second is physical (average score is 4.07), product (average score is 3.99), process (average score is 3.99), price (average score is 3.91), people (average score is 3.74) and promotion (average score is 3.51) respectively, all details are in Table 1.

**Table 1** Means, Standard deviation and important level of marketing mix factor

Marketing mix factor		S.D.	Important level	Rank
1. Product	3.99	0.58	high	3
2. Price	3.91	0.62	high	5
3. Place	4.10	0.69	high	1
4. Promotion	3.51	0.70	high	7
5. People	3.74	0.75	high	6
6. Physical	4.07	0.59	high	2
7. Process	3.99	0.63	high	4
Total	3.90	0.51	high	-

3. Sample groups decided to buy sneaker through online media, in overall is high (average score is 3.70). When considering in process aspect, we found the highest score is problem awareness (average score is 3.95), second is alternative assessment (average score is 3.87), third is information searching (average score is 3.69), buying decision (average score is 3.65) and behavior after purchase (average score is 3.35) respectively, all details are in Table 2.

**Table 2** Means, Standard deviation and sneaker buying decision making level through online media

		(n = 400)		
<b>Sneaker buying decision making level through online media</b>		<b>S.D.</b>	<b>Decision level</b>	<b>Rank</b>
1. Problem awareness	3.95	0.74	High	1
2. Information searching	3.69	0.78	High	3
3. Alternative assessment	3.87	0.68	High	2
4. Buying decision making	3.65	0.58	High	4
5. Behavior after purchase	3.35	0.72	Medium	5
Total	3.70	0.56	High	-

4. Result of hypothesis 1 concluded that the difference of demographic in gender, age, marital status and monthly average income are differently effected to sneaker buying decision making at 0.05 significant level. This result according to an assumed hypothesis. For educational level is indifference effected to sneaker buying decision making through online media, all details are in Table 3.

**Table 3** Differentiation result of average score of sneaker buying decision making through online media which classified by demographic

<b>Demographic factors</b>	<b>t/F</b>	<b>Sig..</b>
1. Gender	4.01*	0.000
2. Age	6.36*	0.000
3. Marital status	3.10*	0.046
4. Education level	0.79	0.453
5. Occupation	10.70*	0.000
6. Monthly average income	3.99*	0.008

\* at 0.05 significance level

5. Result of hypothesis 2 concluded that marketing mix factors are significantly influenced to sneaker buying decision making through online media at 0.05 significance level. The results were accordance with assumed hypothesis. Combining product, physical and process factors can predict the result of sneaker buying decision making of people in Bangkok through online media at 0.05 significance level with correlation coefficient value 0.580

**Table 4** Result of marketing mix analysis effects to sneaker buying decision making of people in Bangkok through online media

<b>Predictor variables</b>	<b>B</b>	<b>Beta</b>	<b>t</b>	<b>Sig.</b>
(Constant variables)	1.132	-	5.958*	0.000
Product	0.194	0.201	3.828*	0.000
Price	0.009	0.010	0.156	0.876
Place	0.003	0.003	0.051	0.960
Promotion	0.053	0.067	1.193	0.234
People	0.012	0.016	0.270	0.787
Physical	0.132	0.139	2.087*	0.038
Process	0.246	0.278	3.760*	0.000
R = 0.580, R <sup>2</sup> = 0.337, Adj.R <sup>2</sup> = 0.325, F = 28.402*, Sig. = 0.000				

\* at 0.05 significance level

According to table 4, the result can be created regression equation in raw data form which can be predicted more accurate at 32.5% and predict sneaker buying decision making through online media as follows:

$$Y = 1.132 + 0.194 X1 + 0.132 X2 + 0.246 X3 \text{ (all details are in Table 4)}$$

## 7. Discussion and Conclusion

1. From the research result revealed that sample groups who decides to buy sneaker through online media are male whose age between 20 and 30 years old, single, educational level is bachelor degree, self-employed/freelance, monthly average income is over 30,001 baht, frequently buy sneaker through its own website and most prefer ADIDAS brand. This result according to the research of Natthapon Srikittiwan (2016) that study about marketing mix factor effects to buying Adidas shoes of member in ADIDAS Market Thailand Facebook group. The result reveals that the sample groups are male more than female whose age between 20 and 29 years old, educational level is bachelor degree of equivalent, single, most of them are student, employees in private company and monthly average income is 20,001 and 50,000 baht.

2. Research result found the sample group opinion about marketing mix factor of sneaker buying decision making through online media. In overall of purchasing decision making is high but consider in each aspect we found the highest average score is distributional channel which means an important channel that consumer prefer the most is online media and effects to sneaker buying decision making through online media. THbusinessinfo (2015:Online) explained that Place means distribution channel for product and/or service including to methods to deliver product and/or service to consumer in time. The key is consideration about who is the target group and how to choose the preferable distribution channel for distributing product and/or service to consumer.

3. Research result found the sample groups decided to buy sneaker through online media. The overall is high score but when considers in each topic we found the highest score is problem awareness that means the most of sample groups are aware of problem and their needs which according to the result of Sornsawan Siriwanaset (2015) that study about factors effect to NIKE buying decision making of people in Bangkok Metropolitan Region. They found the different of customer needs even the different in themselves. Customer wearing is changing in different time which make the necessary of variety pattern that serve all kind of customer needs.

4. Result of hypothesis 1 found the different of demographic factor in gender, age, marital status, occupation and monthly average income are differently effected to sneaker buying decision making through online media at 0.05 significance level. According to Natthapon Srikittiwan (2016) that study about marketing mix factor effects to buying Adidas shoes of member in ADIDAS Market Thailand Facebook group. The result reveals the different of gender, age, marital status, educational level, occupation and monthly average income is differently effected to Adidas buying decision making.

5. Result of hypothesis 2 found marketing mix factor effects to sneaker buying decision making through online media at 0.05 significance level. According to Piyamaporn Chuaychunu (2016) that study about factors effect to buying product through online media. Result reveals marketing mix factor such as people, product quality, price, place, product image and shop and shop information, product information and service procedure, for all factor effect to buying decision making through online media.

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## Marketing Mix Affecting the Decision of Consuming Clean Food in Bangkok



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# Marketing Mix Affecting the Decision of Consuming Clean Food in Bangkok

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## Abstract

The study on marketing mixes of clean food habits in Bangkok areas was aimed 1) to examine differences between personal factors affecting clean food habits of people in Bangkok areas, and 2) to investigation relationship of marketing mixes affecting clean food habits. The methodology of this study was survey research. A questionnaire was used as the research instrument and the samples included 400 populations who had experienced on consuming clean food and resided in Bangkok. Data were analyzed with statistical package and statistics for data analysis were frequency, percentage and mean. The hypotheses were analyzed with t-test, One Way ANOVA and Pearson Chi-Square. The findings reveal that most respondents were male with age range of 26-35 years, and education of bachelor's degree. The majority were company's employees and single with average monthly salary of 10,000 - 20,000 Baht. They consumed clean food 1-2 times a month. The marketing mix of the consumers in Bangkok highly affecting clean food habits was products and the aspect with high effects was products and the term with high outcome was employees, price and physical environment, respectively. The terms extremely highly affecting clean food habit were benefit and nutrition of clean food. Meanwhile, the term highly affecting clean food habits was healthiness, respectively. When testing hypotheses, the researcher found that the consumers in Bangkok with different sex, age, educational background, occupation, marital status, average monthly salary had indistinct clean food habits with statistical significance at 0.05. the marketing mixes were related to decision of clean food consumers with statistical significance at 0.01.

**Keywords:** Clean Food, Decision, Marketing Mix

## 1. Introduction

Having long and health life is what everyone in the world wants and attempts to pursue for themselves. Therefore, every person tries to exercise and consumes beneficial food regularly to normalize any components of their body. In 2017, Thailand ranked top 10 diseases as a cause of death of Thai people as follows:

1. Cancer	6. Chronic lung disease
2. Coronary artery disease	7. Allergy
3. Diabetes	8. Nervous diseases
4. Hypertension	9. Muscular disease
5. Tuberculosis	10. Obesity

Therefore, when considered, a number of populations in Thailand had overweight and obesity especially when they did not exercise regularly and consumed unhealthy food such as liquors, beer, junk food, soft drinks and low-nutrition food. Nevertheless, Thai populations also had decreased movement such as sitting on a work desk for long time. As a result, they were unhealthy. It is obvious that, consumption behavior is extremely essential; hence, keeping the body healthy will reduce risks of illness. Finally, the consumers realize importance of keeping body healthy on a regular basis.

Consuming clean food is another way based on natural similarity influenced by western way of living. Clean food is a way to consume fresh and new food without too much processing or seasoning and clean food would be cooked the least such as fresh vegetable, fruits etc. and meat that is not processed with high heat like steaming and grilling. It includes stir-frying of raw materials which is not added with oil and newly cooked food with low seasoning in accordance with principles of nutrition. A number of persons believed that clean food consumption focuses on vegetables only but in fact, clean food covers food in 5 groups with sufficient proportion for energy need in each day (Anadee Nitithamyong, 2015). Nevertheless, to have good nutritional condition and consumption, having attitudes towards the clean food affects decision on consuming more clean food for good health.

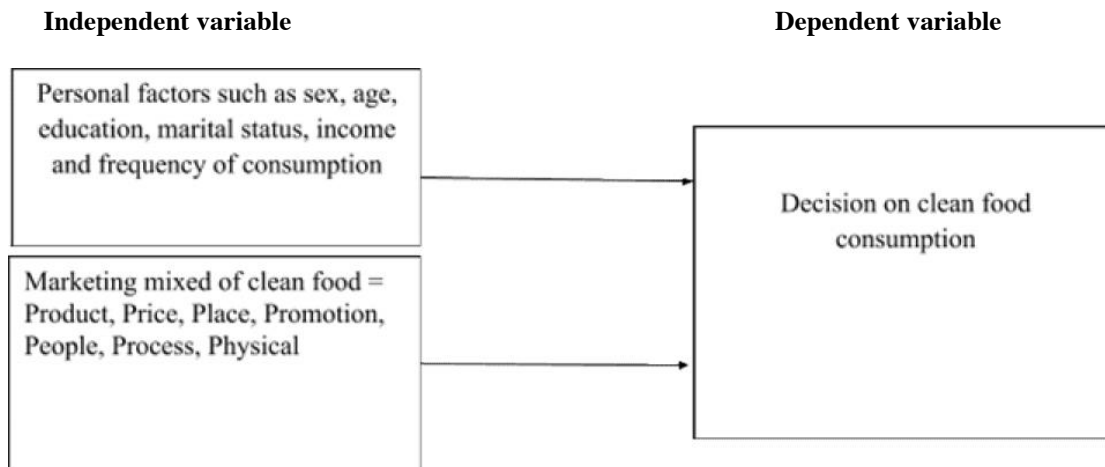
### 1.1 Research objectives

1. To examine personal factors affecting decision on clean food consumption of people in Bangkok
2. To investigate marketing mixes affecting decision on clean food consumption of people in Bangkok

### 1.2 Hypothesis

1. Different personal factors of consumers affect decision on clean food consumption.
2. Marketing mixes affect factors of decisions on clean food consumption.

### 1.3 Conceptual Framework



## 2. Literature Review

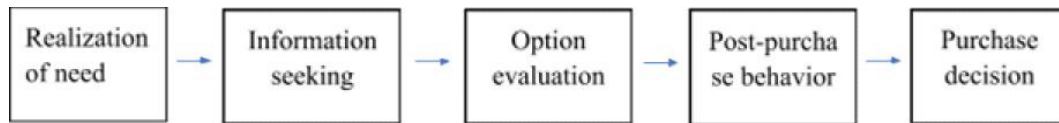
To study clean food habits of people in Bangkok areas, the researcher examined related literature as follows

1. Related concepts and theory of purchase decision
2. Concept and theory about consumer behavior
3. Theory related to marketing and marketing mixes (7 P's)
4. Related studies

### 2.1 Related concepts and theory of purchase decision

(Jaturongkukul) Multi-stage decision process leading to purchase consists of different steps. The buyers need to screen information before making a decision with 5 steps as follows

1. Perception of need or problem. First, the buyers think of their needs and problems of products caused by necessity from internal and external stimuli.
2. Seeking information: next, the consumers will find information of the products to support decision or ask from other persons who know or have experience about that product. Additionally, they may search information from public media.
3. Evaluation: the consumers will follow their selection such as forms, characteristics of the products etc.
4. Purchase decision includes following items
  - 4.1 Brand
  - 4.2 Shop
  - 4.3 Quantity
  - 4.4 Time
  - 4.5 Payment
5. Post-purchase behavior: marketing requires a questionnaire to perceive satisfaction with that product. If the consumers are satisfied, they will repurchase the product initially bought.



## 2.2 Concept and theory about consumer behavior

(Solomon, 1996:5) “consumer behavior” as processes that a person or persons are involved with purchase, use or consumption of products, services, thoughts or experiences to respond needs or desires to be satisfied

(Santiwong, 2540) “consumer behavior” as actions of a person directly involved with provision, obtainment and use of a product and service including decision process which precedes contributing to such action. The key point of such definition is precedent decision which means behavioral characteristics of consumer at that moment.

## 2.3 Theory related to marketing and marketing mixes (7 P's)

(Sareerat, 1908) Marketing mix (4P's) (7 P's) is a marketing instrument employed with businesses including products and services to achieve the objectives of the business. The marketing tool is widely exercised whether it is 4 P's or 7P's. The implementation of marketing tool in businesses depends on their requirement about how the marketing mix strategy can be applied with business operation. Marketing strategizing includes

1. **Product** mean what responds needs of consumers to satisfy them. Needs consist of tangible and intangible items whether it is product or service which is valuable and worthwhile for consumers and accepted by the consumers.
2. **Price** means amount used in exchange for products or services. Price influences purchase decision; hence, it is another factor affecting satisfaction of consumers. To evaluate if that product has value, utility and price reasonability, a marketer needs to consider pricing in accordance with utility of each product to bring satisfaction to the consumers.
3. **Place** means any activities concerning movement of products from production site to end users. Activities in distribution channels include product transport, product storage, inventory management, estimation of consumer's need, service and product distribution which means delivery of raw materials, pasts, instant products, ready-made products and services from upstream to downstream to respond needs of the consumers.
4. **Promotion** means marketing promotion which influences purchase decision. So, it is an instrument of a marketer to publicize to persuade and include targeted customers to purchase that product resulting rapid sales and considerable profits.
5. **People** Selling by a person is different from other types of marketing mixes as there is interaction between a buyer and a seller. Therefore, a seller or a sales representative has effective communication skill that can induce customers to purchase or have needs in that product.
6. **Physical evidence and presentation:** Total quality management: TQM is implemented to present quality of service through visible evidences such as a cinema business developing physical evidence and services to do Customer-value proposition) i.e. cleanliness and rapidity.
7. **Process** is an activity about regulations, methods and practices in services presented to customers to provide correct and quick service to impress the customers.

## 2.4 Related Studies

It is in accordance with the research of Warangkhan Phengpreecha (2014) studying relation of online marketing mix and purchase decision on cosmetic products through online channels of consumers in Bangkok. It was found that the consumers with different sexes had indistinct purchase decision process. However, it is not consistent when the consumers had different age, educational background, marital status and average monthly salary.

It is in line with Chanida Jumphon (2015) examining the project of clean food by blood type business and finding that factors of product, price, place, promotion, people, process of service and physical environment were related with decision.

## 3. Research Methodology

The study on marketing mix affecting clean food decision of people in Bangkok is survey research. For data collection, the researcher followed below procedures.

1. Population and sample
2. Research instrument
3. Data collection
4. Data analysis

### Demographic information

The populations in this research were men and women residing in Bangkok, totaling 5,682,415 persons (Registration Technology Administration and Management Division, Bureau of Registration Administration, Department of Provincial Administration, 2017).

### Samples

Due to certain number of populations, the samples were selected by calculation according to formula of **Taro Yamane** with reliability at 95% and error at 0.05. Size of the samples from calculation was 399.97 with error at 0.05 and 95% reliability. The researcher used 400 samples.

### Research instrument

The instrument used for data collection of the theses on elderly supplementary food purchase habits in Bangkok areas was a questionnaire containing 3 parts.

Part 1: Personal information of respondents consisting of open-ended check-list questions which included sex, age, educational background, occupation, marital status, average monthly salary and frequency of consumption.

Part 2: the questionnaire about marketing mixes and effect on selection of healthy food by examining 7 aspects including product, price, place, promotion, people, process and physical environment. The questions were rating scale with 5 levels of rate ranked from 5 as the highest and 1 as the lowest.

Part 3: the open-ended questions about consumption decision containing sub-questions based on rating scale ranked from 5 as the highest and 1 as the lowest.

### Research data

Primary data were data collected from 400 samples who are and were clean food consumers.

Secondary data were data from examination of texts, theses and research studies from data sources of a library and internet media.

## 4. Data analysis

1. Data were analyzed with descriptive statistics to perceive data of personal information of the respondents and clean food purchase behavior as follows; personal data included sex, age, marital status, occupation, monthly salary and educational background of the respondents. The data were presented in forms of frequency and percentage in relation with clean food purchase behaviors and frequency of clean food consumption. It was the distribution of frequency and percentage of importance of marketing mixes and data were presented in forms of mean and standard deviation.
2. Analysis with inferential statistics was conducted with hypothesis testing and the statistics employed in this study included Independent Sample t-test and One Way ANOVA to do comparative study of decision level in clean food consumption and personal factors.
3. Inferential statistics analysis was conducted by the researcher to find relationship by using Pearson Chi-Square to investigate relationship of marketing mixes affecting decision on clean food consumption of people in Bangkok.

### Descriptive data analysis

#### Part 1: Personal information of respondents

The findings reveal that most respondents were male with age between 26-35 years, and educational background of bachelor's degree. The majority was company employees with single status, and monthly salary at 10,000 - 20,000 baht. Most respondents consumed clean food 1-2 times/month.

#### Part 2: Importance of marketing mix on clean food consumption

Marketing mixes' importance on selection of clean food consumption was generally at high level (Mean = 3.67). When considered by 7 aspects, the consumers had opinions at high level in 7 aspects including product (mean = 3.91), people (mean = 3.67), price (mean = 3.57), physical environment (mean = 3.57), promotion (mean = 3.56), process (mean = 3.53) and place (mean = 3.49) respectively.

Mean, standard deviation and level of opinions on factors affecting clean food consumption decision

#### Part 3 Mean, standard deviation and level of opinions on factors affecting clean food consumption decision

Decision on clean food consumption was generally important at high level (mean = 3.55). When considered by aspect, the highest mean belonged to "You buy clean food as it is useful and nutritious" (mean = 3.96) followed by "You will consume clean food as it is good for health" (mean = 3.94), and "You decide to buy clean food immediately if it is distributed in a shop" (mean = 3.50), respectively. Moderate average belonged to "you want to consume clean food regularly" (mean = 3.31) and "you always search information about clean food" (mean = 3.06) respectively.

#### Hypothesis 1: Different personal factors affected decision on clean food consumption of consumers in Bangkok

Consumers with different sexes have different decision on clean food consumption: the findings revealed that the consumers in Bangkok with different sexes had indistinct decision in clean food consumption with statistical significance at 0.05.

Consumers with different age have different decision on clean food consumption. The findings revealed that consumers in Bangkok with different age had no dissimilar decision on clean food consumption except the term of searching information about clean food which was statistically significantly different at 0.05.

The consumers with different educational background had decisions on clean food consumption. According to the study, the consumers in Bangkok with different educational background had different decision on clean food consumption with statistical significance at 0.05.

The consumers with distinct occupations had opinions on clean food consumption. From the study, the consumers with different occupations had different decisions on clean food purchase because it is beneficial and good for health with statistical significance at 0.05.

The consumers with different marital status had decision on clean food consumption. The findings reveal that the consumers with different marital status had indistinct decision on clean food consumption except the term that clean food is food for health with statistical significance at 0.05. The comparison of decision on clean food consumption of people in Bangkok area in the aspect that clean food was good for health categorized by marital status was found that they were different with statistical significance at 0.05. In other words, the single group of consumers in Bangkok had more decisions on clean food consumption as it is good for health than the married group.

The consumers with different income decide on clean food consumption. According to the study, the decision on clean food consumption was not different except that clean food is beneficial and “you always search information about clean food” that were distinct with statistical significance at 0.05. From the table of comparison regarding decision on clean food consumption of consumers in Bangkok about searching information about clean food categorized by average monthly income, it was found dissimilar; that is, the group with average income not over 10,000 Baht had more decision on clean food consumption in term of search information about clean food than the group with income higher than 50,000 Baht/ month.

The consumers with different sexes decide on clean food consumption. Categorized by frequency, it was found that the samples had different decision on clean food consumption with statistical significance at 0.05.

The clean food consumers had decision on clean food consumption by frequency. According to the study, decision on clean food consumption was dissimilar with statistical significance at 0.05.

## **Hypothesis 2: marketing mixes are related to clean food consumption of consumers in Bangkok**

Marketing mixes of clean food affected decision on clean food consumption in Bangkok with statistical significance at 0.01 and marketing mixes in every aspect were related to clean food consumption of consumers in Bangkok with statistical significance at 0.01.

### **Part 6: Suggestions**

The findings reveal that 6 respondents had suggestions regarding decision on clean food consumption. Most of them agreed to shops and distribution channels that were highly needed as currently, there are not sufficient clean food shops to respond the needs.

## 6. Discussion

Hypothesis 1: from the 21<sup>st</sup> hypothesis, different personal factors of the consumers affected decision on clean food consumption dissimilarly. It was found that consumers in Bangkok with different sexes decided on clean food indistinctly in every item of decision process. Meanwhile, the consumers in Bangkok with distinct age, educational background, occupation, marital status, average monthly salary and frequency of consumption in terms of “you decide to buy clean food because it is beneficial”, “You decide to buy clean food immediately if it is distributed in a shop”, you decide on clean food because it is good for health”, “you want to consume clean food regularly” and “you always search information about clean food” had different decision with statistical significance at 0.05. This is in line with the study of Warangkhan Phenpreecha (2014) studying relationship of online marketing mixes affecting decision on purchasing cosmetic products online of consumers in Bangkok. It was found that the consumers with different sexes had indistinct decision process. However, it is not consistent in terms of dissimilar age, educational background, occupation, marital status and average monthly salary.

Additionally, most respondents were male with age range of 26-35 years and single status. The majority had education of bachelor's degree, being company employees with monthly salary of 10,001-20,000 Baht. This is in agreement with the study of Nattaphat Wattanatavorn (2015) studying decision on clean food consumption of populations in Bangkok.

Hypothesis 2: relationship of marketing mixes affected factors of decisions on clean food consumption of people in Bangkok. It could be concluded that marketing mixes were related with decision on clean food consumption of consumers in Bangkok with statistical significance at 0.05. In addition, marketing mixes in every aspect were related with clean food consumption of consumers in Bangkok with statistical significance at 0.01. When considering process of decision on clean food consumption, the researcher found that in general, marketing mixes were related with decision on clean food consumption of people in Bangkok in every aspect: decision on clean food consumption due to its benefits and nutrition, immediate purchase when clean food is distributed in a shop, its good results for health, need to consume clean food regularly and clean food information searching with statistical significance at 0.01. This is consistent with the work of Chanida Jumphon (2015) examining the project of clean food by blood type shop establishment and finding that product, price, place, promotion, people, process and physical evidence were interrelated with decision.

## 7. Recommendation

### *7.1 Recommendation from research*

According to the findings, 7 aspects of marketing mixes including product, price, place, promotion, people, process and physical evidence were related with decision on clean food consumption of consumers in Bangkok. Therefore, obtained data could be applied as a guideline for developing and improving clean food business to respond needs of consumers the most. Additionally, it could be employed to create a strategy of marketing mixes to have features in various aspects to perfectly suit consumers' need and to be an approach of strategy development to respond consumer's need the most.



## 7.2 Recommendations for further research

1. This study is conducted with population in Bangkok. Future works may cover the study with consumers in upcountry in order to compare the result whether it is related among samples in each province or each area.

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## Title Factors Affecting the Use of Co-Working Space Services



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# Title Factors Affecting the Use of Co-Working Space Services

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## Abstract

At present, the development of communication is important. To change the way people, work. Especially with professional workers such as designers, architects, IT engineers, auditors, or SME businesses, these people are starting to turn their backs on human beings, pay more and go into more independent careers. Change direction Work at home or fresh coffee at various places. Because it can be comfortable. The lifestyle of the new generation. Do not like clocking in Tired of traffic Tired of the old-fashioned way. Work more freely. Work at home or a live cafe. Work at home is comfortable. It can be dressed as you want to change the working time, start to work or stop as required. At the same time, working at home can result in distraction-intensive work. A job that does not have the capacity to work alone may feel unworkable. Because there are no co-workers and self-starters, or those who work in cafes, it can result in a shorter focus. But when a lot of users talk loudly in the store may distract the work. In the career that has to work for time. When it comes time for work, I often find it convenient to work. And the place is not enough. For example, the reception room will negotiate a business meeting room or turn off the electricity when it's time to leave. In this regard, the need for a place. Working device and facilities. The above factors contribute to a new and exciting business called Co Working Space.

**Keywords:** Co-Working Space, Distraction-Intensive Work

## 1. Introduction

Co Working Space is a place where you can rent space for work and full equipment such as table, chairs, meeting room, internet access, creative works, relaxation area, including coffee shop. Both daily and monthly rental. Easy to travel because most businesses are located in the city along the BTS sky train line and MRT is suitable for people in the modern era. To change the place of work from the morning to find the place. The result is talk. Share ideas openly. It is a small center that combines people with a diverse interest in the same job, and people who want to experience something new in their own way. I know a lot of new friends. Or exchange ideas in the same work. Connect to society to increase your chances of working in the future. Make it interesting and popular.

At present, Co Working Space is well-known to the group. The information is not enough. Based on the information above, the research team wants to study the needs of users. Co Working Space to know the daily work habits of consumers. Demand for Co Working Space To study the factors influencing consumers' choice of Co Working Space. Management Developed to meet the needs of consumers, and enabling Co Working Space to grow further or a better start in business that may expand to metropolitan areas or provinces with consumer needs.

#### *Research Objectives*

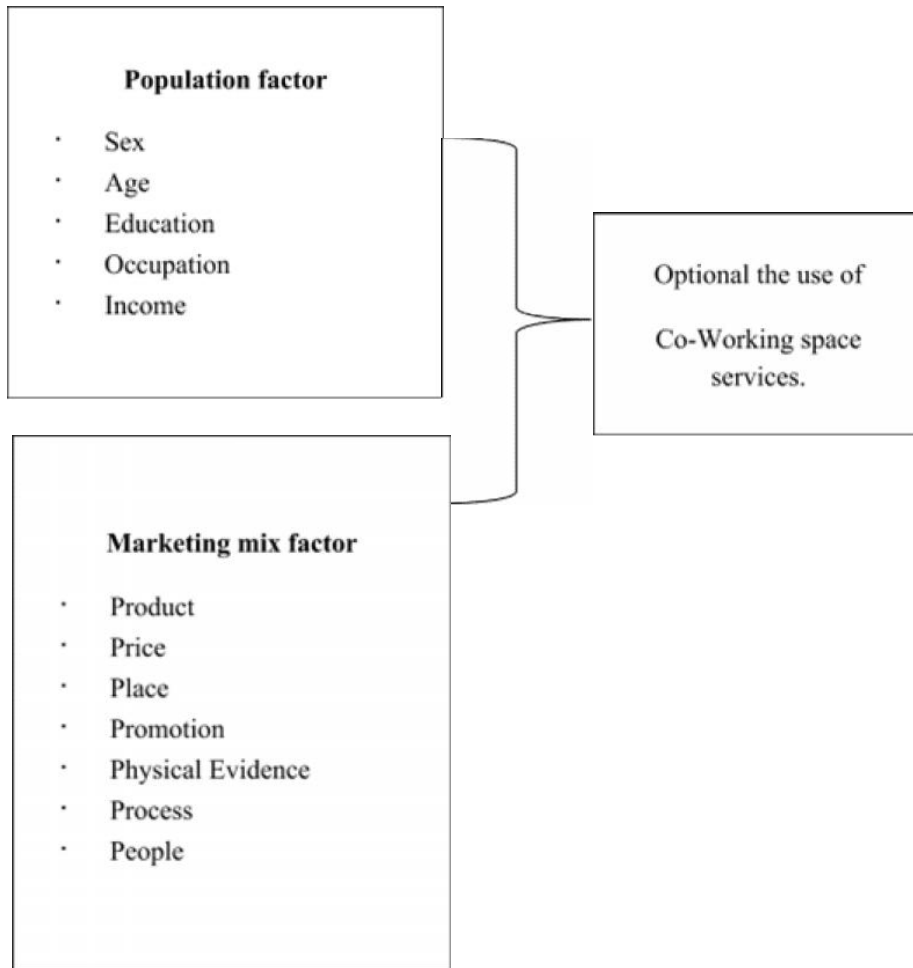
1. To study consumer behaviour in everyday life.
2. To study the demand for Co Working Space of consumers.
3. To study the factors that can increase the number of consumers of the business.

#### *Expected Benefits of Research*

1. Know the daily work habits of consumers.
2. Know how to use the Co Working Space business.
3. Be aware of factors in increasing the number of consumers of the business.

#### *Scope of Research*

Male / Female, age between 18-40 years old, working in the field.



## **2. Literature Review**

Siriwan Serirat (1995) defined definitions of theories and concepts. Demographics are defined as demographic characteristics.

It consists of sex, age, size, family, status, income, occupation, education. Marketers like to use these elements. Criteria for segmentation and targeting of the market. The major variables are:

1) Sex: Nowadays, consumer behavior is very variable, which may result in a lack of sexual behavior. For example, Currently, women have Go out to work more Unlike the past, women are usually housewives. The different sex is usually. It also affects the attitude, perception, decision making, thinking, and analysis.

2) Age refers to consumers with different age ranges. The consumer behavior of the product or service responds to the varying age requirements. Marketers can take advantage of this different

age range to find the niche market. Elderly people will pay attention to products or services related to health. Teenagers focus on fashion items. costume Working people pay attention to family goods.

3) Education Level Education is one that influences an individual's thinking or attitude. People have different education levels. It makes the mind and attitude are different. Highly educated people tend to have better ideas and attitudes than those with lower education.

4) Income, education and occupation It is important to determine the market segment. In some cases, the income level alone may not be. Real consumer purchasing metrics. There are other elements such as life style, taste, career, experience, etc., as well as targeting.

### *Marketing mix for marketing*

The form of a service business is tangible and intangible. For example, what is tangible in the service business, such as packaging, which is a component of the service. The location of the facility, the cleanliness of the equipment and the location of the service. The appearance of the employee's dress and the intangible product such as staff etiquette. Process Delivery Process Facilitate service recipients. The speed of service delivery ability is accurate and meet the expectations of customers.

The importance that can make a difference to a service business is the process or process that arises between creating experiences from service providers or business owners and employees. The knowledge and expertise of the staff trained to standard. Same service To maximize customer satisfaction and to meet the service provider. Pledge to the recipient.

It requires a tool or marketing factor to control. To stimulate Targeted demand for goods and services. Providers must provide confidence by creating. Collateral to encourage service users to consider faster access. Through 7 marketing mix tools or 7Ps.

The marketing mix strategy for service businesses is different. From the consumer goods business. For the consumer goods business, there are four main components: Product, Price, Place, and Promotion. Service business It is important to take into consideration three factors: the human factor (Employee), the employee (employee), the factor of creating and presenting the physical and the process factors. Therefore, the service business consists of marketing mix factors rather than the consumer goods business. T or 7Ps (Kotler and Keller, 2012 cited in Pa Siri works Prapattis Gul, 2558, page 11) as follows.

Product is what the business offers to create benefits. And value to meet the needs. The products of the service business are often intangible (eg, the satisfaction of service, convenience, comfort, speed, accuracy, etc.). Business Services Services can be classified into three categories:

(1) Core Service is the activity that the business has pledged. To the recipient. To deliver this experience through the provision of services to clients, such as the Co-Working Space, the core business service is providing work space to individuals who require a temporary workplace. It consists of places. The basic facilities required to operate the wireless Internet for business purposes. Convenience and safety.

(2) Extra Services Facilitating Service is a facility. The physician expects the patient to receive Other services include parking, food and beverage. Full facilities are available.

(3) Exceeded Service. The body does not expect to receive the service. It is a service beyond the core services provided, which adds value and value to the service. To impress the competitors, such as drinks and other hospitality on arrival. Kitchen Service Bathroom Service Services, equipment, etc.

Price refers to the value of the service. The service provider compares the value received from the service with the price to be paid if the customer is aware of the value. The value of providing the service provider is higher or higher. Price to pay as a result, the service provider can make the decision easier. Price will be correlated with cost. Costs incurred in providing services and



competitive status in the business are also correlated with other marketing mix factors. The perceived value must be taken into consideration when accepting a value higher than the price paid for the service.

The distribution channel (Place) is the location decision. Of the place of service. It must take into account the ease of travel, which is a factor that the service business must provide. Very important And the place must cover the area where the target audience lives as much as possible. The location of the competitor must also be considered. Because business service is a business. Service providers must be self-employed at the location provided by the service provider. Defining target customers

Marketing Promotion (Promotion) is to communicate the right information. To create attitudes and buying behavior from service providers to service recipients with marketing communication tools.

Personnel or Employee means the relationship between employees, service providers and users of the organization. It involves all personnel in the organization, including front desk staff or support staff. Which is required. Training and motivation to enable employees to deliver a different service experience and beyond the competition, at least to the satisfaction of the service recipient. The service of each customer, the staff must have the ability. There are attitudes that can respond to the service. Have initiative. Solve the problem immediately. It is part of creating value for the organization. The owner and Management are very important. Because it is the direction. Service Policy, Powers, Responsibilities of Employees Process of service Modifying and improving the service provided by the service personnel is the person who needs to meet and create the service process. Direct service and the support staff will support the work that will be done. The service is complete.

The creation and presentation of physical characteristics means the creation and presentation of tangible physical characteristics to service users. Both the physical and the physical. Provide service to create value that meet the expectations for the service recipient, such as the uniform. The costume of the service provider looks good clean. The manner in which the talk and courtesy are courteous. Providing fast and accurate services. It also includes the maintenance and delivery of other benefits that customers should receive. First Impression of the customer will occur at this process because it is the first factor that the customer will experience before using the service.

Processes are defined as methods and procedures. Practical Guidelines for Service To deliver the service accurately in the shortest possible time. For example, Co-Working Space may have a large number of service users. The service provider must have a reservation queue management service. To manage. Manage the location to meet the needs of each customer. Although there are complex procedures, the users will pay attention, but the results of the service need to fully meet the needs without missing.

### *Literature Survey*

Review the theory. Concepts and research related to the factors affecting the use of the Co-Working Space service. There are research studies on demographic factors and marketing mix factors (7Ps) that affect the use of the service. Co-Working Space The researcher reviewed the research on satisfaction factors in the coffee shop. Apartment Dorm More Ice Cream and Desserts It is a business that is similar in service. The Co-Working Space service is as follows.

Research of Pimanmat Leelert Wongpakdee (2009) found that customer satisfaction and consumer behavior were correlated with the trend of Sorbet & Sherbet's Golden Place service. Consumption in return Use future services. Sorbet & Sherbet is an ice cream and dessert shop, so a variety of ice cream and desserts are available. Ice cream flavor Tops and drinks Ice cream and quality of raw materials are very necessary. To make future use of the service. As well as the

research on the satisfaction of using the service, Nine Chur House apartment of Thunyaporn Lertwanpong (2011) found that.

Even though it is a business service provider. But the product factor is one of the factors that affect the satisfaction of users as well. The user will pay attention to the quality of the equipment. And modern furniture. The above research conflicts with Research by Thunyaporn Lerdwanpong (2011) on the factors affecting the satisfaction of using Ploenchit Service Apartment (Service Apartment). Service satisfaction has been better in terms of cost and service and better service compared to other serviced apartments.

Gunawan Airlines Research (2015) found that the price factor Positive correlation. It is important to be satisfied and loyal to the airline brand. Because the group values the reliability of the airline in its delivery capabilities. Professional service and safety. The value of the service. More important than the price paid. As with the Jeddah Hospital's price strategy research, Ahmed et al (2013), since Jeddah Hospital is a private hospital, which already determines market prices.

Research by Amin et al. (2013) found that customers who came to the hotel were expecting the hotel to be able to accommodate the booked service in a short time. The hotel will be able to clarify the details in a transparent manner. It will affect your satisfaction. User is very much. For the expectation of customers to use this hotel.

In line with Huat et al. (2012) 's findings, Responding to Want to get it right and they can provide services to help with additional customer requests. And complete facilities. Siguwaw et al. (1999) found that the process of providing services was different, such as the way in which the service was provided. To reduce the time to check in, hotels for VIP customers can be made in the car. Satisfy customers. In addition, in the research, Sorbet & Sherbet's ice cream and dessert shop, Pimanmalee Lertwongpakdee (2009), also noted that the fast food and Pricing Fast food serving and delivery. Deliver the right food according to ordered items. Factors affecting satisfaction. Reuse Future service recurrence of service recipients at a moderate level. This affects behavioral satisfaction. The change in the level is higher than other marketing mix factors.

### **3. Research Methodology**

The target population of this study is the population who are doing business and studying in Bangkok. The Co-Working Space was not available. The researcher selected the size of the sample in case of unknown population. Researchers chose a sample size strategy. The Taro Yamane reference sample, with sample size at a 95% confidence level and a tolerance of no more than 5% Variables used in this research. Indicate independent variables and variables as follows.

#### **1. Independent variables consist of**

Factors to consider include:

- (1) Age
- (2) Career
- (3) Income per month

The 7Ps are:

- (1) Product Factor
- (2) Price factor (Price)
- (3) Marketing promotion factor (Promotion)
- (4) Channel Distribution

- (5) Personnel or Employee
- (6) Process factors
- (7) Factors in creating and presenting physical characteristics (Physical Evidence and Presentation)

## 2. Variable

In this study, the dependent variables were the level of satisfaction with the co-working space service in Bangkok.

For the study used. The questionnaire generated from the review. Related articles are tools to collect information. To study the factors affecting the satisfaction of using Co-Working Space in Bangkok. The questionnaire is divided into 4 parts.

Part 1: Respondent's Profile

Part 2 Behavior in daily life

Part 3 Requirements for Co Working Space

Part 4 Factors in Selecting a Co Working Space Business

Analysis and processing of data from the study of factors affecting the satisfaction of using co-working space in Bangkok. It is divided into 2 parts.

### **Descriptive Analysis**

The demographic characteristics of the sample were age, occupation and monthly income. Using frequency and percentage in the analysis.

Data analysis Customer Satisfaction and Market Mix Factors Influencing the Satisfaction of Co-Working Space in Bangkok Metropolitan Area. The mean (Mean) and Standard Deviation (SD)

### **Inferential data analysis**

One-way ANOVA to test for demographic factors. Are the occupations and the different monthly income influencing the satisfaction of choosing Co-Working Space property?

Analysis of Independent Sample T-Test to compare the differences between two independent variables.

After the researcher has collected and verified the correctness of the questionnaire. Then the researcher will put the questionnaire into the code. And convey the query code into the form Coding Form code to be processed by computer. In the statistical package, the results were then discussed.



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**Marketing Mix Affecting Purchasing Behaviors of  
Complementary Foods for Elderly in Bangkok**

**RCGR<sup>2nd</sup>  
2018**

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# **Marketing Mix Affecting Purchasing Behaviors of Complementary Foods for Elderly in Bangkok**

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## **Abstract**

This research aimed to examine personal factors in terms of gender, age, marital status, education, occupation and income affecting purchasing behaviors of complementary foods for elderly in Bangkok to study the marketing mixes affecting purchasing behaviors of complementary foods for elderly in Bangkok. This research collected data through 400 questionnaires and analyzed data by IBM SPSS Statistics Version 20 using descriptive statistics and inferential statistics. The findings showed that most of the respondents were female between 21-30 years old, holding a bachelor degree, working as private employees with an income of 10,001 – 20,000 baht. The respondents gave importance to the marketing mixes in terms of product most, whereas they gave importance to price, distribution channel, promotion, people, process, and physical evidence at the high level. The result of hypothesis testing showed that the personal factors, such as, gender, age, education, and occupation were related to purchasing behaviors of complementary foods for elderly in Bangkok. The marketing mixes (7 P's) were related to purchasing behaviors of complementary foods for elderly in Bangkok. Product was related to purchasing channel with statistical significance. Price and physical evidence were related to reasons of purchasing with statistical significance. Promotion, people, and process were related to frequency of purchasing with statistical significance.

**Keywords:** Elder, Complementary Foods, Purchasing Behavior

## **1. Introduction**

Wellness and healthiness have been enduring which leads consumers in the new era to be more health-conscious. People have different ways to take care of their own health including doing exercise in fitness center, doing exercise in parks, as well as purchasing behaviors of healthier food, such as, cooking clean food to eat by themselves. However, cooking clean food takes time and cooking skills and some people cannot cook. This brings to a lot of healthy food business including delivery healthy food and complementary foods for health business to respond to the consumers' trend in the modern era which spend their lives in a hurry, have less time, and take care of their health consistently. Ordering healthy food by delivery or complementary foods for health is the most popular choice of males and females. Moreover, health-consciousness leads to the emergence of a lot of dietary supplement business and the tendencies to be more increasing. Consumers with wellness and healthiness including advanced evolution of medical technology lead Thai society at present into the elderly society completely.

**Table 1** Top 5 of the largest number of elderly population in 2017

<b>Number</b>	<b>Province</b>	<b>People (number)</b>
1	Bang Kok	978,455
2	Nakhon Ratchasima	417,303
3	Chiang Mai	300,490
4	Khon Kaen	287,272
5	Ubon Ratchathani	254,377

Source (Department of Older Persons of Ministry of Social Development and Human Security, 2017)

According to the above number of elderly population, Thailand has already entered into the elderly society. The researcher has been aware of health problems of the elderly which lead their descendants to investigate the marketing mix information of interesting complementary foods and compare price and properties, as well as channels to purchase complementary foods for elderly both offline and online. Complementary foods for elderly contain a variety of properties; therefore, the consumers need to investigate information carefully for health of the elderly in the family.

The researcher investigated the marketing mixes affecting purchasing behaviors of complementary foods for elderly in Bangkok. The reason of choosing Bangkok as the study area was Bangkok consisted of the largest number of the elderly in Thailand in 2017 about 978,455. This research aimed to perceive different purchasing behaviors of complementary foods for elderly among consumers in Bangkok and be beneficial to the manufacturers, distributors, marketers, anew entrepreneurs interested in the complementary foods for elderly business. Therefore, they can apply this information as the guidelines for doing business and the basic information for further planning development of complementary foods for elderly.

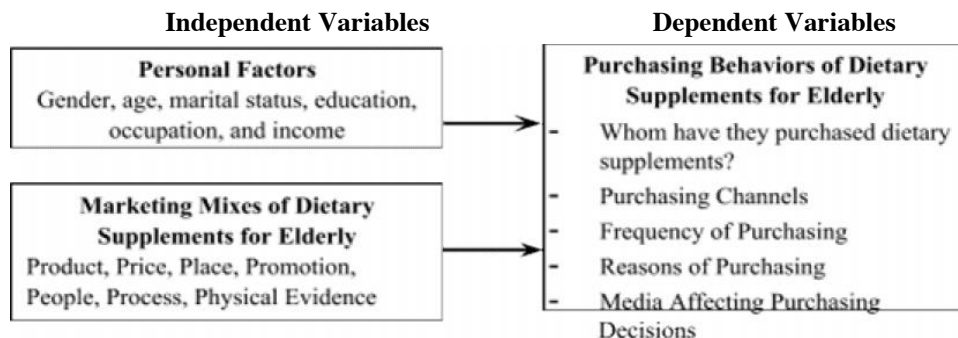
#### *Research Objectives*

1. To examine personal factors in terms of gender, age, marital status, education, occupation and income affecting purchasing behaviors of complementary foods for elderly in Bangkok.
2. To study the marketing mixes affecting purchasing behaviors of complementary foods for elderly in Bangkok.

#### *Research Hypotheses*

1. The demographic factors in terms of gender, age, marital status, education, occupation and income were related to different purchasing behaviors of complementary foods for elderly.
2. The marketing mixes were related to purchasing behaviors of complementary foods for elderly.





## 2. Literature Review

Service refers to activities, benefits or satisfaction to offer for selling or purchasing activities together with selling products. In general, service is not only related to the products, but also provides information on exchanging needs for use, training how to use for the consumers, etc.

Service business which offers the services in accordance with consumers' needs will rely on the concept of selling general product, that is, only products in need will be sold. Services and pricing will consider consumers' needs.

### Differences between service and product

1. Intangibility
2. Inseparability
3. Variability
4. Heterogeneous
5. Perishability

(Samerchai, 2007)

Marketing mix refers to controllable marketing variables which are applied together to serve satisfaction of the target group. The marketing mixes of service business are as follows:

1. Product is to serve needs and demands of the customers. The customers will get benefits and values of the services. In general, forms of services will be major services and additional services which can respond to the customers' needs exactly and be competitive when compared to the rival's service.
2. Price refers to service value in terms of money. The factor which the entrepreneur should consider before setting the service fee is the values perceived by the consumers. The consumers will compare the values they get with price, cost of services and related expenses, and existing rivals' competition.
3. Place is the activities related to the environment of offering services to the customers which affect customers' perception in terms of values and benefits offered by services. This will consider location, convenience of services, and service channels.

4. Promotion refers to the communication between sellers and buyers to create attitudes and purchasing behaviors. The communication probably uses salespeople and non-personal communication.
5. People refer to all staff of the organization providing services including proprietor and staff at all levels. All people are related to the service quality.
6. Process is a very important marketing mix which depends on efficient employees or advanced equipment to enable the process to deliver the quality services. In general, providing services consists of several stages from reception, basic information inquiry, providing services as demand, and payment. Each stage needs to be interconnected very well. If there is a problem in any stages, it will lead customers to dissatisfy with all services.
7. Physical evidence refers to creation and presentation of physical evidence including office buildings, place decoration, internal atmosphere of the place providing services, equipment, counter providing services, employee uniform, etc. These are one of factors which the customers choose to use services. Therefore, physical evidence which is beautiful and consistent with service positioning is as important as the service quality (Department of Industrial Promotion, 2017)

Marketing “behavior” refers to the expression in terms of activities. Marketing “consumer” refers to economic consumption. Therefore, consumer behavior means “the activities occurring during the process related to any economic consumption” (Sookcharoen, 2016).

Consumer behavior is expression of any person to get or use the product or service to respond needs of the person through processes, such as, searching, purchasing, using, evaluation, and spending to get the product and service (Fakfueangboon, 2011)

(Samerchai, Consumer Behavior, 2007) explained the purchasing decision process as follows: although the consumers are different and have different needs, they have the same forms of purchasing decisions. The purchasing decision process consists of 5 stages including problem recognition, information search, evaluation of alternatives, product choice, and outcome.

**What are complementary foods?** Pharmaceutical complementary foods refers to foods which are eaten in addition to main food (5 groups of foods eaten 3 meals a day) Purposes of providing complementary foods are to increase wellness, to provide energy to the body, or to enable the body to grow very well (Boonsorn, 2561)

Complementary foods are the nutrients in addition to the major foods which can be used for medical purposes or maintain health according to some people’s belief. The nutrients which are often used to manufacture complementary foods are vitamins, minerals, amino acids, vegetables and herbs (POBPAD, 2018).

### **Generation**

Silent Generation refers to people born during 1925-1942.

Baby Boomer refers to people born during 1943-1960 who are patient and hard-working.

Generation X refers to people born during 1961-1981 who are creative.

Generation Y refers to people born during 1982-2005 who are able to do many things in the same time.

Generation Z refers to children born and grown with advanced technology.

Generation Alpha refers to children grown with technology, that is, the year iPad began to launch in the market about 2010.

Generation C refers to a group of people who turn to be interested in technology increasingly. This group will be Gen-B and Gen-X (Faramnuayphol, 2018)

### 3. Research Methodology

#### *Population and Sample*

The population in this study was 5,682,415 male and female consumers in Bangkok (Division of Registration Technology Development and Administration, The Bureau of Registration Administration, Department of Provincial Administration, 2017) The population in this study was definite number. Therefore, the research applied the calculation of the sample size of Taro Yamane at a reliability level of 95 percent. The researcher used a total sample of 400.

#### *Research Instrument*

The instrument used to collect data of the thesis on Marketing Mix Affecting Purchasing Behaviors of Complementary Foods for Elderly in Bangkok was the questionnaire consisting of 4 parts as follows:

**Part 1** consisted of 6 questions on personal factors of the respondents consisting of (gender, age, marital status, education, occupation, and income).

**Part 2** consisted of questions on marketing mix of complementary foods for elderly by rating scales.

**Part 3** Purchasing behaviors of complementary foods for elderly of the respondents.

**Part 4** Suggestions.

#### *Research Statistics*

1. Use descriptive analysis and the statistics used were percentage and means.
2. Test hypotheses on different personal factors were related to different purchasing behaviors of complementary foods for elderly in terms of gender by using T-Test at a reliability level of 0.05. Other personal factors, such as, age, marital status, educational level, occupation, and income were tested by Chi-Square at a reliability level of 0.05 because it calculated the relationship between groups.
3. The marketing mix factors were related to different purchasing behaviors of complementary foods for elderly. The researcher tested by Pearson Chi-Square at a reliability level of 0.05 because it calculated the relationship between groups.

## 4. Results Analysis

### 4.1 Descriptive Data Analysis

#### Number and percent of personal factors

According to the personal factor analysis, most of the respondents were female between 21-30 years old accounting for 38.30 percent (153 people), followed by age between 31 – 40 years old accounting for 29.30 percent (117 people), and age between 41 - 50 years old accounting for 18.00 percent (72 people). Most of the respondents were single accounting for 44.30 percent (177 people), followed by married accounting for 42.30 percent (169 people) and divorced accounting for 10.80 percent (43 people). Most of them held the bachelor degree accounting for 56.30 percent (225 people), followed by Vocational Certificate / High Vocational Certificate accounting for 25.50 percent (102 people), and master degree accounting for 9.30 percent (37 people). Most of them worked as private employees accounting for 33.00 percent (132 people), followed by business owners accounting for 27.80 percent (111 people), and workers/ freelance accounting for 15.50 percent (62 people). Most of them had monthly income of 10,001 - 20,000 baht accounting for 31.30 percent (125 people), followed by monthly income of 20,001 - 30,000 baht accounting for 25.30 percent (101 people), and over 40,000 baht accounting for 20.50 percent (82 people).

#### Means and standard deviation of marketing mixes

Overall was at the high level with a means of 4.11. When considering by factors, product was at the highest level with a means of 4.23, followed by price at the high level with a means of 4.20 and distribution channel at the high level with a means of 4.02, respectively. Other factors were at the high level.

#### Number and percent of purchasing behaviors

According to the survey of purchasing behaviors of complementary foods for elderly of the respondents in Bangkok, most of the respondents have purchased complementary foods for elderly to their parents accounting for 55.0 percent (220 people), have purchased through the drug store accounting for 31.50 percent (274 people), have had frequency of purchasing 1-2 times in 6 months accounting for 45.50 percent (182 people), have purchased to maintain health for elderly accounting for 73.3 percent (293 people), and have purchased due to word of mouth from neighboring people accounting for 34.0 percent (311 people).

### 4.2 Data Analysis for Hypothesis Testing

According to the Independent Sample T-Test, personal factors in terms of gender at a reliability level of 95 percent showed that all factors had Sig. more than 0.05, that is, gender was related to purchasing behaviors of complementary foods for elderly indifferently at a significance level of 0.05.

The results of Pearson Chi-Square were as follows:

Personal factors were age, education, and occupation related to different purchasing behaviors of complementary foods for elderly.

Overall, marketing mixes in terms of product, price, place, promotion, people, process, and physical evidence were related to purchasing behaviors of foods.

## 5. Discussion and Suggestions

### 5.1 Discussion

Personal factors showed that most of the respondents were female between 21 - 30 years old, followed by age between 31 – 40 years old, and age between 41 - 50 years old. Most of the respondents were single, followed by married and divorced. Most of them held the bachelor degree, followed by Vocational Certificate / High Vocational Certificate and master degree. Most of them worked as private employees, followed by business owners and workers/ freelance. Most of them had monthly income of 10,001 - 20,000 baht, followed by monthly income of 20,001 - 30,000 baht and over 40,000 baht.

**According to the hypothesis testing 1** Personal factors were different gender, age, marital status, educational level, occupation, and monthly income was related to different purchasing behaviors of complementary foods for elderly as follows:

**Gender** was related to significantly indifferent purchasing behaviors of complementary foods for elderly.

**Age** was related to purchasing behaviors of complementary foods for elderly. Different age was related to indifferent purchasing behaviors of complementary foods for elderly in terms of whom they have purchased dietary supplements, reasons of purchasing, and purchasing channels of complementary foods for elderly.

**Marital status** was not related to purchasing behaviors of complementary foods for elderly. Different marital status was related to purchasing behaviors of complementary foods for elderly indifferently in terms of reasons of purchasing, purchasing channels and media affecting purchasing decisions indifferently.

**Education** was related to purchasing behaviors of complementary foods for elderly. Different educational level was related to purchasing behaviors of complementary foods for elderly in terms of frequency of purchasing, purchasing channels and media differently.

**Occupation** was related to purchasing behaviors of complementary foods for elderly in terms of frequency of purchasing, reasons of purchasing, and purchasing channels differently.

**Income** was not related to purchasing behaviors of complementary foods for elderly in terms of whom they have purchased dietary supplements, reasons of purchasing, purchasing channels, and media leading to indifferent purchasing decisions.

Information on means and standard deviation of marketing mix factors showed that

**Product** The first position was that complementary foods were safe and certified by Food and Drug Administration with a means of 4.31 at the highest level of importance, followed by products with natural ingredients, such as, natural or herbal extracts with a means of 4.27 at the highest level of importance, and label of the package specifying details and warning of complementary foods clearly with a means of 4.21 at the highest level of importance.

**Price** Specifying price clearly had the highest means of 4.21 at the highest level of importance and price appropriate with the product quality with a means of 4.19 at the high level of importance.

**Distribution channel** The first position was the products distributed in general drug store, such as, Watson and Boots with a means of 4.22 at the highest level of importance, followed by the products distributed in hospitals, clinics or health centers with a means of 4.06 at the high level of

importance and the products distributed in online media with a means of 3.77 at the high level of importance.

**Promotion** The first position was being informed by multi-channel, such as, TV, printed media, Social media, etc. with a means of 4.40 at the highest level of importance, followed by shop fronts having salespeople to suggest properties of complementary foods for elderly with a means of 4.13 at the high level of importance, and organizing promotional activities consistently, such as, free delivery with a means of 3.96 at the high level of importance.

**People** The first position was salespeople suggesting and providing information clearly with a means of 4.23 at the highest level of importance, followed by salespeople speaking politely and smiling with a means of 4.10 at the high level of importance, and salespeople dressing neatly with a means of 3.98 at the high level of importance.

**Process** The first position was specifying stages of product ordering completely and being convenient to contact with a means of 4.28 at the highest level of importance, followed by searching for product information easily, such as, online media with a means of 4.22 at the highest level of importance, and having the detailed stages to contact with complementary foods manufacturers with a means of 4.06 at the high level of importance.

**Physical evidence** The first position was reliable place or website distributing the products with a means of 4.32 at the highest level of importance, followed by distributing the products in the position easily to look for with a means of 4.09 at the high level of importance, and having parking space in the distribution place with a means of 3.57 at the high level of importance.

Information, number, and percentage of purchasing behaviors of complementary foods for elderly showed that most of the respondents have purchased complementary foods for elderly to their parents, followed by having purchased complementary foods for elderly to senior relatives in the family and by having purchased complementary foods for elderly to the elderly they have known (over 60 years old). Mostly, they purchased from general drug stores, followed by the drug stores (Watson, Boots), and online purchase. Most of them had frequency of purchasing 1 - 2 times, followed by less than one time and frequency of 3-4 times. Most of the reason of purchasing was to maintain health for elderly, followed by treating the diseases for elderly and maintaining youth for elderly. They purchased by word of mouth most, followed by online media advertising and TV advertising.

**According to the hypothesis testing 2** Marketing mixes were related to purchasing behaviors of complementary foods for elderly as follows:

**Marketing mixes in terms of product** was related to purchasing behaviors of complementary foods for elderly in general drug stores, drug stores, hospitals or clinics and media affecting purchasing decisions by word of mouth from neighboring people at a significance level of 0.01 and was related to purchasing channel from the direct sales member, and purchased due to online media advertising at a significance level of 0.05.

**Marketing mixes in terms of price** was related to purchasing behaviors of complementary foods for elderly in drug stores (Watson, Boots), the reasons of purchasing, and purchasing by word of mouth at a significance level of 0.01 and was related to purchasing channels from hospitals or clinics at a significance level of 0.05.

**Marketing mixes in terms of place** was related to purchasing behaviors of complementary foods for elderly in purchasing due to online media advertising, word of mouth from neighboring people at a significance level of 0.01 and was related to purchasing channel from the direct sales member and purchasing from drug stores (Watson, Boots) at a significance level of 0.05.

**Marketing mixes in terms of promotion** was related to purchasing behaviors of complementary foods for elderly in drug stores (Watson, Boots), word of mouth from neighboring

people at a significance level of 0.01, and was related to purchasing channels from hospitals or clinics and frequency of purchasing at a significance level of 0.05.

**Marketing mixes in terms of people** was related to purchasing behaviors of complementary foods for elderly in frequency of purchasing and word of mouth from neighboring people at a significance level of 0.01 and was related to purchasing channels from drug stores (Watson, Boots), hospitals or clinics at a significance level of 0.05.

**Marketing mixes in terms of process** was related to purchasing behaviors of complementary foods for elderly in online purchasing channels, frequency of purchasing at a significance level of 0.05.

**Marketing mixes in terms of physical evidence** was related to purchasing behaviors of complementary foods for elderly in purchasing channel from the direct sales member and the reason of purchasing at a significance level of 0.01.

The results of personal factors, such as, gender, age, education and occupation were related to purchasing behaviors of complementary foods for elderly in Bangkok and marketing mix factors, such as, product, price, place, promotion, people, process, and physical evidence were related to purchasing behaviors of complementary foods for elderly in Bangkok which was consistent with the research of (Visanlayangkul, 2011) studying purchasing behavior on healthcare products of working people in Bangkok in 2011. The research found that different demographic factors, such as age, marital status, educational level, occupation, and monthly income were related to purchasing behavior on healthcare products of working people in Bangkok differently. According to the relationship between marketing mix factors and purchasing behavior, product, distribution channel and promotion was related to purchasing behavior on healthcare products of working people in Bangkok. Different purchasing behavior on healthcare products, such as, type, selected product, objectives of purchasing, place, frequency, repurchasing, period of purchasing, average expense of purchasing each time were related to healthcare products of working people in Bangkok differently.

However, it was different from the research on types of complementary foods in the research by Saypin Visanlayangkul on purchasing behavior on healthcare products of working people in Bangkok which were involved with complementary foods for working people. On the other hand, this research investigated on marketing mixes affecting purchasing behaviors of complementary foods for elderly in Bangkok which were related to complementary foods for elderly.

## 5.2 Suggestions

According to the study, 7 marketing mixes were related to purchasing behaviors of complementary foods for elderly in Bangkok. The entrepreneurs doing business of complementary foods for elderly should consider 7 marketing mixes, such as, product should give importance to safety and product quality, distribution channel should distribute the products in reliable places, especially general drug stores of drug stores for customer convenience. The consumers will purchase complementary foods for elderly due to word of mouth from neighboring people, online media advertising and TV. The entrepreneurs should provide useful information to customers in multi-channel.

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**The Marketing Mix Affecting Purchasing Decision or  
Computer Assembling of Population in Samutsongkram Province**

**RCGR<sup>2nd</sup>  
2018**

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# **The Marketing Mix Affecting Purchasing Decision or Computer Assembling of Population in Samutsongkram Province**

by

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### **Abstract**

A study about 'The marketing mix affected to purchasing decision or computer assembling of population in Samutsongkram province.' This research has goal for studies about personal factors which affected to purchasing decision or computer assembling of population in Samutsongkram province. There has used sample groups as population in Samutsongkram province approximately with 400 samples. Furthermore, this research methodology has collected information from questionnaire and analyzed information with means, percentage, frequency, and standard deviation, and F-test, One-Way Anova. The results indicated that purchasing decision or computer assembling of population in Samutsongkram province and marketing mix which affected to consumer's decision for price, personal, service and promotion factors at most high levels, respectively, for products, physical evidence, and channel of distribution at high levels.

**Keywords:** Marketing Mix, Purchasing Decision, Computer Assembly

## **1. Introduction**

Nowadays, our world has evolved so much faster since in the past. Computers are used to process information about experiments in research or as a tool for calculating the business sector.

In today's world, computers are a tool to help businesses or businesses, such as sending emails or data logs, to people in the business or use it has the convenience. Data transfer is more convenient and reduces the amount of paper used. Cut down the trees to help the world live. Because the information contained in the electronic file does not require paper unless it requires concrete. So it is necessary to print. The paper is a tangible piece of paper for use in carrying out other activities.

### 1.1 Objectives

1. To study the factors influencing the purchase decision to purchase or computers assemble of consumers in Samut Songkhram province.
2. To study the factors influencing the purchase decision or computer assemble by personal factors.

### 1.2 Scope of Study

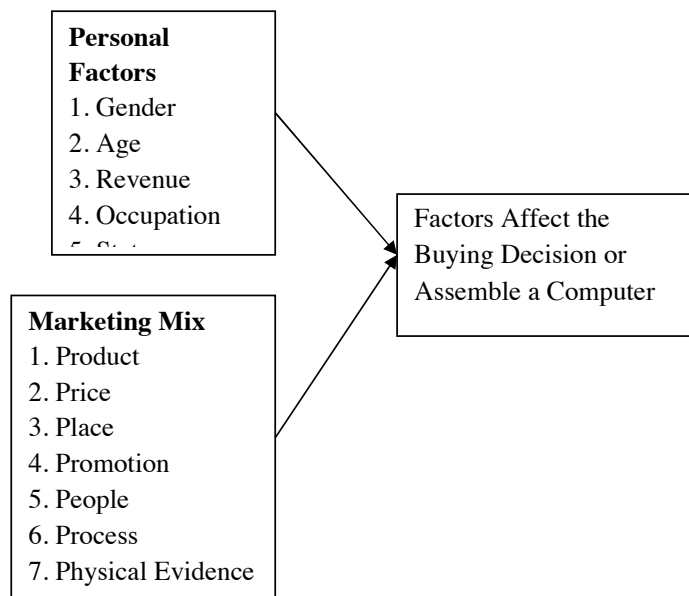
In the study, the researchers set the scope of the study as follows.

1. Study of consumers in Samut Songkhram province. The survey was conducted by online questionnaire.
2. Data collected during November 2018.

### 1.3 Population and Sample

The population in this study in Samut Songkhram province was 400 people.

### 1.4 Conceptual Framework



### 1.5 Research Hypothesis

**Hypothesis 1:** Personal factors affect different purchasing decisions or incorporated computer is no different.

**Hypothesis 2:** Different personal factors influence the decision to buy or assemble the computer. Factors that affect the purchase decision are not different.

## *1.6 Expected Results*

1. Apply the information to deploy the business.
2. The data can be analyzed to bring products that meet the needs of the target market.
3. The results of the research can be used to develop or improve a shop that sells local computer equipment.

## **2. Literature Review**

### **The theory of Decision Making**

#### *1. Problem or Need Recognition*

When consumers are aware of the problem. He may find a solution to that problem or not. If the problem is not very important. Is it possible to fix it? If the problem does not go away. Not reduced or increased again. The problem is that stress becomes the driving force for trying to solve the problem. He will begin to find a solution by searching for information.

#### *2. Search for Information*

When problems arise Consumers need to find a way. Find out more to help you make informed decisions by finding sources from different sources, such as news sources. Or consumer experience, such as friends, relatives, etc.

#### *3. Evaluation of Alternative*

When consumers get the information from step 2, they will evaluate the choices and decide the best way. The methods consumers use to evaluate alternatives may be evaluated. Information about the characteristics of each product and choosing to choose from a variety of brands to brand only one may depend on the belief in the brand, or maybe it depends on the past consumer experience and the circumstances of the decision, as well as the choices that are available. There are concepts to consider in order to help evaluate each alternative for easier decision making.

#### *4. Decision Making*

Typically, each consumer needs information and time to decide on a particular product. Some products require a lot of information. It takes a long time to compare. But some consumer products simply do not require a long decision-making period.

#### *5. Post purchase behavior*

After the purchase, consumers will gain experience. This may be satisfied or not. If satisfied, consumers are aware of the benefits of the product, resulting in a repeat purchase, or may introduce a new customer. But they are not satisfied, they may cancel their purchase later, and may have a negative impact on the customer.

### 3. Research methodology

This study was conducted by survey research using questionnaires as a tool to collect data. Details of the research methodology are as follows.

#### 3.1 Population and sample

The population used in this study was 400 people in Samut Songkhram province.

#### 3.2 Research Instrument

Part 1 Questionnaire about personal factors of people in Samut Songkhram Province. The questionnaire consists of 5 multiple choice questions: gender, age, education level, occupation and income.

Part 2: The questionnaire about the marketing mix that affects the decision to buy or assemble the computer. The nature of the query Gauges (Rating Scale) in the form of Likert questions to each priority level 5 of the 35 items.

Part 3 questionnaire about factors that affect the decision to buy or assemble a computer. Each question is based on the Likert scale. Each question is selected in 5 priority levels, 5 of which are in the Interval Scale. The weight of the assessment is as follows.

Part 4 Additional comments that allow the questionnaire to be commented.

#### 3.3 Construction of the Instrument

In this study researchers have construction of the Instrument or questionnaires used to collect the following information:

1. Study data and academic principles related to research topics from textbooks, papers and related research for use as a guideline for creating questionnaires.
2. Scope of the questionnaire and Instrument or questionnaire based on a conceptual framework that deals with factors influencing purchasing decisions, to meet the objectives, definitions and examples
3. Examine the Instrument with SPSS program with an Alpha Conbach value greater than 0.7.
4. Questionnaires into the draft submitted to the advisor to verify the accuracy. And get more suggestions. The questionnaire was returned to the corrected solution.
5. Enhanced questionnaires to try out by the test sample and the population as a real test (Pre-Test) 30 sets.

#### 3.4 Data Collection

1. Primary data sources Samut Songkhram Province 400 samples
2. Secondary data sources include document research the article, related websites, documentation, interview document and related research that others have studied.

#### 3.5 Research Statistics

Once the data was collected from the questionnaire. All data was coded and processed by computer using statistical processing program. Data analysis was divided into 2 types.

1. Descriptive statistics (Descriptive Statistics) were frequency, percentage, mean and standard deviation. The data was analyzed by 2 parts.
  - 1) Analysis of information on personal factors. By frequency and percentage analysis.
  - 2) Analysis of the expectations of users to the hospital Lt. Using an average and standard deviation.
2. Inferential Statistics include tests (T-Test) and one-way analysis of One-way Anova to test the relationship between the independent variable and dependent variable.

### **4.3 Results Analysis**

#### **Part 1 General information of the respondents**

The majority of respondents were male (210%), 52.5% were aged 16-30 years old (312 persons) or 78%, level Degree 332 people, representing 83.0 per cent, private employees / owner of 229 people accounted for 57.3 percent, total revenue of 20,000 baht per month, more than 104 people, representing 26.0 per cent.

#### **Part 2 Marketing mix that affects the decision to buy or computer assembly of people in Samut Songkhram province**

Most respondents had opinions on Price factor was 4.34 at the highest level, followed by personnel at 4.33 at the highest level. The service process was 4.32 at the highest level. Marketing promotion was 4.24 at the highest level. Product quality was 4.16 at the high level. Physical evidence was 4.16 at a high level. Distribution channels were 4.08 at the high level, respectively.

#### **Part 3 Factors Affecting Buying or Computing Decision of the People in Samut Songkhram Province**

Most respondents had opinions on In decision making before entering service or purchasing, you have to consider the price factor with average 4.36 at the highest level. Or study the channels of various online media sites. Before buying or buying, the average was 4.32 at the highest level. Before deciding whether to buy or buy a product, you have to consider the marketing promotion factor, which is 4.20 on average. Before deciding whether to buy or buy a product, you have to consider the factors of the product, the average is 4.20 at a high level, and in deciding before buying or buying products you have to consider the factors. Personnel average was 4.10 at the high level.

#### **Part 4 Test hypothesis**

##### **Hypothesis 1 Different personal factors affect the decision to buy or assemble computers which are not differentiated by the marketing mix**

1.1 The comparison of personal factors that affect the decision to buy or compose the sex computer, it is found that different gender affect the decision to buy or assemble the computer is not different. At the 0.05 level ( $T = -1.171$ ,  $Sig = .242$ ).

1.2 The comparison of the different individual factors that influence purchasing decisions or incorporated computer age, the age difference affect their decision to purchase or a different computer. At the 0.05 level of significance ( $F = -17.031$ ,  $Sig = .000$  \*\*).

1.3 The comparison of the differences in personal factors that affect decision to buy or assemble computer. Education levels indicate that different levels of education affect the decision to buy or assemble a different computer. The statistical significance was 0.05 ( $F = 3.969$ ,  $Sig = .004 *$ ).

1.4 The comparing the differences in personal factors that affect the decision to buy or compose a career computer, it is found that different occupations affect the decision to buy or assemble a different computer. At the 0.05 level ( $F = 6.512$ ,  $Sig = .000 **$ ).

1.5 The comparison of personal factors that affect the decision to buy or compute income computers, it is found that different revenues affect the decision to buy or assemble a different computer. Significant difference was found at 0.05 ( $F = 22.398$ ,  $Sig = .000 **$ ).

## **Hypothesis 2 Personal factors affect the decision to buy or assemble a computer that does not vary by factors that influence purchase decisions**

2.1 The comparison of personal factors that affect the decision to buy or compose a computer, the different sexes affect the decision to buy or assemble the computer. Significant at 0.05 ( $T = -2.553$ ,  $Sig = .011 *$ ).

2.2 The comparison of personal factors that affect the decision to buy or assemble age computers, it is found that different ages affect the decision to buy or assemble a different computer. At the 0.05 level of significance ( $F = -21.448$ ,  $Sig = .000 **$ )

2.3. The Comparison of the differences in personal factors that affect the decision to purchase or assemble a computer. Education levels indicate that different levels of education affect the decision to buy or assemble a different computer. At the 0.05 level ( $F = -7.538$ ,  $Sig = .000 **$ )

2.4 The comparison of personal factors that affect the decision to buy or assemble the occupational computer, it is found that different occupations affect the decision to buy or assemble computers which are not different. At the .05 level ( $F = .787$ ,  $Sig = .502$ )

2.5. The Comparison of the differences in personal factors that affect the decision to buy or compute the income computer, found that different income has no effect on purchasing decision or computer assembly. The statistical significance was 0.05 ( $F = 1.963$ ,  $Sig = .119$ ).

## **5. Discussion**

The majority of respondents were male 210 persons representing 52.5% were aged 16-30 years old 312 persons or 78 per cent, level Degree 332 people representing 83.0 per cent, private employees / owner of 229 people accounted for 57.3 per cent, total revenue of 20,000 baht per month more than 104 people, representing 26.0 per cent.

Most respondents had opinions on Price factor was 4.34 at the highest level, followed by personnel at 4.33 at the highest level. The service process was 4.32 at the highest level. Marketing promotion was 4.24 at the highest level. Product quality was 4.16 at the high level. Physical evidence was 4.16 at a high level. Distribution channels were 4.08 at the high level, respectively.

Most respondents had opinions on decision making before entering service or purchasing, you have to consider the price factor with average 4.36 at the highest level. Or study the channels of various online media sites. Before buying or buying, the average was 4.32 at the highest level. Before deciding whether to buy or buy a product, you have to consider the marketing promotion factor, which is 4.20 on average. Before deciding whether to buy or buy a product, you have to consider the factors of the product, the average is 4.20 at a high level, and in deciding before buying or buying products you have to consider the factors. Personnel average was 4.10 at the high level.



**Hypothesis 1: personal factors differently influence the buying decision or assemble a computer that does not vary by the marketing mix.**

- 1.1 The Comparison of different personal factors that affect the decision to purchase computers or gender, the gender differences affect purchasing decisions or incorporated computer is not different. Even though the sex is different, the purchase decision is not different, it may be due to the product has a similar look, so it does not affect the buying decision.
- 1.2 The Comparing the differences in personal factors that affect the decision to buy or assemble age computers, it is found that different ages affect the decision to buy or assemble different computers. The decision to buy a product, such as the age of 15-30 years, may decide to compose a computer to play the game.
- 1.3 The Comparison of the differences in personal factors that affect decision to buy or assemble computer. Studies show that different levels of education affect the decision to buy or assemble different computers, indicating that different levels of education result in the purchase or assembly of different computers, such as Graphic design students are required to purchase a computer with fast image processing to work.
- 1.4 The Comparing the differences in personal factors that affect the decision to buy or compose a career computer, it is found that different occupations affect the decision to buy or compute different computers. Purchasing or assembling a different computer, such as a professional shooter, requires a computer that is fast to process the living (Edit a picture)
- 1.5 The comparison of personal factors that affect decision to buy or assemble computer. Revenue shows that different revenues affect the decision to buy or assemble different computers, indicating that revenue affects the decision to buy or assemble computers. There is a grade for the workstation computer for work in the same way that gaming for gaming.

**Hypothesis 2: different personal factors affect the decision to buy or assemble a computer that does not vary by factors that influence purchase decisions**

The Comparison of differences in purchasing decision or computer composition of Samut Songkhram residents showed that the occupation and income were not different except sex, age and education level. The decision to purchase or assemble a computer may be different because of different life styles, gender, age and education level, so different buying decisions.

## **6. Acknowledgements**

We thank all volunteers, and publications support and staff, who wrote and provided helpful comments on previous versions of this document. Some of the references cited in this paper are included for illustrative purposes only.

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**Factors Influencing to Purchase's Decision  
of Eggs from Cage Free System in Bangkok**



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# **Factors Influencing to Purchase's Decision of Eggs from Cage Free System in Bangkok**

by

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## **Abstract**

This research aims to study comparison of marketing factors with price sales channels and market facilitating which affect to purchase decision of consumer to study comparison of external factors such as economy, social, cultural and psychology which affect to purchase decision of consumer to study consumer's behavior which affect to purchase's decision. Procedures use questionnaire to gather information from group of consumer who buys cage free egg in Bangkok via accidental sampling method. Statistics analysis use percentage frequency, standard deviation, frequency testing statistics, one-way ANOVA and Scheffe's Method. The results show that 1) No difference in effects of economic, products, price, sales channels and facility from consumer with .05 significant but there's difference in age and education with 0.5 significant. 2) External factors such as economy, social, cultural and psychology effect with consumer's purchase decision to cage free eggs with .05 significant.

**Keywords:** Purchasing Decision, Marketing

## **1. Introduction**

In present, eggs from industrial system are a crowded system to decrease area and cost which affect to cause a stress in chicken. This leads to cause a free radical in cells and circulatory system. These free radicals would harm a cell membrane and antibody including growth in a hen. Eggs will contain residue which we ate it then it will cumulate in our body it may be a cause of decease with can't cure by antibiotics. So, for safety eggs from cage free system are safer from chemical with no chemical use, pesticide, decease and antibiotics. With cage free system the chickens can live a natural behavior which make them stronger and this lead to less antibiotic for curing. This gives us better egg quality and safety compare with egg from industrial system.

This work has the objectives to study factor of cage free eggs purchase decision and what's the difference between cage free and organic eggs. Attribute and appropriate eggs for every people. Healthy adult can consume 1-2 fresh eggs per day but statistics of eggs consuming in Thailand is 220 eggs/person/year while China is 340 eggs/person/year, Japan 330 eggs/person/year, Malaysia 300 eggs/person/year and United state 290 eggs/person/year in 2015. (Matichon online news ,2560) This caused from misunderstanding and wrong belief of Thai people to eggs consuming. And most of Thai people doesn't care about nutrient, quality of eggs for eating or containing condition. These is the cause of nutrient decreasing when consume eggs for people. Studying about belief and behavior of egg consumer is a way to facilitate the eggs consuming in Thailand. This study aim to knowledge, belief and behavior of Thai consumer. And difference in age of consumer such as children, teenager, adult and older.

### *1.1 Objectives*

1. To compare effects of factors marketing, price, sales channels and market facilitating with cage free eggs purchase's decision of consumer.
2. To compare effects of external factors economy, social, cultural and psychology with cage free eggs purchase's decision of consumer.
3. To study consumer's behavior with cage free eggs purchase's decision.

### *1.2 Hypothesis*

1. Consumer has personal factors to decide to buy a cage free eggs with different marketing factors.
2. Consumer has personal factors to decide to buy a cage free eggs with different external factors.
3. Different behavior causes a different cage free eggs purchase's decision

### *1.3 Expected Benefits*

1. The research told that the marketing and external factor are economy, social, cultural and psychology. This can be used as marketing strategy to adapt with consumer's need.
2. The behavior of cage free eggs consuming can be used to facilitate and product a cage free eggs in the way consumer needed.

## **2. Literature review**

### *2.1 Information about cage free eggs*

#### Description and importance of cage free eggs

Daily consuming egg nowadays is from chickens in narrow cage which they have to stand all the time and can't do an activity in nature of them such as forage lying and hatching. The industrial raising system force the chicken to produce more eggs that lead to more calcium consumer in chicken body this is one of the causes a distorted bone and strange nail's shape of them. The chicken have to live with uncomfortable life that bring the lower quality and amount of eggs. According to this many countries start to interest in chicken's health by choosing to buy eggs from open farm where raise the chickens in their nature.

**Cage free eggs** means open farming system that let the chicken lives in their own nature, the area covered with grass which allow chickens to seek a food in their way these make chickens feel happier that close system. The European standard told that the open farm must have at least 4 m for each chicken to let them walk and seek a food. The chicken is free to go out at any time. The farm must have a space for seven hens per nest. The system has to be along with standard of organic farm with scientific method and real execution. Cage free system allows the chickens live in nature that makes the out of stress, happy and healthy. More healthy less antibiotics uses, it's good to adapt organic system to this because there're an execution and certificate to ensure the consumer. Benefits of eggs from happy hen is condensed egg white, swelled yolk, better tastes, no risk from chemical, antibiotics and high nutrients (King Fresh Farm, 2018).

**Free range system means** the system that allow the chickens to walk and go out of the cage freely, area covered by grass to let them live in nature and can do an activities of its own such as walk around, clean themselves and seek a food. These will make them in a good mood called "happy chick".

### Concept of demography

**Demography** means an analysis of size and structure of population, spreading and changing of population with relation with economic, social and different culture. Population factor may be a cause or result of economic, social and culture phenomena. Hauser and Dancan (1959) described demography as a study of structure and components of spreading and changing of population.

### Concept of consumer behavior

**Consumer behavior** means a personal expression directly to products and services in economic way and including to factors of decisions. (Lars Parner, Ph.D) or means study of consumer helps company and organization can optimize a marketing strategy via understanding of procedure and psychology of decision between two different products. (such as original brand and brand's retail) How consumer receive an effect of their environment. (such as culture, family and media) Consumer's behavior during shopping or purchase's decision, limited knowledge and ability to analyze the information of products. How different between incentive and strategy of consumer to decide a purchase from different brand. The market runner can improve a campaign and strategy of economy for effective access.

Adul Chaturongkakul (2543 : 112) said consumer behavior means buying behavior of last men, personal and family for their own personal consuming. All these last men called marketing for consumer.

Seree Wongmontha (2532 : 32) said consumer behavior is a study of marketing to response with wants and needs of consumer's satisfaction. To please the consumer, the marketing runners have to understand the consumer because if they don't understand consumer's needs they can't response their consumer.

### 3. Research Methodology

#### 3.1 Procedure

This research named “Factors influencing to purchase’s decision of eggs from cage free system in Bangkok” uses questionnaire, group sampling and analysis of answers in quantity and meaning. As shown below.

1. Population and group sampling
2. Tools
3. Progress of tools’ building.
4. Data collecting
5. Data preparation and analysis
6. Statistics method for analysis

#### 3.2 Population and group sampling

Group sampling in this work is consumers in Nonthaburi. Calculation of populaltion uses infinite population with 95% confidence level. (นันทพร เต็งวงษ์, 2557 หน้า 40) so there’s no mistake over 95% from Taro Yamane’s formula (Yamane 1967)

#### 3.3 Method and procedure or random sampling

Group sampling of this work uses convenience sampling by spreading questionnaire in area of Bangkok specific with 400 consumers in Bangkok .

#### 3.4 Tools

Tools of this work uses open questionnaire.

Analyze a reliability of questionnaire by try out the prototype with 40 non-interested samples in this work to calculate a Cronbach’s Alpha Coefficient with confidence value is 0.908. After investigate the questionnaire with confidence value higher than 0.6, use this as a complete questionnaire in further work.

#### 3.5 Data collecting method

1. There’s a train for team to spread and collect a questionnaire for using in this work
2. Spread the questionnaire to 400 cage free eggs’ consumer in Bangkok.

#### 3.6 Data analysis

1. **Descriptive statistics** is a method to determine conclusion and attribute of population by conclude and interpret only group of sample with no use to other group of sample via frequency, percentage, central tendency, mean, measure variation and standard deviation for grouping the information.



**2. Inferential statistics** use to determine the attribute of variant in group sample by collect data from population. Hypothesis testing and conclusion use independent t-test, one-way ANOVA and F-test with 0.5 significant level to analyze the data. If there's a difference will use Sceffe's Method.

#### **4. Conclusion**

1. **Personal factors** are sex, age, status, job, education and income. There's a difference to decision with sex, status, job and income but not with age and education.

2. **Behavior of consumer in Bangkok** found that most of the consumer buy a cage free eggs from super market. The reason is "good service can convince the purchase's decision of consumer". The amount of eggs consuming is 5 eggs per week and the most chosen brand is CP. It can be discussed that behavior of consumer who buys from super market is depend on services they get which according to the research.

3. **Analysis of marketing factor which affect to organic eggs purchase decision of consumer in Bangkok** found that marketing factors affected to cage free eggs purchase's decision. The lower factor is sales channel, price and facility respectively. This is along with research.

4. **External factor of cage free eggs purchase's decision of consumer in Bangkok** found that the effectiveness of factor is social, culture, psychology and economy respectively. After considering found that economic factor is the first factor by considering to income with depend on economical changing, period of liquidity and price changing respectively. The social and cultural factor are self's attention, chemicalless in agriculture campaign, self cooking people and told from other people about goodness and useful of cage free eggs (called classy consumer) respectively. Psychology factors are safety needed and pleasure to be a modern person.

#### **5. Recommendation**

This work collected data from only consumer in Bangkok, in further work should run in other provinces for comparison and adaptation.

#### **6. Acknowledgements**

We thank all volunteers, and publications support and staff, who wrote and provided helpful comments on previous versions of this document. Some of the references cited in this paper are included for illustrative purposes only.

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**Impact of the Quality Customer Relationship Management  
Affecting Delivery Satisfaction of Customers in Nonthaburi**



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## **Abstract**

The world changing to the digital economic society connected by the Internet can effect to the business environment to be change to E-commerce. the new generation behavior loves to shop online and love convenience, this cause the e-commerce market become more bustle in 3 recent years (2557 – 2560). Therefore, the need of delivery service has been grown up too. Even we can shop or purchase in the online platform conveniently and easily, the process of the delivery from the sellers to the customers still require transportation. This research is about the Impact of the quality customer relationship management that effect to the satisfaction of the delivery company's customers in Nonthaburi. It aims to study about the satisfaction of the delivery company's customers in Nonthaburi and the impact of the quality customer relationship management that effect to the satisfaction of the delivery company's customers in Nonthaburi by using surveying research. There are about 400 questionnaires that have been use in this research to collect data. The fundamental statistics to analyze data are percentage, mean, and standard deviation. The research result found that the overall satisfaction of the delivery company' customers based on personal factors was in high level and the overall satisfaction of the delivery company' customers based on the customer relationship management was in high level. The customer relationship management of the delivery company has positive relationship in the same direction significantly with the satisfaction of the delivery company's customers in Nonthaburi in 4 dimensions including customer follow up, customer relationship, communication management, and response to customer needs.

**Keywords:** Service Satisfaction, Customer Relationship Management, Delivery

## **1. Introduction**

Nowadays, technology has been involved in every part of our daily life. It is the era of the communication through online media and the era that the logistic transportation becomes popular. In the past, people who use the delivery service usually are the people who have bulk orders or who want the transport from urban area to far away area in countryside. There is only small number for

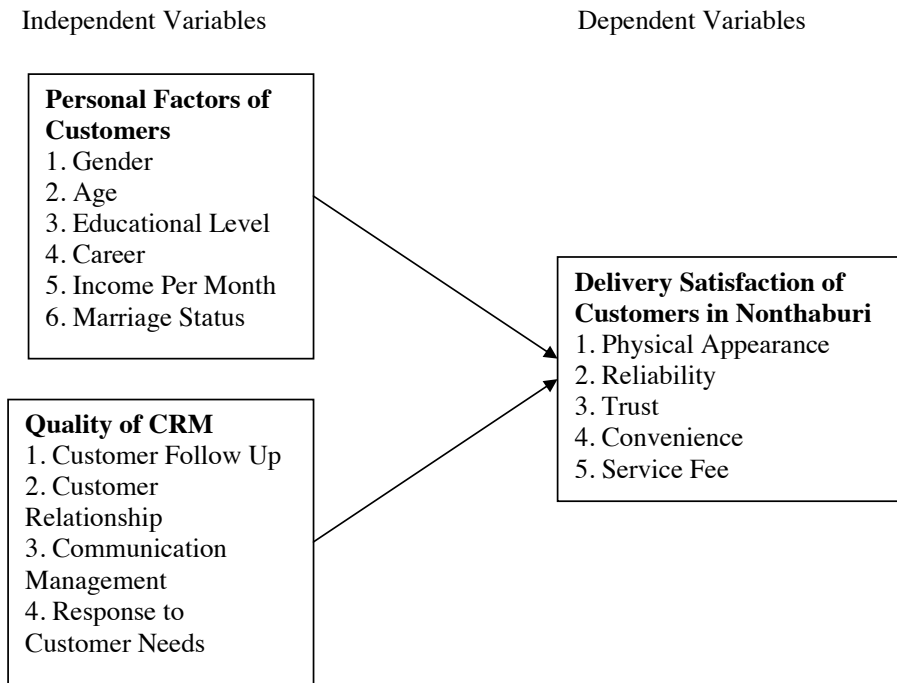
transportation frequency because there is a bulk order. However, from the expansion of the urban area and behavior of the new generation who love online shopping and convenience, the delivery service can response to their needs that has become more and more in present. Even we can shop or purchase in the online platform conveniently and easily, the process of the delivery from the sellers to the customers still require transportation. More than the online seller, the others also need delivery service for their parcels or documents. The delivery service in Thailand has been grown up rapidly from several factors. One of that is the growth of “E-commerce” as the Electronic Transactions Development Agency (Public Organization) or ETDA define that the value of online shopping in 2017 was 2.8 billion baht, and in 2018 will be about 3 billion baht or grow up about 9-10%. The supporting from the changing of offline platform to be online platform, or the retail store/retail more to be online platform, the world changing to the digital economic society connected by the Internet can effect to the business environment to be change to E-commerce. Since the smart phones have been the media for human to reach more social network until it become one our daily life, the new generation behavior loves to shop online and love convenience, this cause the e-commerce market become more bustle in 3 recent years (2557 – 2560) and expended about 11.4 percent per year (Kasikorn Thai researching center, 2560) cause the delivery service has been grown up too. The behavior of urban people and the expansion of urban area, there are about 19 city that will be developed to urban city. This cause the urban people need the convenience the most even how they shopping. They want the delivery within one day or as soon as possible. Hence, the delivery service need to adapt itself and give importance to delivery service system more (Arinchai Weeradutsadeenont, 2560). The delivery service is the service that have the entrepreneurs as much as the sixth place from all entrepreneurs the separated by type of business. The competition in delivery service will be more serious to support E-commerce. Therefore, the delivery companies need to operate with the standard to support their transportation, logistic cost management to be effective and be able response the needs of customers or consumers.

The Customer Relationship Management: CRM is the marketing activity that bring CRM to an organization in order to establish the relationship with customers by using technology and personnel systemically to increase the service level to customers, cause understanding in need of customers, and response the needs of customer in product and service with competitive notion on delivery service that is very serious now. The CRM is an important tool to managed customers to choose service of each delivery company. CRM is not only focus on the customer service, but also the collecting of purchasing behavior and need of customers too. Then use that information to analyze and use them to improve product or service, or even management policy. The CRM development is the changing from customers to be royal customers forever (God of marketing, 2559) From these reason, the researcher aims to study about the impact of the quality customer relationship management that effect to the satisfaction of the delivery company’s customers in Nonthaburi for anyone who interested in or the entrepreneurs in delivery service can use this information form the research to adapt for customer relationship planning to be more efficient and effective in term of marketing and improve the quality of service to be more valued of the delivery system and logistic in Thailand.

### *1.1 Objectives*

1. To study the satisfaction of the delivery company’s customers in Nonthaburi
2. To study the impact of the quality customer relationship management that effect to the satisfaction of the delivery company’s customers in Nonthaburi

## 1.2 Scope of work



## 2. Document and Related works

### *Concepts and theories of Customer Relationship Management*

Customer Relationship Management (CRM) is a marketing activity that integrates electronic business tools and customer sale service, direct marketing, accounting, and customer purchase and support service. It is a marketing strategy used to treat the customer or the target group where the guideline is one by one or a certain group to respond each one of them. The target of CRM might be done continuously on each customer or each distributor with the objective of creating good understanding, inducing satisfaction in the product and service as well as building loyalty toward brand or the organization all the way to its products or services. A long-lasting relationship established between the organization and the target would affect the income in long term. The relationship will be focus on two-way communication activities to develop a win-win situation for both parties.

### *Related Works*

Juriaporn Piniichop (2560) study about the factor that can effect to the satisfaction of the service of the e-commerce delivery service provider in Bangkok. The research result found that the factor that effect to the satisfaction to use the service form e-commerce delivery service provider in Bangkok has 6 factors which are products, distribution channels, marking supports, personnel, physical and presentation, and process. The overall satisfied with the modern service provider more and the factors about fee didn't effect to the satisfaction of the service of the e-commerce delivery

service provider in Bangkok. The entrepreneurs or anyone who is interested in delivery service can apply the research result to improve their service, plan marketing, develop techniques for the most effectiveness, and build e-commerce customer's satisfaction.

Mallika Subongkod (2559) study the customer relationship management of private hospital in Thailand. It found that 1) the customer relationship management of private hospital in Thailand has 4 signification components which are for customer know the value added, for convenience of the customers, for customer specialty, and the communication support for customers. These components of the CRM is the significant part of building the relationship between customers and business 2) the most result of the operation of the private hospital are from 2 main factors which are the external factor or the benefit of business and the market share, and the internal factor which are the innovation support, capital planning, and the satisfaction of the customers 3) the success factors of the CRM of the private hospital in Thailand are included the resource improvement to be the most utilized, the focusing on the differentiation to compete in business, and the potential and capability of the service providers, which is an important part the push the CRM in private hospital in Thailand to be successful.

### **3. Methodology**

#### *3.1 Research method*

In this research, the researcher use the survey research which is Quality and Quantitative Research by using the questionnaire as a tools to collect data from 400 samples which have been specific randomized in order to gather the different population data. The fundamental statistics to analyze data are included percentage, mean, standard deviation: SD to emphasize information in each part.

#### *3.2 Inferential Statistics Analysis*

T-test was used to analyze personal factors and gender. One-Way ANOVA was used to study other personal factors with a given statistical significance level of 0.05. Correlations (Pearson) were used to analyze Customer Relationship Management at 95% confidence level. If level of significance (Sig.) was less than 0.01, this indicated a statistically significance level of 0.01.

### **4. Research Results**

From the personal factors of the interviewee, it found that most of them are female in 20-30 years old with bachelor's degree and they are students/university student who have income between 10,001 – 20,000 baht per month and also single. Most opinions of the samples about the quality of CRM in overall is high level or in average 3.66. The researcher divided the CRM in 4 dimension as follow. For the customer follow up, most samples provide opinion in high level or average 3.45. For the customer relationship, most samples provide opinion in high level or average 3.66. For the communication management, most samples provide opinion in high level or average 3. For the response to customer needs, most samples provide opinion in high level or average 3.70. Most opinion of the sample about the satisfaction of the delivery service for overall is in high level or about average 2.72 in 5 dimensions including the details as follow. For the Physical appearance, most samples provide opinion in high level or average 3.73. For the Reliability, most samples provide opinion in high level or average 3.76. For the Trust, most samples provide opinion in high



level or average 3.65. For the Convenience, most samples provide opinion in high level or average 3.75. And for the Service fee, most samples provide opinion in high level or average 3.72.

**Table 1** The multi-correlation coefficient about CRM and satisfaction of the delivery company's customers in Nonthaburi

Correlations					
CRM	Satisfaction of delivery service				
	Physical appearance	Reliability	Trust	Convenience	Service fee
customer follow up	.450** (.000)	.498** (.000)	.611** (.000)	.497** (.000)	.549** (.000)
customer relationship	.624** (.000)	.668** (.000)	.664** (.000)	.582** (.000)	.518** (.000)
communication management	.609** (.000)	.602** (.000)	.623** (.000)	.576** (.000)	.521** (.000)
response to customer needs	.699** (.000)	.688** (.000)	.662** (.000)	.644** (.000)	.570** (.000)
Overall	.686** (.000)	.717** (.000)	.753** (.000)	.674** (.000)	.638** (.000)

## 5. Discussion

The CRM of the delivery company is related to the satisfaction of the delivery service of the delivery company positively. It found that the CRM of the delivery company has positive relationship in the same direction significantly with the satisfaction of the delivery company's customers in Nonthaburi due to the delivery company's customers pleased with the CRM in the dimension of communication management such as having the contact channel via website or application, having clear procedures how to use the services in high level. It shows that the delivery service's customer pay attention to the service which are touchable. This is consistent with the research of Mallika Subongkod (2559) which state that the supporting of the communication is a way to build a customer relationship continuously due to the communication is the technique that the customers use to seek for product or service and also the channel to search information, express their opinion, or even complain when they fell unpleasant about that products or services. Therefore, the information that can be reachable conveniently and easily is the way to attract customers or consumers to choose a particular product or service. These factors are the important part that cause the customer feel convenience to use the service. The customer follow up has a positive relationship with the satisfaction to user delivery service in dimension of physical appearance and reliability. To illustrate, when the delivery company has a complete customer database, the delivery company will have the document system which is correct and be able to deliver the parcels to the destination correctly. This can effect to the good appearance of the company and consistent with the research of Pondnara Saowaluksakul (2560) which state that when the company has a reliable product follow up system while deliver product, fast service, good manner, helpful, and solving problem service, they can effect to the good appearance of the company.

The costumer relationship has the positive relation with the satisfaction of delivery service in the dimension of building trust to customer. To illustrate, the company that have employees who have a good manner and service mind, support customers both pre and post service, and be punctual,

this can effect to the trust of the customer that they will trust in profession of the employee to delivery their parcels and the company provide service based on standard. This is consistent with the notion of Chittinan Nanthapaiboon (2551) which state that if any organization can provide a good service and provide quality to the needs and expectation of the customers, it will cause the pleasant to the service. The response to customer needs has positive relationship with the satisfaction of the delivery company in dimension of physical appearance and reliability. To illustrate when the employees provide service with the manner and their service mind, they can suggest the service that can solve customer problem, and the company provide sufficient contact channel, it can effect to the reliability of the service. This is consistent with the work of Worachanok Tengwongwattana (2558) which state that the customer can reach the delivery service conveniently, employees who delivery the parcel can provide a quick service or can solve customer problem fast, and also the company has sufficient contacting channels that are convenient and easy, this is consistent with Levitt (1960) which said that the organization will exist if it does not focus on how to sell or how to purchase, but pay attention to the response for customer need. This notion also influenced the business management until now. The core of the CRM notion which does not focus on how to sell or buy product, but focus on how to add more value to customer which is the process of value added for customer and also added value to business too.

## **6. Suggestions**

### *6.1 Suggestion for business*

From the study, it was found that CRM affected the satisfaction of customers using the service of the shipping company, in which the strategy to attract old customers to repeatedly use the service should be done. As the study result shown low satisfaction among customers, the service system should be improved by integrating with technologies such as a complete database system for convenient of the customers, transparent document system, frequent service satisfaction survey, and the evaluation on the service performance of the staffs.

### *6.2 Suggestion for future research*

This research studied on the satisfaction of the delivery company's customers in Nonthaburi. In the next research, the government and private companies should be classified clearly to bring the clearer research result. The questionnaire target should be the group directly use services of the shipping companies to output a clear result such as online traders, while the researcher should also research other elements of CM such as the decision to choose the service or loyalty towards the brand.

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**Marketing Choices Affecting Satisfaction of Choosing Private  
School for Children in Wang Thong Group Company Limited**



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## **Abstract**

The objective of this research is to study factors of the marketing mix that influence parents satisfaction choosing a learning institute for children to affiliated private school in Wang Thong Group Co., Ltd. The participants' group is student parents in affiliated private school in Wang Thong Group Co., Ltd. which are Ban Wang Thong Kindergarten School and Ban Wang Thong Wattana school (Primary Education) with quantitative 210 students. The research tools in this study are designing questionnaire (Questionnaire) about the marketing mix and parent's satisfaction with choosing affiliated private school in Wang Thong Group Co., Ltd. for children. Owing to research purpose, the queries would be check-list and a psychometric scale with 5 rating scale as Likert method (Likert Scale). The researcher tested the validity as Cronbach's Alpha Method and got 0.94 validity data analysis result by frequency, percentage, average and standard deviation. The result of research found that the marketing mix is mostly at high level, which emphasized school teacher and personnel the most, less about working process and they emphasized about location and environment the least. The factor that influences satisfied choosing the learning institute is mostly at high level as well, which emphasized about education management the most, less about schooling lesson management and they emphasized about parent's expense the least.

**Keywords:** Marketing Mix, Satisfaction, Affiliated Private School

## **1. Introduction**

### **1.1 Background and Signification of the Research Problem**

Education has developed dramatically since several factors such as competitive economy and society including working in stable company. What if people in society lack knowledge and skill, they would not be able to compete performance with others. This is reason why that the government sector increasingly supports Thai Education by setting up Student Loan Fund or Kor Yor Sor and Kor Ror Aor which can let students take a loan from government for studying and paying by

instalments back. As mentioned previously, Student Loan Fund can make students having more opportunity to study causing to Thai Education can be physically expanded. Whereas having more opportunity to be educated, scholarship investment also increases dramatically. For example, learning institutes have been establishing as private education continuously.

Currently, parents considerably emphasize to education because education can develop children to have potential in all skills and enlighten the foundation of human living to children as well. Education is significantly supporting a child to be effectively a better adult in the future. Therefore, school consideration should be cogitated properly. Most of parents have various reasons to choose school for children by qualifying consideration which can be reliable for children safe such as qualified personnel, academic achievement, services, hygiene, security, reputation and school quality.

Whereupon, this study concerns with the marketing mix that influence parents satisfaction choosing a learning institute for children which have schooling lesson and school services. Since, parents normally select school for children with different reasons, and it makes parents in each family have satisfaction for selecting the school by attention and desire or they can rely on education management and service system of affiliated private school in Wang Thong Group Co., Ltd. in different ways such as schooling lesson management, itinerary, parents' expense, environment, school management and reputation. There are influenced to reliability and confidence of parents to be satisfied in choosing school for children. As well as, to know different profile of parents such as gender, age, educational background, occupation and income that cause them to decide affiliated school in Wang Thong Group Co., Ltd. or not, and to earn information details research to develop a better lesson schooling and service effectively.

### *1.2 Purpose*

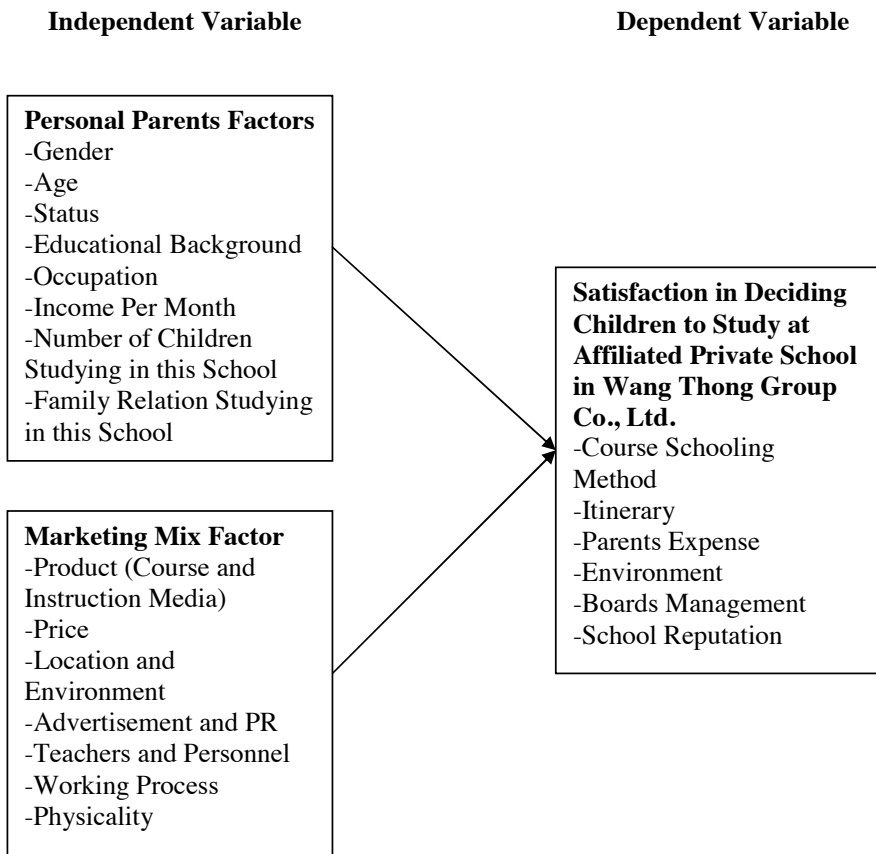
1. Study factors of the marketing mix that influence parent's satisfaction choosing a learning institute for children to affiliated private school in Wang Thong Group Co., Ltd.
2. Study influence of parents' satisfaction factors selecting a learning institute for children to affiliated private school in Wang Thong Group Co., Ltd.

### *1.3 Research Hypothesis*

1. Deferent personal factor can cause to parents' satisfaction in deciding children to study at this affiliated private school in Wang Thong Group Co., Ltd. which separated by gender, age, status, educational background, occupation/income, number of children and family relation who are studying in this school.
2. The marketing mix factor has related with parent's satisfaction in deciding children to study at this affiliated private school in Wang Thong Group Co., Ltd. which separated by product (course and instruction media), price, location & environment, advertisement & PR, teacher & personnel, working process and physicality.



## 1.4 Conceptual Framework



## 2. Literature Review

### 2.1 Theory and Definition

#### Marketing Mix Theory

Kotler (1997, p.92) said that marketing mix is variable or marketing tool which are controllable. Companies frequently collaborate for fulfilling satisfaction and demand of targeted customer. Previously, the marketing mix only has 4 variables (4Ps) which are product, Price, Place and Promotion. Afterwards, there are added 3 variables which are People, Physical Evidence and Process to be related with modernized marketing especially service business. Therefore, marketing mix is mixing marketing as 7Ps.

#### Satisfaction Theory

Direk (2528) mentioned that satisfaction means a positive attitude person to something which is perspective and feeling of people to work in positive way. The happiness of people causes from work operating to getting satisfied. This makes people getting motivated and happy, ambitious

for working, encouragement, mutuality between organization, pride in achievement and all can affect to performance to be advanced and successful with their organization.

## *2.2 Literature Survey*

Kanchana Mukchiew (2558) studied about the factors of parent's decision choosing Chotikan School for children and the result of research found that the marketing mix influenced to parent's decision, and they emphasized about teachers and personnel the most. Selecting school decision is emphasized about teaching the most and age, status, occupation, educational background, relation between children and parents and different number of students do not matter about decision much. However, gender and different income per month are contrast for studying decision which shows that relation between studying decision and factors of the marketing mix have positive relation at average level.

## **3. Research Methodology**

The people group who involved with this research is parents in affiliated private school in Wang Thong Group Co., Ltd. which are Ban Wang Thong Kindergarten School and Ban Wang Thong Wattana School (elementary education) with 210 students.

### *3.1 Instrumentations*

The Instrumentation of students' parents in affiliated private school in Wang Thong Group Co., Ltd. which are Ban Wang Thong Kindergarten School and Ban Wang Thong Wattana School (elementary education) are:

1. Students parent's information questionnaire as check-list pattern
2. Parents' satisfaction to decide the affiliated private school in Wang Thong Group Co., Ltd. evaluation form as 5 level such as the most (5), more (4), average (3), less (2), the least (1) and open-ended question for other advices.

### *3.2 Data Analysis*

The research analyzed data by these followings

1. Validate all completed questionnaire with defining password for analyzing programmatic statistics by specifying significant level at statistical 0.05.
2. Analyze generic data (demography) such as gender, age, status, educational background, occupation, income per month, member of children and relation between student by applying descriptive statistics which analyze from frequency and percentage.
3. Analyze the marketing mix factor that influenced with choosing school decision by frequency, mean, standard deviation.
4. Research hypothesis testing applied T-Test, One-Way ANOVAs and Pearson Product Moment Correlation Coefficient.

## 4. Results Analysis

### Part 1 General information of respondents

The respondents mostly are 78.2% female, 21.9% the oldest age 36-45 years, 62.4% married, 9.10% graduated bachelor's degree, 69.5% self-employed, 39.5% income over 50,001 baht, 46.7% having more than 1 child, 65.7% father, 92.4% mother.

### Part 2 The factors of the marketing mix that influence parents satisfaction choosing a learning institute for children to affiliated private school in Wang Thong Group Co., Ltd.

Most of participants have comment (the highest – the lowest) about the marketing mix influences their satisfaction at high level averaging 3.92 (S.D. = .51) considering in many topics and found that the highest average is 4.12 (S.D. = .94) teachers and personnel the most, 4.06 (S.D. = .61) working process, 3.99 (S.D. = .63) advertisement and PR, 3.98 (S.D. = .65) physicality, 3.97 (S.D. = .56) product (course and instruction media), 3.69 (S.D. =.60) price, and 3.62 (S.D. = .66) location and environment.

### Part 3 Satisfaction analysis for choosing an affiliated private school in Wang Thong Group Co., Ltd.

Most of participants have comment about choosing an affiliated private school in Wang Thong Group Co., Ltd. satisfaction in high level considering from participants emphasize about 4.19 (S.D. = .60) education management the most, schooling lesson 4.02 (S.D. = .67), school reputation 3.97 (S.D. = .61), itinerary 3.90 (S.D. = .64), environment 3.88 (S.D. = .69) and they emphasize about parents' expense the lowest at 3.64 (S.D. = .71).

### Part 4 Research hypothesis testing

**Hypothesis 1 the different factors of the marketing mix that influence parents satisfaction choosing a learning institute for children to affiliated private school in Wang Thong Group Co., Ltd. separated by gender, age, status, educational background, occupation, income per month, number of children in this school and relation between family.**

1. According to choosing school satisfaction comparison, it can be classified by parents' gender and found that there are different opinions about education management which is significantly at 0.05 ( $t = -2.114$ , Sig. = .037) while considering that all parts are not different at 0.05 statistical level.
2. According to choosing school satisfaction comparison, it can be classified by parents' age and found that the result is totally different environment at 0.05 ( $f = 3.094$ , Sig = .028) while other parts is not at 0.05 statistical.
3. According to choosing school satisfaction comparison, it can be classified by parents' status and found those students' parents having different status, but it is significantly non-statistical at 0.05.
4. According to choosing school satisfaction comparison, it can be classified by parents' educational background which have shown opinion in different ways about schooling lesson, environment, education management, reputation and overall of school and the result has been different at 0.05 ( $f = 3.910$ , Sig = .004) except itinerary and parents' expense.

5. According to choosing school satisfaction comparison, it can be classified by parents' occupation and found that different occupation of parents can be significantly non-statistical at 0.05.
6. According to choosing school satisfaction comparison, it can be classified by parents' income per month and found that different income, parents' expense, environment, education management, reputation and overall are having significantly statistical at 0.05 ( $f = 5.237$ ,  $Sig = .002$ ) except schooling lesson.
7. According to choosing school satisfaction comparison, it can be classified by parents' number of children in this school found that having different statistical about schooling lesson and environment at 0.05 ( $f = 2.991$ ,  $Sig = .052$ ).
8. According to choosing school satisfaction comparison, it can be classified by parents' relation between students and parents found that different relation between students and parents is indifferent and statistical at 0.05.

**Hypothesis 2 the different factors of the marketing mix that influence parents satisfaction choosing a learning institute for children to affiliated private school in Wang Thong Group Co., Ltd. separated by product (course and instruction media), price, location and environment, advertisement and PR, teachers and personnel, working process and physicality.**

Hypothesis 2 found that the factors of the marketing mix can be related significantly in the same way with parent's satisfied decision about affiliated private schools in Wang Thong Group Co., Ltd.

## **5. Conclusion**

1. As per the research result, the factor of the marketing-mix that influence parents satisfaction choosing a learning institute for children to affiliated private school in Wang Thong Group Co., Ltd. is high level in overall considering with other parts and the highest average is school teacher and personnel, the secondary is working process, advertisement and PR having opinion in high level, physicality, product (course and instruction media), price, location and environment consecutively. Owing to students' parents in an affiliated private school in Wang Thong Group Co., Ltd. got demand response from teachers and internal personnel in school where also can give knowledge, reliability, and support students quality properly.

2. As per the research result, the factor of the marketing-mix that influence parents satisfaction choosing a learning institute for children to affiliated private school in Wang Thong Group Co., Ltd. in overall is considerably at high level. The highest average is education management, the secondary is schooling lesson, and school reputation is having a lot of opinions, itinerary, environment and parents' expense consecutively. These show that the affiliated private school in Wang Thong Group Co., Ltd. management is well-managed that emphasize for increasing efficiency in schooling lesson to students and parents as well.

3. According to choosing school satisfaction comparison, it can be classified by parents' gender and found that different parents' gender satisfying to decide affiliated private school in for Wang Thong Group Co., Ltd. children and choose from school management at 0.05 statistical only 1 part because most of parents might be satisfied to service of school management or human relation management.

4. According to choosing school satisfaction comparison, it can be classified by parents' age and found that different parents' age is satisfied to choose an affiliated private school in Wang Thong Group Co., Ltd. from only environment part statistical at 0.05 only 1 part. Due to the fact that the different age parents mostly are satisfied in environment differently such as convenience, hygiene, security, bright light and beautiful scenic atmosphere through balcony effecting to learning and developing learners.

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**Core Competencies of Chef in Commercial Cookery Management**

**RCGR<sup>2nd</sup>  
2018**

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# Core Competencies of Chef in Commercial Cookery Management

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## Abstract

In this study, the researcher would like to present about Core Competencies of Chef in Commercial Cookery Management. The food business is important for the human living because the food is one of four requisites. The commercial cookery is one of food business systems which needs the kitchen maids who are efficient and have the professional skills. The people who work as the chef play the important role for the restaurant business and for the commercial cookery because they are the core producers in the food manufacturing. In general, most people understand that the chef are the cook in the kitchens. In fact, the principal duty of the chef is the “kitchen management” more than the cooking. The principal duties of the chef are as follows: planning and management to prepare and cook enough food for the customer, creating the new menu for their business, preparing ingredients and cooking as their business conditions, demonstrating the cooking techniques so that the kitchen maids can understand their manufacturing steps, recommending the cooking steps, controlling the food quality and the cost of ingredients in the steps of preparing and of food decoration, estimating the food quantities which have to be prepared and purchasing any equipment, discussing about the preparation and the cooking with managers, nutritionists, and all kitchen maids, choosing the kitchen maids for doing the assessment and calculating their wages, and verifying the sanitation and keeping the kitchens clean. All duties as above-mentioned are the important things to help the production system of food business to succeed as the targets and policies of that business.

**Keywords:** Competencies, Chef, Commercial Cookery, Food Business Management

## 1. Introduction

The chef is the individual resource which is like the valuable asset of food business because this is a strategy which can make the competitive advantage for the organizations. That’s why every organization tries to find strategies or tools for using in the human resources management, such as the talent Management, the skill based human resources management, the performance management, and the competency-based human resources management. According to the above-mentioned tools, the researcher can say that the competency-based human resources management is the tool which is paid attention and admired the most by administrators and human resources directors because the competency is the fundamental tool of the human resources management in other sides like the skill based human resources management, the performance management, and the career path. The competency application in the resource management of food business can help the organizations to choose qualified and efficient people as their objectives. Due to many changes in the business field, many organizations have to review and consider their competency so that they will be able to keep up with the strongly increasing business competency. If the organizations want to have the competitive advantage and to deal with many changes in the business field, they have to develop the

competency of their personnel at first because the personnel is the important factor to increase the capacity of organizations to compete effectively with their competitors. Besides, it can make the power for the organizations so that they will be able to persist and struggle with many changes in the business field and the marketing competency.

## 2. Background and Meaning of Competency

The starting point of the approach about the competency is the academic article presentation in 1960 of David C. McClelland, the psychologist of Harvard University. It presents about the relation between the excellent performance of the personnel and the competency skill level. He thinks that the IQ evaluations and the personality test cannot assess the personnel's ability or aptitude because the test results cannot reflect the real ability.

In 1982, "The Competent Manager: A Model of Effective Performance", this book was written by Richard Boyatzis. The word "Competencies" was defined that it is the work skills or the ability to work efficiently.

In 1994, "Competing for The Future", this book was written by Gary Hamel and C.K. Prahalad. They presented the important approach that the "core competencies" is the essential factor of working. For choosing qualified personnel who can efficiently work for organizations, they have to be evaluated which level their basic knowledge and their working ability are.

Scott B. Parry defined that the competency is the relation of knowledge, skills, and attributes which have the influence on the working in any positions. These competences can be evaluated and can be strengthened by the training and development (Sukanya Ratsameethammachote 2004:48)

McClelland said that the competency is the internal personality of individuals. It can force the ones to work effectively or along the regulations.

Arnont Sakworawit (2547: 61) defined that the competency is the attributes and other qualifications of each person which are necessary and agreeable for the organizations. These attributes are the knowledge, the skills, and the abilities while the other qualifications are the values, the ethics, the personality, and the physical performances, etc. By these elements, the researcher can tell what excellent performances people who will succeed in working should have, or what are the causes of the working failure.

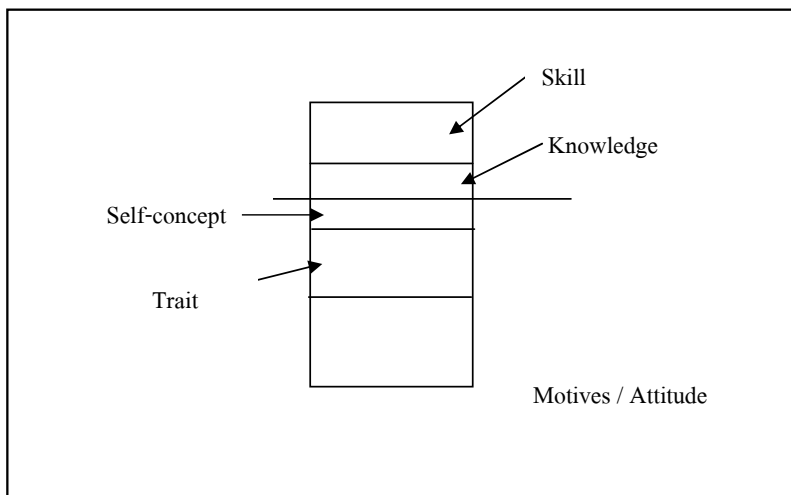
*As mention previously, it can be concluded that the competency is the knowledge, the skills, and the necessary qualifications of human resources. They can help people to succeed in their working and to have the work accepted by the business standards because people will further understand the scopes and kinds of their work, have the working morality and ethics, and have more obvious work targets which accord with the business administration frameworks.*

### 3. The Components of Competencies

According to McClelland's approaches, the components of competencies are as follows:

1. Knowledge: It is the substantial for working, especially the specialized knowledge, such as the engine knowledge.
2. Skills: They are the efficient ability to carry out the tasks, such as the computer skills, the teaching skills, etc. These skills come from the basic knowledge and the proficient operation.
3. Self-concept: It is the attitudes, the values, and the opinions about their own appearances or characters like the confidence.
4. Traits: They are used for describing about a person's characteristics, such as the reliability or the leadership.
5. Motives/Attitude: They are the motivation or the internal force which make people to head for their targets.

All above-mentioned components have the relation with one another. Their relation can be explained as the figure below.



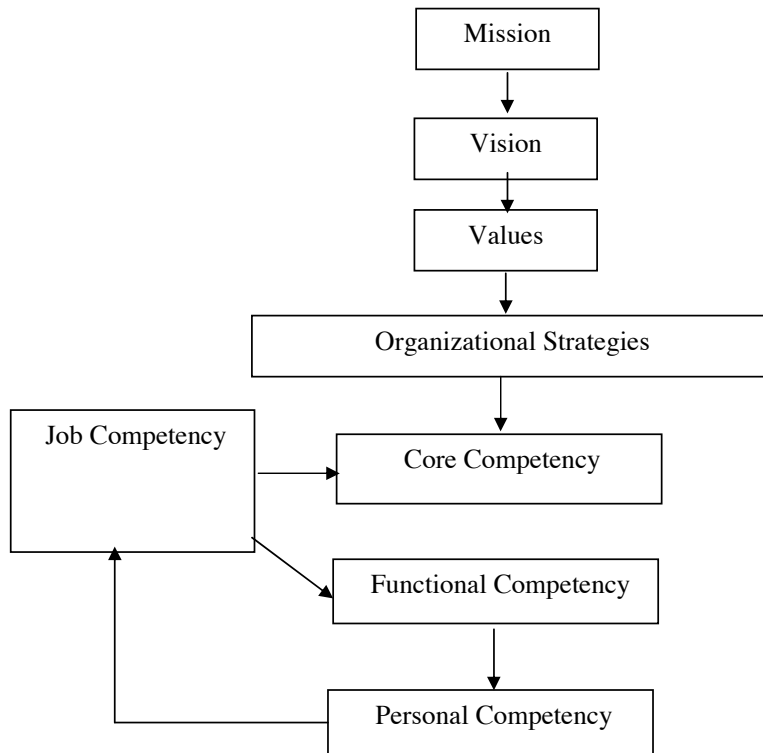
**Figure 1** Components of Competencies Relationship

The researcher can find that both skills and knowledge are on the top. It means that they can be easily developed until they are in the professional level from the study, the experiences, and the training.

#### 3.1 Identifying Competencies

The competency identification or the competency model formation are as follows: (Arnont Sakworawit 2547 : 62, Sukanya Srithammachote 2004 : 50-51; 58-59)

The visions, the missions, and the values of organizations are used as the methods of competency valuation as the figure.



**Figure 2** Identifying Competencies

This figure shows the continuous consistency of competency which makes the smooth work and administration. First, the visions, the missions, or the values, and the targets are used for the strategy formation of the organizations. Then, the researcher will consider what the essential competencies are for attaining the targets of organizations, such as the knowledge, the skills, and the performance in which fields. Therefore, the chef should have the following competencies:

1. Attention in details

The cooking is as the science, so the chef should be accurate in the ingredient measurement. The chef has to be accurate in the ingredient purchase also. That's why the chef have to pay attention in every step.

2. Carefulness in business

The chef has to be a good businessman also. They have to find the new cooking methods for creating the delicious food. They have to work efficiently and also control the raw material cost so that the business will have more profit.

3. Cleanliness

The chef has to know the food sanitation methods. The food sanitation is the important thing for restaurants because it can impact the food quality. If any restaurants have the bad condition, they may be closed.

4. Creativity

It is necessary for working in the food industry. The chef have to gather new lists of food in the menu and have to always improve the recipes. So, the creativity and the imagination can make the new innovation of cooking, and customers will return to the restaurants again.

### 5. Proficiency in Cooking

This is the important thing of the chef because they must have both the ability and the technical knowledge in cooking. The technical knowledge means many skills including the skill of using the kitchen utensils and of the taste. The chef must be able to cook accurately and effectively. They must have the skill of the taste and of the decision about balancing of the seasoning so that each type of food will have the suitable taste.

### 6. Making a Decision Quickly

The chef should decide quickly and effectively. In the kitchens, there are many dangerous utensils and equipment, so the chef have to make a decision in a short time when they have to do many things at the same time.

### 7. Making Inspiration

The chef should stimulate the working of kitchen maids so that they will be able to work quickly and efficiently.

### 8. Working in many roles

While the chef are in the kitchens, they have to do many things in the same time. They may solve the problems of kitchen maids while cooking. The chef have to do all jobs efficiently in the same time.

### 9. Organizational Structure Management

There are many things in the kitchens which the chef have to arrange. They often do various jobs in the same time. They have to arrange and systemize the kitchen so that there will be the suitable working condition.

### 10. Teamwork Skill

The chef are a part of team and have to work smoothly and effectively with other people, not only the kitchen maids but also workers in other departments and the executives.

## 3.2 Core Competencies of Chef in Commercial Kitchen

### 1) Menu Planning

The chefs typically succeed because of their creative talents. Restaurants rely on distinct menu creations to differentiate themselves from other restaurants with similar food ingredients. In planning menus, head chefs not only come up with new recipes, but they must also create seasonal menus, combine foods into meal offerings and help in setting prices that provide good taste nice presentation and good profit opportunities for the business.

### 2) Kitchen Maintenance

The kitchen is the chef's domain and taking care around of the kitchen and equipment are common duties. Proper cleaning and sanitation is required in kitchens to ensure the restaurant meets OSHA requirements upon inspection. The head chef typically arranges the kitchen, sets cleaning procedures and trains kitchen staff on properly following procedures commercial kitchen management.

### 3) Inventory Management

A chef is also responsible for monitoring supply inventories and ordering when necessary. Restaurants or commercial kitchen suffer when the kitchen can't provide the items offered on the menu because of low inventory. Along with ordering necessary ingredients for food, the head chef also orders cooking supplies and other materials used in preparing food and maintaining all the ingredients in the kitchen.

### 4) Staff Supervision

The head chef is also the kitchen manager. They look after oversees the work of other cooks who help prepare the food. Hiring and firing kitchen staff, training new employees and motivating staff to prepare food effectively and efficiently are common requirements in this role. A

kitchen is normally a fast-paced environment and a chef must stay on top of the entire food preparation operation.

#### 5) Customer Interaction

The importance of customer interaction in a chef's responsibility varies greatly. The chef needs to watch for or listen for customer feedback on the table dining experience, menu and food. In fancy restaurants where the chef is central to the restaurants' reputation, the head chef may spend time out on the restaurant floor conversing directly with patrons.

## 4. Conclusion

The chef should have the following abilities. They have to plan and create the new menu for restaurants because they must give priority to most of their customers while paying attention to the sanitation and the security of the kitchens. They also should check kitchen maids' usability for avoiding the unreasonable waste, look after the kitchens so that they will be clean and hygienic and that they can cook the reputable and high-class food. Another thing which is the chef's responsibility is that the training for the kitchen maids. During the period of human resources lack, the chef must be a good teacher and interested in the teaching as the defined business standard. Qualifications and requirements for a chef management may include prior kitchen experience as a chef or line cook, managing kitchen staff and budgeting and purchasing. The job may require a culinary degree or associate's degree and certification in safety procedures. Core Competencies chef may need to possess intangible qualifications such as leadership skills, exceptional and creative culinary skills, ability to work in a high-pressure environment, ability to multi-task and expedite a kitchen line, ability to balance budget and save on soft costs such as scheduling and product waste. The competency valuation plays the important role for the food business and the commercial cooking because it makes them to be more systematic and to have more success.

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**Factors Affecting the Decision to Buy a Condominium**



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# Factors Affecting the Decision to Buy a Condominium

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## Abstract

This study aimed to 1) studies the behaviors of the decision makers to buy a condominium. 2) study the marketing mix factors affecting the decision to buy a condominium, and 3) study the processes that make customers decide to buy a condominium. The population in this study was 400 people living in Ramindra. The questionnaire was used as a tool to collect data from 400 people. Statistics were used to analyze the frequency, percentage, mean, standard deviation, and one-way analysis of variance. The results of the study revealed that the factors affecting the purchasing decision of the condominium in Ramindra area were summarized as follows: The general condition of the respondents: The respondents were females more than males or 246 female (61.25%). The age was between 20-29 years old (42.37%). 274 respondents were single (68.55%). Average income was 20,001-30,000 Baht, 181 people (45.3%). 211 respondents were private company officers (52.8%). In terms of decision behavior, it was found that 222 respondents want a condominium with studio rooms (55%). 267 respondents wanted 22-35 square meter. 220 respondents had the average budget of 900,000-1.5 millions Baht for buying condominium (50.5%). 115 respondents had a purchase decision period after one month (28.8%). In terms of the decision makers to buy condominium, 272 respondents decided by them (68%), and 83 respondents had their spouses as the decision makers (20.8%). The results of analysis of population influenced on purchasing decision in Ramindra area was at a high level ( $F = 4.22$ ,  $SD = 0.32$ ), and when considering all aspects, they can be sorted in ascending order as price, promotion, location, products. From the analysis of the influence of different marketing mixes and the influence of different demographic variables, they affected the decision making process of buying condominium. Moreover, One-way analysis of variance was found to be significantly different at significant level of 0.05.

**Keywords:** Behavior, Decision Making, Condominium

## 1. Introduction

The word "condominium" has started to become popular among Thai people over the past decade. The idea which was rarely accepted in the first has become a new imagery for living apart from the house. This is because the concept of people is changing according to the economic situation in each period, from the popularity of those with high income at first to the popularity of low-income people, causing more condo projects, respectively. Although many condominiums are built, they are considered a new thing in Thailand. The choice of condo will vary according to the purpose of each person. Some require a living space near a workplace, some want a home at a price they can afford, and more than that, everyone needs a place like home.

"Condominium" is an English term. The legal term "condominium" refers to "a building where a person can separate his or her ownership. Each part consists of Ownership of personal property and joint ownership in common property" This can be translated in Thai as the owner or the owner of condominium who shares ownership of communal property such as a walkway, elevator, parking or swimming pool in the condominium. These ownership have evidence of holding called "Act of condominium", which is similar to a land deed and can be used as in the same purpose of the land deed.

Overall, the launch of new condominiums in 2016 was down 4% from the previous year as entrepreneurs focused on launching projects worth more than 3 million baht. Plus, in the fourth quarter, the project launch was postponed to 2017, in line with the current situation and in line with market constraints with buying power less than 3 million baht, reflecting the average sales of the project with the price of more than 3 million baht, accounted for 56%, while the price of project with the price below 3 million baht had the average sales of only 43%.

## 2. Literature Review

### 2.1 Consumer Behavior Theory

#### Consumer Behavior Analysis

Buying and consuming behavior is concerned with the advertising of goods and services, whether individuals, groups, or organizations, in order to understand the nature, need and behavior of purchase, consumption, choice of service, concept, or experience to make consumers happy (Panisalan Chanon, 2005), or the analysis of consumer behavior based on the study of consumer behavior, purchasing decision, buying and using of goods and services of consumers in order to inform marketers about the satisfaction and demand of consumers.

7 questions (6Ws 1H) which will help in analyzing consumer behavior to find 7 answers (7Os) ( Kamolrat Satyapimol, 2009; Naruemol Adirekhotikul, 2005) (Pratya Pitarungsee, 2011) are as follows:

1. Who is in the target market? This is a question that needs to know the target market or occupants. The target groups are (1) demography (2) geography (3) psychology or psychoanalysis (4) behavioral marketing strategy (4Ps) includes of strategies about product, price, place and promotion, to meet satisfaction of target audience. (Pratya Piyarungsee, 2011)

2. What does the consumer buy? It's a question to know what consumers want to buy (Objects). What consumers want is the product component, and the competitive differentiation with product strategies of (1) Main products (2) Product look (3) Merger products (4) Expected products (5) Product potential and (6) Competitive Differentiation (Pratya Piyarungsee, 2011) (Thawanwarat Inthananchai, 2009).

3. Why does the consumer buy? This is a question that needs to know the objectives of the purchase by studying the factors affecting the decision to buy : (1) psychological factors, (2) social and cultural factors, and (3) personal factors (Thawanwarat Inthananchai, 2009) because consumers buy products to meet their physical and psychological needs, so factors that influence the buying behavior must be studied (Pratya Piyarungsee, 2011).

4. Who participates in the buying? This is a question that needs to be addressed about the role that organizations play in the management decision making process with decision making components as follows: (1) the initiator (2) the influential person (3) the decision maker and (4) the user (Pratya Piyarunsee, 2011) (Thawanwarat Inthananchai, 2009)

5. When does the consumer buy? It is a question that needs to know the buying opportunities (occasions) of consumers, such as during any season, any month, as well as special occasions or festivals. (Thawanwarat Inthananchai, 2009)

6. Where does the consumer buy? It is a question to know the channels or outlets that consumers purchase such as department stores, supermarkets, including grocery stores, etc. (Thawanwarat Inthananchai, 2009)

7. How does the consumer buy? It is a question that needs to know the process or decision making process (operation), which has components as follows (1) perception of the problem (2) search of information (3) selection of alternatives (4) decision of purchase (5) Feeling after the purchase (Thawanwarat Inthananchai, 2009)

## *2.2 Evaluation of Alternative*

When consumers get the information from the 2<sup>nd</sup> process, they will evaluate the choices and decide the best way. The way in which consumers use alternative evaluations may be assessed by comparing information about the characteristics of each product and the choice to choose from a variety of brands to one brand. It may depend on the consumer's past experience and the circumstances of the decision, as well as the options available. The concept may be based on the belief in the brand to evaluate each option to make the decision easier as follows.

3.1 Attributes and benefits of the product. It is a consideration of what the attribute and benefits are and what the product is capable of doing or how it is capable. Each consumer looks at the product as a whole, and they will look at the differences in how these characteristics relate to themselves. Moreover, they are most interested in the characteristics that are relevant to his needs.

3.2 Degree of Importance is the consideration of the importance of attribute Importance of a product rather than the salient attributes that we see. Consumers value different aspects of the product in accordance with their needs.

3.3 Brand Beliefs are the beliefs of a brand or product image that consumers had seen, recognized by past experience. Consumers will build a branding belief about a particular brand. Brand beliefs influence consumer choice assessment.

3.4 Utility Function is a measure of how satisfied each product is. Consumers have the attitude to choose the brand, and they will determine the product features that they need. Consumers will compare the attributes of the desired product with the brand attributes.

3.5 Evaluation Procedure: This is another way to bring in many decision factors, such as satisfaction, brand trust, product attributes, and compare the scores and find out which ones get the most rating before buying.

## Decision Making

Typically, each consumer needs information and time to decide on a particular product. Some products require a lot of information and require a long time to compare, but some consumer products simply do not require a long decision-making period.

## Post purchase Behavior

After the purchase, the consumer will gain experience in the consumption, which may be satisfied or not satisfied. If satisfied, consumers are aware of the benefits of the product, resulting in a repeat purchase, or may introduce a new customer. If they are not satisfied, they may cancel their purchase later, and may have a negative impact to selling.

Based on the theory, decision making refers to the process of choosing to do one of the alternatives. The process used to select products and services that meet the needs of the consumer is always relevant to 5 processes of decision making, consisting of Problem or Need Recognition, Search for Information, Evaluation of Alternative, Decision Making, Post purchase Behavior.

### *2.3 Decision Making Process*

Decision Process. Although consumers are different, and have different needs, but they have similar decision making styles. The purchase decision process is divided into 5 processes.

## Problem or Need Recognition

The problem arises when a person feels the difference between an ideal condition, a condition in which he feels good about himself, and a condition that is desirable to the reality of things. This leads to the need to fill the gap between the ideal and the reality. The problem of each person has different causes; they may arise from the following causes;

1.1 Things to use are gone: When the original item used to solve the problem is running out, there is a new demand for the missing items. Consumers need to find something new to replace.

1.2 The effect of past problems leads to new problems: as the use of one product in the past can cause problems such as when the belts are out of order but can not find the same one, so the lower standard gear may be replaced, resulting in the car noise, and need a spray to spray the belt to reduce friction.

1.3 Personal change, growth of the person, maturity and qualifications, or even negative changes such as illness, physical changes, growth, or even mental conditions that cause change and new demands.

1.4 Changes in family circumstances: When family circumstances change, such as marriages, childbirths, there is a need for goods or services.

1.5 Changes in financial status: Changes in financial status either positive or negative will result in a change in the way of living.

1.6 Results from reference group changing: Individuals will have reference groups at different ages, lifecycles, and different social groups. The reference group is therefore influencing consumer behavior and decision making.

1.7 Promoting Marketing Effectiveness: When promoting marketing, whether it is advertising, public relations, sales promotion, employee sales or effective direct marketing, it can encourage consumers to be aware of the problem, and the demand is up.

When consumers are aware of the problem, they may find a solution to the problem or do nothing if it is not very important. However, if the problem does not go away, not reduced or increased again. The stress of having problems will become the driving force for trying to solve it, and they will begin to find a solution by searching for information.

### 3. Conclusion

The study on factors influencing the decision to buy a condominium in Ramindra can be summarized as follows. Data were collected from 400 people in the Ramintra area, 400 questionnaires were distributed and 400 copies were returned, accounted for 100%. The statistics were analyzed by percentage and descriptive analysis. The results of the study revealed that, in terms of general condition, 246 respondents were female (61.25%) and 154 were male (38.5%). Age of most respondents ranged from 20 to 29 years (42.37%), followed by 20-30 years (32.77%). 274 respondents were single (68.55%), 109 respondents had been married (27.3%), 17 respondents had been divorced (4.3%). It was found that most respondents had average income of 20,001-30,000 Baht (181 respondents, 45.3%), followed by the income of 30,001-40,000 baht (150 respondents, 37.5%). 211 respondents were privater company officer (52.8%), and 99 respondents were business owners (24.8%).

In terms of decision behavior, it was found that 222 respondents want a condominium with studio rooms (55%). 267 respondents wanted 22-35 square meter. 220 respondents had the average budget of 900,000-1.5 millions Baht for buying condominium (50.5%). 115 respondents had a purchase decision period after one month (28.8%). In terms of the decision makers to buy condominium, 272 respondents decided by themselves (68%), and 83 respondents had their spouses as the decision makers (20.8%).

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**Product Reviews in Social-Network that Influence Buying Decision of Customer in King Mongkut's University of Technology North Bangkok**



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# **Product Reviews in Social-Network that Influence Buying Decision of Customer in King Mongkut's University of Technology North Bangkok**

by

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## **Abstract**

The purpose of this study was to understand the product reviews that can influence buying decisions of a customer in King Mongkut's University Of Technology North Bangkok. The objections of this research are to: 1) find out a difference of social-network such as Facebook Twitter Instagram and Youtube influencing the buying decision of customer in King Mongkut's University Of Technology North Bangkok, 2) examine difference type of product influencing buying decision of customer in King Mongkut's University Of Technology North Bangkok, and 3) examine the Reliability of reviewer, Image of reviewer influencing the buying decision of customer in King Mongkut's University Of Technology North Bangkok. This research study used a survey questionnaire collected from the sample of 100 peoples 50 for man and 50 for a woman in King Mongkut's University Of Technology North Bangkok. Data was analyzed into mean, percentage and result of each question will show in a pie chart. The result of this study shows that the most format of Product reviews in social-network that influence buying decision of customer in King Mongkut's University Of Technology North Bangkok is Facebook and the least influencing is Twitter. The most type of product that was reviewed in social-network that influence buying decision of customer in King Mongkut's University Of Technology North Bangkok is skin case and the least is food.

**Keywords:** Buying Decision, Social Network, Product Reviews

## **1. Introduction**

In the globalization world, fifty percent of peoples in the world can connect to the internet especially social-network people can see much contents and also the product reviews on the social network. Many marketers are now doing online marketing to access people as know as influencer marketing using beauty-blogger net idol or other online influencers to reviews or present their product through social-network. The report from Global Digital shows the Facebook is a number one social-media in the world and Bangkok is number one using Facebook of the world. In Thailand, the statistic shows that Thai people using internet around ten hours per day Facebook, Youtube, Line are top three social media in Thailand and one of Thai platform that on the top list is Pantip. People in this century likely to see the real users of products help them made a decision when they need to buy something and many times they buy a product because of their idol or products reviewer.

The product reviews not only give benefit to the customer, but it also helps sellers know how people think about their product then they can improve or engage to show responsibility when a problem happened with their customer. The product reviews also have an effect on sales because of a review from customer much more believable than advertising from a seller and when customer show

negative reviews it also gives an opportunity to sellers to show responsibility to their customer. Most of the customer are more thinking when they have to make a buying decision, we can know this from many statistics that showed the number of reviewer and online review content are now increasing rapidly. If you ask children what you want to do when you grow up, many of them would tell you they want to be a Youtuber because they get a lot of money from product review. For many reasons, we can guest that product review become more important for people life.

They are two main types of product reviews on social-network, sponsor reviews are the seller hires a reviewer to use a product and create content to a customer the others one is customer reviews this type of review came from a customer that buys and use a product. Customer reviews are more believable than sooner reviews because they come from customer's opinion they will give the real opinion about a product, it can be positive and negative reviews. The most reliability of reviewer in social-networks that influence buying decision of customer in King Mongkut's University Of Technology North Bangkok is a number of the follower and the least are gender and education.

## 2. Literature Review

The Merriam-Webster dictionary defines social media as “form of electronic communication (as websites for social networking and blogging) through which users create online communities to share information, ideas, personal messages, and other content (as videos).” It also defines networking as “the exchange of information or services among individuals, groups, or institutions; especially: the cultivation of productive relationships for employment or business.” Social networks have evolved over the years to the modern-day variety which uses digital media.

Leslie Klieb (2018) the role of social media in consumers' decision-making process for complex purchases-those characterised by significant brand differences, high consumer involvement and risk, and which are expensive and infrequent. The model uses the information search, alternative evaluation, and purchase decision stages from the classical EBM model. A quantitative survey investigates up to what degree experiences are altered by the use of social media. Results show that social media usage influences consumer satisfaction in the stages of information search and alternative evaluation, with satisfaction getting amplified as the consumer moves along the process towards the final purchase decision and post-purchase evaluation. The research was done among internet-savvy consumers in South-East Asia, and only considered purchases that were actually made by consumers, not including searches that were abandoned.

Funde Yogesh, Mehta Yesha (2014) Social media has revolutionalised the ways of communication and sharing information and interests. The rapid growth of social media and social networking sites, especially, in developing country like India is providing marketer a new avenue to contact customers. Though, organizations are increasing their spend in social media, it is difficult to measure a real return on investment. This paper attempts to assess the impact of usage of social media on purchase decision process. The paper examines the usage pattern and its influences the five stages of purchase process. The study finds that the social media is most widely used in information source for perceived convenience, effectiveness and perceived credibility. Also, the social media reviews and opinions affect the purchase decision process; however, tendency of share their experiences post purchase is surprisingly low.

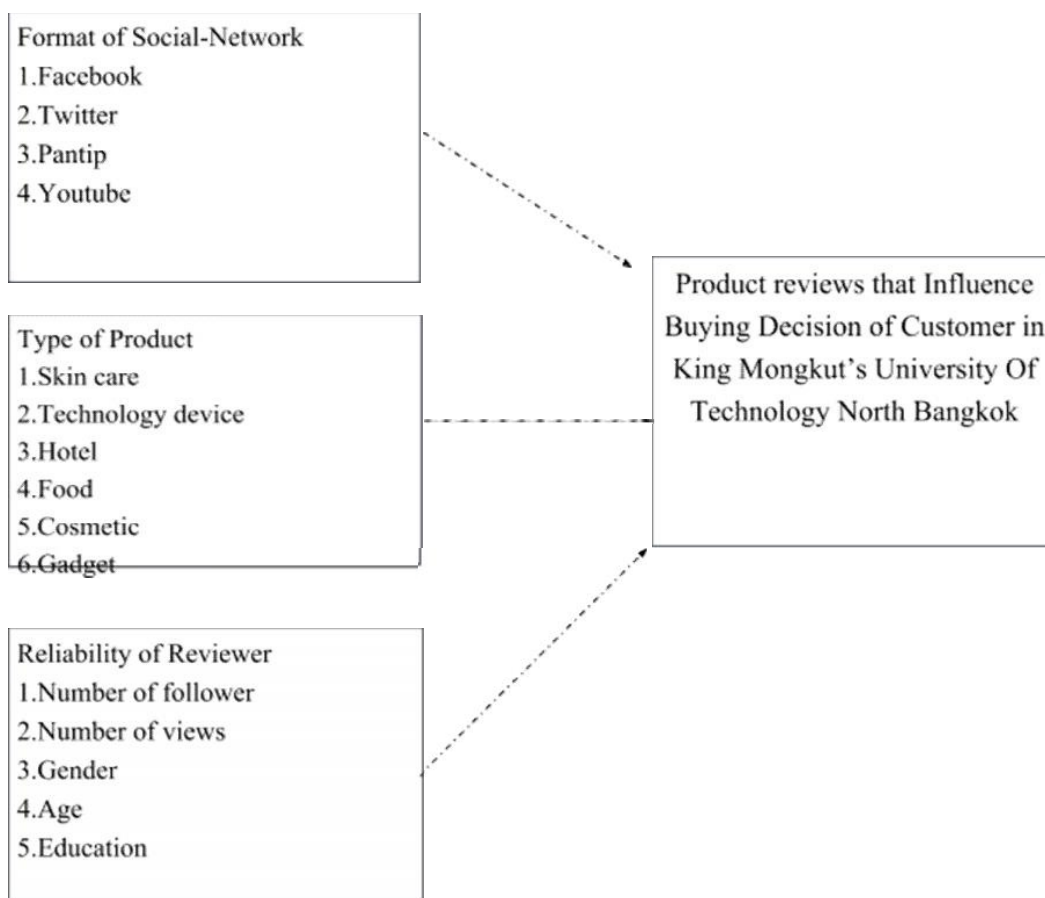
Ram Komal Prasad, Manoj K Jha (2014) Most of the theories of consumer buying decision-making assume that the consumer's purchase decision process consists of several steps. However, it may vary from product to services but all the customers pass through similar process. This study will

help the marketers to understand various steps in the whole process of consumer decision making for final purchase of the products of their choices. The marketers may improve their marketing strategies by understanding issues which are most common in the different consumer decision model developed by earlier researchers and scholars of marketing management. In the present study we have tried to identify the major cues for purchase decision making and we have also explained various buying decision model which are most valuable in marketing literature like consumer psychology (how consumers think, feel, reason, and select between different alternatives), the psychology of how the consumer is influenced by his or her environment, behavior while at shopping, consumer knowledge or information processing abilities etc. and we have focused as how marketer can improve methods to convince the customers effectively.

## Conceptual Framework

### Independent Variables

### Dependent Variables



### 3. Research Methodology

The research used a quantitative method to collect data from people in King Mongkut's University of Technology North Bangkok through the questionnaire. The questionnaire has contained a question about the independent variables in the framework.

#### 3.1 Question

The question in the questionnaire will ask about three main factors format of social-network, type of product and reliability of reviewer. For each factor will contain several choices for the sample to choose and they can choose more than one choice which choices are the most influence there buying decision.

##### 3.1.1 Social-Networks

For the social-networks factor, the question will contain the choice of Facebook, Twitter, Pantip, and Youtube. The sample populations are allowed to choose only one choice which the most factor that influences there buying decision.

##### 3.1.2 Type of Product

For a type of product factor the question will contain the choice of skin care, technology devices, hotel, food and cosmetic. The sample populations are allowed to choose more than one choice in this question.

##### 3.1.3 Reliability of reviewer

For reliability of reviewer, factor question will contain the choice of a number of followers, number of views, age, gender, and education. The sample populations are allowed to choose more than one choice in this question.

#### 3.2 The population and sample

This research used 100 people 50 for man and 50 for a woman in King Mongkut's University of Technology North Bangkok as a sample size to study Product reviews in social-network that Influence Buying Decision of Customer in King Mongkut's University of Technology North Bangkok.

#### 3.3 Statistic use in analysis

This research using survey questionnaire collected from the sample of 100 peoples in King Mongkut's University of Technology North Bangkok. Data was analyzed into mean, percentage, standard deviation, and inference statistic.

#### 4. Anticipated Result

The result of this research is to identify which format of product reviews, type of product and reliability of reviewer is the most influencing customer buying decision. The seller can improve their selling strategy by adjusting follow the customer needed and satisfaction. The result of this research will help directly to reviews that want to improve their strategy based on customer's opinion. The problem of this research happened in a process is some people in the sample group doesn't read the questionnaire carefully and they made mistake when doing the questionnaire.

#### 5. Conclusion

5.1 The format of product reviews in social-network that influence buying decision of customer in King Mongkut's University Of Technology North Bangkok. The majority of 100 sample chosen Facebook as a format of product reviews in social-network that influence there buying decision. They also give reasons to support their answer that in Facebook they can see many styles of product reviews video, photo, text, and mixing between many styles. The second is Youtube people who choose Youtube they also told that because Youtube has many videos about reviews product and easy for them to if they want to see only video reviews. The third is Pantip which is the only one Thai platform on this list. The last one is Twitter, they give the support reasons that on Twitter most of the people they didn't use the real photo or real information so that why people don't likely to see reviews on Twitter even though Twitter has hashtag which is a popular function.

5.2 The type of product that was reviewed in social-network that influence buying decision of customer in King Mongkut's University Of Technology North Bangkok. The majority of sample choose technology devices they also give an example that they always watch reviews before they buy a telephone. The second is skin care most of the woman who choose skin care they also choose cosmetic. They also give other information for this research that most cosmetic reviews will be included with makeup tutorial video this type of video gives so much influencing the buying decision of customer for the cosmetic product. The third is cosmetic, the most woman also chooses cosmetic in the questionnaire. Fourth is hotels and the last one is food.

5.3 The reliability of reviewer in social-networks that influence buying decision of customer in King Mongkut's University Of Technology North Bangkok. People are very concern about the reliability of the reviewer that they see reviews. The most chosen choice in this question is numbers of the followers. Second is a number of views and the third is age. It's interesting that no one chooses gender and education in this questionnaire, from this result researcher, can conclude that the most factor that gives the most reliable to a reviewer is number of follower and people doesn't care about sex and education of the reviewer.

From all the result we got we can summary that Facebook is the most social-media that influencing the buying decision of people in King Mongkut's University of Technology North Bangkok. People always see product reviews about technology devices such as telephone before they mad buying decision because many of technology devices are expensive, people want to make sure about the money that they will use and know feedback from a real user not a user in advertisement. The reliability is one factor that people concern when they see product reviews. Reliability of the reviewer based on a number of followers and nobody concern about gender and education of reviewer that why a social-media account with the high follower is valuable.

## 6. Recommendation and Discussion

Based on the result from this research paper we know that product reviews in social-network can influence buying decision of customer so the brand or seller should adapt and adjust their marketing plan and how the way they present product also responds with a problem when it happened. They are many social-media platforms today on the internet and not only social-network that can create product reviews, blog or website still one of the formats that people used to read or see the product reviews and also show the feedback through comment. Brands or seller can get quick responds or feedback by seeing through social media and they can solve a problem and increase brand image at same times. In any cases social media can destroy the reputation of the brand if the brand reacts in wrong way when they received feedback from a customer, on the internet every thing run fast and so spread to all around the world because almost people in the world can access to the internet and have social-media account. An expensive product such as telephone and technology devices are seen in product reviews than other product, perhaps because of the price and the tutorial of how to use that product. Make up tutorial also mix up with product reviews and most people buy cosmetic because their idol said its good and they like it. Reliability of reviewer also influencing peoples that reasons why many people on the internet want to do something different and unique to stand out from other people because when they have a lot follower they can get money from reviews product. Many product reviews on blog are different from product reviews in other platforms such as Pantip customer not only see reviews on Pantip they also see the comment of other users about a product. From all reasons and result seller or brands should more concern about the product reviews on social-network and adjust the way to promote a product in globalization world.

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**The Influence of Presenter on Purchasing  
Behavior and Intention to Buying Product**

**RCGR<sup>2nd</sup>  
2018**

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# **The Influence of Presenter on Purchasing Behavior and Intention to Buying Product**

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## **Abstract**

In Thailand the trend of use celebrity to be presenter is increasing frequency rapidly from back then. The objective of this research is we want to find out the influence of presenter on purchasing behavior and intention to buying product. Pros and cons of use famous presenter. The paper found likeability, attractiveness, experience and personality of the presenter are the most effective components of the celebrity endorsement construct of the research model, making them key influencers that make customer interest in the product. Nowadays we have several easy ways to access the selling product or advertise and even the presenter. This is the one of strategy to present the brand. The paper outlines ways to effectively use celebrity endorsement for increasing customer purchase intention. We hope this research can help reader or the person who interested to more understanding and can use or adapt in real life. The product we are referring to is est and Taokaenoi.

**Keywords:** Presenter, Buying behavior, Marketing, Celebrity Endorsement

## **1. Introduction**

Our current marketing is very progress, the most strategy that marketer use to present brand or product to help promote the market and create a position for their own products is famous celebrity such as singer, actor – actress, artist and athlete. Since the competitive market conditions in the market, the competition is higher. Marketer has to present brand to stand out the most.

The reason most marketers use celebrity in presenting due to bringing people as a presenter has many good results whether stop the audience's attention easily, quickly and memorize product or at least remember name of brand is still good.

For now brand can respond requirement for specific group such as fan club and normal group which is normal people to have opportunity to meet the presenter whom they prefer by campaign so this will spread brand more known.

This way of marketing have benefit in both side between brand and presenter if the result in the good way, but can be negative result if one side have a problem.

There are actually a number of marketing methods that can be used to promote a product. But this research offers this method because it is a way that can be seen today and understandable.

## 2. Literature Review

The researcher reviewed the literature on the influence of presenter to customer. A purchasing behavior and intention to buying product showed that presenter made customer get attention from famous person to product. Customer will remember the brand associate with famous presenter because of the reputation this can attract the attention of the customer, outgrowth from fan club of presenter. In terms of interest and ease of presentation, it also helps make the product known in the market quick time and can create brand image quickly. (Bettighuas and Cody, 1994 and Erdogan, 1999). The appearance and personality of a good presenter can be interesting and positive impact on the brand that is involved. And by researching a study of strategies for choosing a presenter, a celebrity is often described in detail, whether it is the meaning of the celebrity, the role of the present, the cause. Marketers focus on selecting the right person to represent the product, including the benefits and disadvantages of product presentation.

The company will receive good feedback if presenter is who is well-known. Limitations and meanings of well-known people have been defined, “well-known people refer to people who are famous because they must be successful in one or the heir of a successful individual and they have to be real and live in a tangible way” (Sri Kanya, 2004). Add “that the person is known and famous in the real world. Achievements including success in all professions such as acting or film, music, sport, politics, business and religion” (Sumalee, 2005). Thus, the researcher concludes that the famous person refers to a person who is known to the public as a result of his or her success in many field or profession whether in any industry, entertainment, sport, politics and etc.

Even though the presenter is very famous but there are some people did not feel in that way. They may interest in product but not presenter, but that is still good for the company. Buy and use behavior is divided into three categories, there are buy and use, buy and not use, not buy and not use. Of course we focus on use presenter, from the two and three occupations mentioned above there will be fans that support them no matter what they do. The more is about being a product presenter the way they call attention from the fans as well and they can spend a lot of money to get close to them. In order to understand more, for example soft drinks “est” use famous Korean singer as presenter with a campaign ‘stick the island with GOT7’ to satisfy the customer, fans, needs by make purchases to reach the targeted number and “est” also give normal customer the opportunity to root for a car. With the fact that GOT7 is a very famous artist and singer, we can see that there are 3 to 4 ads to choose GOT7 as a presenter. Since people may be familiar with them in the ads, other brands that want them will get this benefit. It can make the brand itself more eye catching consumers. It is the easy way to observe the customer behavior and decision making.

Pros of the famous presenter

### 1) **Attention increasing**

Because consumers are interested already, seeing celebrity in an ad makes it easy to see, follow, interest and remember (Naveetip, 2007) such as Bausch & Lomb used GOT7 as a presenter.

### 2) **Credibility Building** show the product must be reliable for consumer (Sirilak, 2005) such as Taokaenoi, crispy seaweed used GOT7 to guarantee delicious.

### 3) **Better Quality Image** make consumer feel that both good quality and different from other competing products, which may in fact be of similar quality (Nann, 2008) such as It’s skin, skin care from Korea but they have branch in Thailand, Brand will make Thai customer doubts about the quality of products so It’s skin used GOT7, the group that have both Thai and Korean as a presenter to support brand image.

Cons of the famous presenter (Nann, 2008)

- 1) **Overshadowing** the Brand make consumer is not interested in the product but focus on the more famous person.
- 2) **Overexposure** if a celebrity acts as a product endorser for multiple brands. It will make the image of the famous person look confused. As a result, the campaign is unsuccessful.

Advertising with a celebrity in the form of a presenter or product is an advertising strategy that has used in a long time and still very popular because, in addition to the credibility of the performer, it creates a good image. The product can also attract and convince many. In addition to the credibility of the actor, it will help create a good image for the product. It also attracts and persuades so much. In 2003, Pornpipit found that ads using celebrities as actors in ads would be more memorable 35% and the ability to influence than normal ads by 10 percent. However, even if using celebrity makes more sense, it is not always necessary to create a brand preference more than competitors.

### 3. Conclusion

Selecting a reputable person to present a product not just consideration only one principle to be able to communicate and public relation product effectively even though the use of celebrities as product presenters will have many positive effects, as mentioned in the literature review but that is not the only factor that can motivate buying decisions and re – purchase from the consumer and despite the many risks that are happening and not the final answer to the best marketing strategy but for current market conditions, consumers still need to be confident in their trusted products and services through the person they love and trusts. The use of celebrities in the market is an interesting choice.

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## How Culture Effect To Buying Decision Process

**RCGR<sup>2nd</sup>  
2018**

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# How Culture Effect To Buying Decision Process

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## Abstract

The purpose of this research paper is to study the factors that influence purchasing behavior. The objective for this research is to know how the culture has effects on buying decision process. Buying decision process has affected consumer behavior. Consumer behavior consists of four factors: cultural, social, personal and psychological. In this study, the focus was limited only to the cultural factor. The result of the study is the culture has an effect on the consumer's decision-making process. Research also shows that people from different culture consume different because of their differences in values and norms.

**Keywords:** Culture, Buying Decision Process, Consumer Behavior, Purchasing Behavior

## 1. Introduction

Culture is an extensive and sensitive concept, and it includes almost everything that affectation and individuals' thinking process, belief and behavior. It not only influences these three things, but also the way people make decisions, and how people perceive and have relation around the world.

Research shows that culture, sub-culture, and social classes are particularly important on consumer buying behavior. Cultures differ in demographics, language, non-verbal communication, and values. The objective for this research is to study how the culture have affects to buying decision process.

### 1.1 Theory and Concept

*Meaning of Decision making process*

John Dewey first introduced the following five stages of decision making process in 1910.



**Figure 1** Five Stages Framework Remains a Good Way to Evaluate the Customer’s Buying Process

1. Problem/need recognition

This is often identified as the first and most important step in the customer’s decision process. A purchase cannot take place without the recognition of the need. The need may have been triggered by internal stimuli, and when it doesn’t similar with their culture that will make them uncomfortable.

2. Information search

Having recognized a problem or need, the next step a customer may take is the information search stage, in order to find out what they feel is the best solution. This is the buyer’s effort to search internal and external business environments, in order to identify and evaluate information sources related to the central buying decision. Your customer may rely on print, visual, online media or word of mouth for obtaining information.

3. Evaluation of alternatives

As you might expect, individuals will evaluate different products or brands at this stage on the basis of alternative product attributes – those which have the ability to deliver the benefits the customer is seeking. A factor that heavily influences this stage is the customer’s attitude. Involvement is another factor that influences the evaluation process. For example, if the customer’s attitude is positive and involvement is high, then they will evaluate a number of companies or brands; but if it is low, only one company or brand will be evaluated.

4. Purchase decision

The penultimate stage is where the purchase takes place. Philip Kotler (2009) states that the final purchase decision may be ‘disrupted’ by two factors: negative feedback from other customers and the level of motivation to accept the feedback. For example, having gone through the previous three stages, a customer chooses to buy a new telescope. However, because his very good friend, a keen astronomer, gives him negative feedback, he will then be bound to change his preference. Furthermore, the decision may be disrupted due to unforeseen situations such as a sudden job loss or relocation.



## 5. Post-purchase behavior

In brief, customers will compare products with their previous expectations and will be either satisfied or dissatisfied. Therefore, these stages are critical in retaining customers. This can greatly affect the decision process for similar purchases from the same company in the future, having a knock-on effect at the information search stage and evaluation of alternatives stage. If your customer is satisfied, this will result in brand loyalty, and the Information search and Evaluation of alternative stages will often be fast-tracked or skipped altogether.

On the basis of being either satisfied or dissatisfied, it is common for customers to distribute their positive or negative feedback about the product. This may be through reviews on website, social media networks or word of mouth. Companies should be very careful to create positive post-purchase communication, in order to engage customers and make the process as efficient as possible.

### *Meaning of cultural factor*

Pallabi Chakraborty said that Cultural factors have a subtle influence on a consumer's purchasing decision process. Since each individual lives in a complex social and cultural environment, the kinds of products or services they intend to use can be directly or indirectly be influenced by the overall cultural context in which they live and grow. These Cultural factors include race and religion, tradition, caste and moral values.

Consumer behavior can indicate different things like how individuals or groups choose to buy, use and dispose goods or services, to satisfy their needs and desires. Hence it is important to understand that the consumer behavior is affected by several factors.

To have a good knowledge of the factors affecting the consumer behavior contact ISN Global Solutions for our Sales Support Services. We offer excellent Account Profiling services and can provide the factors influencing the buying decision in the market. We assure the data and statistics are taken from verified sources at ISN.

Culture is by far the most pervasive of these external influences. In fact, it's challenging to even define what culture exactly is because of its prevalence in our lives. One definition I can offer is to consider culture more as a set of individual boundaries or norms. We acquire these boundaries all through our lives, starting at birth. When we react to any situation in a manner that 'feels right,' we're within these boundaries and acting in accordance with our culture.

### **1.2 How does culture impact consumer decisions**

Let's compare between IKEA in Thailand and IKEA in America. And MacDonaldd that have effect from culture to buying behavior.

#### *Case study IKEA*

Normally the IKEA product use D.I.Y. method that to assemble by yourself this are both same in Thailand and America but the different is languages, in America IKEA use Swedish but in Thailand's branch IKEA use Thai language from the reason that follow Thai culture because some Thai people have a huge language barrier in English. By the way IKEA image is for college student but in Thailand it become a really high price furniture become for high class and modern style for people in Thailand.

### *Case study MacDonald*

At first the Mac came in Thailand, They sales hamburgers and fries but Thai people, we always eat rice we were not eat much breads or fries. So it was a big problem for MacDonal in Thailand. And from the begin image of MacDonal in America is a cheap food because it fast and be like a quick meal that mean it looking cheap and does not have high value but when it comes to Thailand price was increased by follow the currency then next happen is, image of MacDonal in Thailand is looking high class for fast food in that moment from the reason that brand from foreigner and have a high price will look good in most people eyes.

### **3. Conclusion and Recommendation**

For all the fact that will effect to buying behavior that we give a sample to be case study that show in every factors are impact to culture in Thailand and I hope so that would be same all around the world, my suggestion for this project would be that we have to study and do R&D to adapt the way and policy to reach marketing point.

To show how culture effect to buying behavior of customers, can see the result from shop, design, advertise, product and service by designation following culture to make customer interested and want to buy our product and service by the way to study culture I suggest two methods. First study and do research the culture in that country, for planning strategy and predict the possibility and risk in that area. Second hire employee that know a culture of country that we are expand to be improve from a survey that can have some misunderstand in a culture.

Finally, this research is studying about how important and effect of culture to buying behavior's customer by give example from case study in Thailand. One is IKEA and other is MacDonal to understand the way to improve marketing and planning a new strategy by learning a culture.

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**Marketing Mix Factors Affecting Dining  
Decision of Saimai Restaurant Customers**

**RCGR<sup>2nd</sup>  
2018**

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# **Marketing Mix Factors Affecting Dining Decision of Saimai Restaurant Customers**

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## **Abstract**

The purpose of this study to examine the marketing mix factors regarding consumer's decision to dine at Saimai restaurant. Data were collected from 400 customers of Saimai restaurant and descriptive statistical analysis is used to analyze the data. The research found that marketing mix factors played significant and consumer decision-making of Saimai restaurant customers overall product offered by the restaurant had very high opinion. When considering each item, the average respondents orders from the most to the least physical characteristics and product areas. At the same time, overall, the respondents had comments very high. When considering each item; the average order from low to high was satisfied with the decision to use the restaurant. Overall, consumer feels good with the restaurant. The service at the restaurant exceeds expectations at high level.

**Keywords:** Marketing Mix, Online Service, Food Center

## **1. Statement of Problems**

Because of the stage of social, economic, and living conditions of today cause eating habits have changed. Humans need comfort to make life easier because they have to work with time. Thus, they do not have time to cook or eating with a family. They need to try a different food or test (VimolSri, Uthai Pattanacheep, Siriwan, Tukkwaoand Tipparadee Kongsuwan, 2015).

At present, Thais are more likely to have food at the restaurant because the social changes, the hustle and bustle caused them do not have time to cook at home. Sometimes, they need to change a place to relieve the stress for family or group of friends. Thus, the restaurant business in the country is an interesting business (MGR Online, 2009). The restaurant business in Thailand faces the lower consumption and eating out, higher restaurant business costs and fast changing business environment as new entrants enter the market. The small retail market, with relatively low investment and relatively short payback, makes both old and new entrants adjust their strategies to scare away market share (Kasikorn Research Center, 2014).

According to the importance above, the researcher interested to study marketing mix factors affecting dining decision of Saimai restaurant customers for ensure maximum efficiency and effectiveness of operations and operations. This will be the benefit the development of the restaurant.

## **2. Research objective**

1. To study the marketing mix factors for consumers decision to dine at Saimai restaurant.
2. To study the decision-making of customers at Saimai restaurant.

## **3. Literature Review**

The marketing service (Service Marketing Mix) has 7 elements (Siriwan Serirat et al, 2541) as follows.

1. Product, it is what the seller offers to meet the needs and meet the needs of customer for achieving maximum satisfaction to buy or use continuously. The products are both tangible and intangible.

2. The price, it is the revenue of the business, say that the high price will make the business more income. The low cost will also make the low income and may lead to loss. In the view of the customer, it was found that pricing is a great way to make a purchase decision and the price of the service is important to the quality of the service. If the price is high, the quality is high. To make sure your prospects are getting high. The service needs to meet the expectations of customers, so customers will be satisfied and back again.

3. Place, it is the structure of the channel consists of institutions and activities between the channels to be used to move goods and services to consumers. The related activities that enable the operation of the channel are efficiency including transportation, warehousing or stock keeping.

4. Promotion, it is the marketing promotion involves the communication of the information necessary to convince customers to buy and to tell customers that there are products and services in the market trying to make customers to buy goods and services.

5. People, it is consists of all employees in organizations that serve them. This includes the owners of the shop, the executives, the employees, and the individuals.

6. Physical Evidence, it is physical environment, including buildings and equipment such as computers ATMs, parking lots, bathrooms, etc. These are what customers need.

7. Process, it is related to the methodology and practice in the field of services is presented to the user to provide the service properly fast and impress customers.

## **4. Scope of Research**

This research is a survey research by focusing on the elements of marketing mix decisions dining restaurant customer area. The research method consists of: population and sample tools used in the study. Data collection and analysis are following details:

### **Populations and samples**

1. The populations used in this research were Saimai restaurant customers. The researcher does not know the exact number.

2. The samples used in this research were Saimai restaurant customers. The researcher does not know the exact number. Thus the researcher is calculated by using a sample of the G-power 3 of Erdfelder, E., Faul, F., & Buchner, A. (1996: 1-11) the effect size of 0.25 for the discrepancy. 0.05 Power (1- $\beta$  erroprob) 0.95 a sample size at least 305 people, so the data collected in this study to

avoid errors (e), the researchers collected data from a sample of 400 people. Then, the researchers random the samplings (Kanlaya Wanishbuncha, 2006: 16-17).

### **Research tools**

The instrument used in this study was a questionnaire regarding the marketing mix with the decision of customers dining restaurant is a question about Saimai marketing mix factors affecting dining decision of Saimai restaurant customers and questions about restaurant decision of Saimai restaurant.

### **Data collections**

Data was collected from primary data, which collected data from the questionnaires of the sampled population living in Saimai district. Bangkok the questionnaire was distributed through Google doc. The researcher distributed the questionnaire via social network, line, facebook and e-mail.

### **Data analysis**

The researchers analyzed data from a survey by using a computer program to determine statistically using descriptive statistics to describe the data and presented in the accompanying tables include mean, standard deviation.

## **5. Results/ Conclusion and Suggestion**

### **Marketing mix factors affecting dining decision of Saimai restaurant customers**

Marketing mix factors on consumer decision-making of Saimai restaurant customers in all areas overall, the respondents had the opinion at the high level ( $\bar{X} = 4.41$ ). When considering each item, the mean order from descending to high was found to be personal at the highest level ( $\bar{X} = 4.51$ ) secondary distribution channel physical characteristics at a high level ( $\bar{X} = 4.47$ ) and products at the high level ( $\bar{X} = 4.46$ ), respectively.

Products overall, the respondents had comments at the high level ( $\bar{X} = 4.46$ ) when considering each item, the average order from descending to highest was found to be the quality of raw materials used. In most ( $\bar{X} = 4.76$ ) variety of food in most the ( $\bar{X} = 4.68$ ) and there are new menus to choose from the high level ( $\bar{X} = 4.41$ ) respectively. In line with research conducted by Rudirat Sitiboriboon (2017), we have studied the marketing mix, service and image that affect the customer satisfaction of the restaurant. Chawan Eimsakulrat (2014) studied on market mix factors quality of service and brand image factors that affect the satisfaction of international food consumption. A study of the behavior and satisfaction of consumers of Shabu Buffet Restaurant at Seacon Bangkae the results showed that the product factor very high.

Overall price at the high level ( $\bar{X} = 4.35$ ) considering each item, the average order from low to high found that the food price was appropriate compared to the quality. In most ( $\bar{X} = 4.71$ ) followed by food and beverage prices are not too expensive compared to the same restaurant. In most ( $\bar{X} = 4.69$ ) and the appropriateness of food prices versus quantity at the high level ( $\bar{X} = 4.23$ ), respectively. In line with research conducted by Rudi Ratthiiboonbutr (2017), we have studied the marketing mix, service and image that affect the customer satisfaction of the restaurant. Chawan Eimsakulrat (2014) studied on market mix factors quality of service and brand

image factors that affect the satisfaction of international food consumption and (6). Customers of Shabu Buffet Restaurant at Seacon Bangkae found that the price factor was at a high level.

Distribution channel overall, the respondents had comments at the high level ( $\bar{X}=4.47$ ) when considering the average order from most to least find a tidy interior. In most ( $\bar{X}=4.57$ ), followed by the location of the shop easy access. At the high level ( $\bar{X}=4.49$ ) and the convenience of parking place. At the high level ( $\bar{X}=4.47$ ) respectively. In line with research conducted by Rudi Ratthiiboonbutr (2017), we have studied the marketing mix, service and image that affect the customer satisfaction of the restaurant. Chawan Eimsakulrat (2014) studied on market mix factors quality of service and brand image factors that affect the satisfaction of international food consumption. A study of the behavior and satisfaction of consumers of Shabu Buffet Restaurant at Seacon Bangkae found that the channel factor very high.

Marketing promotion overall, the respondents had comments at the high level ( $\bar{X}=4.19$ ) when considering the average order from most to least showed signs of taste. Special month in most ( $\bar{X}=4.56$ ), followed by activities during the festival, such as New Year, Christmas and other high level ( $\bar{X}=4.48$ ) and promotions of the shop. At the high level ( $\bar{X}=4.27$ ), respectively. In line with research conducted by Rudirat Sitiboriboon (2017), we have studied the marketing mix, service and image that affect the customer satisfaction of the restaurant. Chawan Eimsakulrat (2014) Studied on market mix factors quality of service and brand image factors that affect the satisfaction of international food consumption. A study of the behavior and satisfaction of consumers of Shabu Buffet Restaurant at Seacon Bangkae found that the marketing promotion factor very high.

Personal overall, respondents with comments at a high level ( $\bar{X}=4.51$ ) when considering the average order from most to least find that employees have good human relations smiling cheerful at the very end ( $\bar{X}=4.89$ ), followed. Staff properly dressed modestly in a very possible ( $\bar{X}=4.55$ ), and staff are attentive and enthusiastic about the service. At a high level ( $\bar{X}=4.48$ ), respectively, consistent with the research of Rudirat Sitiboriboon (2017) studied the marketing mix and brand image affects customer satisfaction restaurants Waterside resort beach Chawan Eimsakulrat (2014) Studied on marketing mix factors quality of service and brand image factors that affect the satisfaction of international food consumption. A study of the behavior and satisfaction of consumers of Shabu Buffet Restaurant at Seacon Bangkae found that the personal factors were at a high level.

Physical characteristics overall, the respondents had comments at the high level ( $\bar{X}=4.47$ ), it was found that the atmosphere and decoration of the shop were good. At the very most ( $\bar{X}=4.056$ ). The style and color of uniforms are polite unique at a high level ( $\bar{X}=4.49$ ), and the place is clean and hygienic at a high level ( $=4.45$ ), respectively, consistent with the research of the abundant Rudirat Sitiboriboon (2017) Studied the marketing mix, service and image, which affected customer satisfaction of the restaurant, Chawan Eimsakulrat (2014) studied quality of service and brand image factors that affect the satisfaction of international food consumption. A study of the behavior and satisfaction of consumers of Shabu Buffet restaurant at Seacon Bangkae the results showed that the physical characteristics very high.

Process overall, the respondents had comments at the high level ( $\bar{X}=4.44$ ), it was found that there was a standardized receipt for the payment. At the very most ( $\bar{X}=4.056$ ). The service is fast and accurate at the very most the ( $\bar{X}=4.55$ ), and reservations are available by phone. At a high



level ( $\bar{x}= 4.44$ ), respectively, consistent with the research of Rudirat Sitiboriboon (2017) studied the marketing mix and brand image affects customer satisfaction restaurants Waterside Resort Beach. Chawan Eimsakulrat (2014) studied on marketing mix factors quality of service and brand image factors that affect the satisfaction of international food consumption. A study of the behavior and satisfaction of consumers of Shabu Buffet Restaurant at Seacon Bangkae the results show that the process factor very high

### **Restaurant decision of Saimai Restaurant**

Restaurant decision of Saimai restaurant overall, the respondents had comments. At the high level ( $\bar{x}= 4.42$ ), it was found that satisfaction with the decision of using the restaurant at the very most ( $\bar{x}= 4.76$ ). Overall, it feels good to the restaurant at the very most ( $\bar{x}= 4.71$ ), and the service at the restaurant exceeded expectations. At the high level ( $\bar{x}=4.36$ ), respectively, in accordance with the research conducted by Rudirat Sitiboriboon (2017) studied the marketing mix, service and image, which affected customer satisfaction of the restaurant Chawan Eimsakulrat (2014) studied quality of service and brand image factors that affect the satisfaction of international food consumption. A study of the behavior and satisfaction of consumers of Shabu Buffet restaurant at Seacon Bangkae found that restaurant decision of Saimai restaurant very high

## **6. Future Research**

### **1. Recommendations from the study.**

The study found that marketing mix factors affecting dining decision of Saimai restaurant customers. Products should develop a variety of services; the price should improve the standard fee. Distribution channel should develop. Services should be faster. Moreover, marketing promotion should be developed service to the user, information should be public relations through the media, and the person should improve on the accuracy of the service staff. Physical characteristics should improve the design of the container is beautiful and the process should improve on the credit card payment process to be convenient, safe and reliable.

### **2. Recommendations for the next research.**

This study is a survey about marketing mix factors affecting dining decision of Saimai restaurant customers. Therefore, the next study should be conducted by in-depth interview with the user on issues that will be useful for the development of the company's management.

## **7. Acknowledgements**

Thank you for all support from faculty, Dean of Graduate School of Business and to all of the helpful staff at Sripatum University.

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**Employee Opinions on Tourism Policy  
Travel Agencies in Bangkok and its vicinity**



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# **Employee Opinions on Tourism Policy Travel Agencies in Bangkok and its vicinity**

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## **Abstract**

The objective of this study is to study employees' attitudes that affect the operation of tourism policy of tour company in Bangkok. Besides, to compare the attitude of employees who affect the operation of tourism companies which classified by personal factors. The research sample consisted of 200 tour employees and the instruments used in the study were questionnaires. Descriptive statistical tool is used to analysis the collected data. The study found that the attitude of the employee affected the operation of tourism policy of the tour operators in Bangkok and metropolis of all aspects at a high level. Leadership and Resource Allocation were at the highest level. The rules and procedures of the work were at the high level and organizational structures were at the high level, respectively.

**Keywords:** Employee, Attitudes, Tourism Policy, Tour Company

## **1. Statement of Problems**

The tourism industry has become the largest industry in the world in the near future. Since the tourism industry is the main factor in the current global economy, especially in international trade, which is more closely related to the World Trade Organization, Thailand is a country that has attracted both tourists and tourists. Thais and expatriates who come to visit and appreciate the atmosphere of tourism in many forms such as nature spot historical tourism, archeology and culture have made tourism revenue up to 9 percent of total gross domestic products. In 2012, the global tourism industry recorded a record number of foreign tourists (International Visitor Arrival) around the world. There are up to one billion people. This year, the number of tourists in Thailand was 22.3 million, an increase of 16% compared to 2011 (Tourism Authority of Thailand and the College of Innovation. Thammasat University, 2013: 1).

Tourism has grown rapidly over the past three decades. It is a high growth activity and will continue to grow. It has become the largest travel industry in the world. It plays an important role in

the economic and social system of Thailand, especially as a source of foreign exchange, job creation and distribution to other regions of the country, not only in Thailand. The importance of the tourism industry all countries see that tourism is generating huge revenue as well. As a result, the tourism competition spread to all regions of the world. Each country needs to seek new forms of tourism. To attract tourists is always (Boonlert Jittangwattana, 2005: 1). Although there are some situations that make tourism slow down. But tourism trends continue to grow. It has created new forms of tourism such as eco-tourism. Health tourism or historical tourism, etc. (Phoom Moomsil, 2012:1)

From this situation, the researcher is interested to study Employee Opinions on Tourism Policy Travel agencies in Bangkok and its vicinity. The results of this study will be beneficial to be applied as a guideline for the operation of tour operators in Bangkok and its vicinity. To follow the tourist policy. To be effective and more effective next.

## **2. Research objective**

To study the opinions of employees on tourism policy have to travel agencies in Bangkok and its vicinity.

## **3. Scope of Research**

### **Population and sample**

The population in this research includes employee travel agency in Bangkok and the vicinity of 3,350 people (data from the Department of Tourism. 2559 online).

The samples used in this study were the staff of travel agencies in Bangkok and its vicinity. The study sample size was determined by calculating the sample size from the formula of Taro Yamane (Taro Yamane, 1976). The confidence level of 95% and 5% tolerances and 357 random samples with Simple Random sampling.

### **Tools used in the study.**

Tools used in the study the researcher used the questionnaire on the opinions of employees on tourism policy have to travel agencies in Bangkok and its vicinity to question on employee feedback on the travel policy have to travel agencies in Bangkok and its vicinity.

### **How to collect data**

The questionnaire was used as a tool to collect data asks for cooperation from the staff of the tour company in Bangkok and its vicinity by giving out the questionnaire and collecting the questionnaire. Distribute self-administered questionnaires. 357 series take the time to complete the questionnaire and get the completed questionnaire back within 5 days collectively the questionnaires were returned in 357 series.

### **Data analysis**

Verification researcher the code was analyzed and analyzed using computer program employee opinions on tourism policy travel agencies in Bangkok and its vicinity. Data were analyzed by mean and standard deviation.

#### 4. Results/ Conclusion and Suggestion

This study is a study employee opinion on Tourism Policy Travel agencies in Bangkok and its vicinity. The study found that:

Analytical results employee opinions on tourism policy travel agencies in Bangkok and its vicinity. All sides overall, it was at a high level ( $\bar{X} = 4.31$ ). In terms of ranking, the descending order of importance was found in terms of leadership and resource allocation. The opinions were at the highest level ( $\bar{X} = 4.52$ ), followed by the rules and procedures of the work. The opinions were at a high level. ( $\bar{X} = 4.38$ ) and organizational structure. Opinions on the level ( $\bar{X} = 4.30$ ) respectively. The results are as follows.

Theoretical support / goal / objective overall, it was at a high level ( $\bar{X} = 4.25$ ) when considering the sort of averaging descending found that the planet is the target in the value of tourism is clear, of course, there are comments in class. Much ( $\bar{X} = 4.32$ ), followed by policies to attract tourism inure a tourist coming into this fight the source at the tourism increase. The opinions were at a high level. ( $\bar{X} = 4.31$ ) and the unit for treatment at the device to activities / projects in the course together for the purpose Conformity with the objective of Lahore, a tourist point at the obvious. Opinions on the level ( $\bar{X} = 4.30$ ) respectively.

The rules and procedures of the work Overall, it was at a high level ( $\bar{X} = 4.38$ ) when considering the average order from most to least find a significant participation in the decision making device performance to cool down the process. The opinions were at a high level. ( $\bar{X} = 4.46$ ), followed by There is of course a clear operational processes. The opinions were at a high level. ( $\bar{X} = 4.35$ ) and there is a clear operational procedures of course. Opinions on the level ( $\bar{X} = 4.32$ ) respectively. Consistent with research Vit Chairungruang (2010) Tourism Policy Study of Pak Kret Municipality the opinions of tourists and the opinions of people about the development of the community landscape in Pak Kret Municipality. Amphoe Pak Kret, Nonthaburi the study indicated that have a good policy. The budget for the development of the community as a tourist destination is sufficient. The development workforce is adequate, but lacking in knowledge and understanding of how to implement it for better performance. Training should be provided on setting budgets. Development of community resources to the Sarocha Praepasa (2557) made implementation of tourism policy in Thailand. Quantitative data analysis, with descriptive statistics, has shown that success in tourism policy is based on tourism revenue, according to the number of tourists compared to the target. 98.1% ( $\bar{X} = 4.15$ ,  $SD = 0.58$ ). Success rate the tourism policy is based on revenue from tourism compared to the target. 85.1% ( $\bar{X} = 3.60$ ,  $SD = 1.03$ ). Factors affecting the success in the implementation of tourism policy found that the main factors affecting the success. In the implementation of tourism policy, the external environment is the highest.

Planning Overall, it was at a high level ( $\bar{X} = 4.29$ ) when considering the sort of averaging descending the unit of the North at the end of the project, targeted approach to work in upcountry on the map is the making. Saving the opinions were at a high level. ( $\bar{X} = 4.35$ ), followed by unit operation of the device at the planet that action plan, both short-term and long-term plan for the one-year cooling unit tourism development. The opinions were at a high level. ( $\bar{X} = 4.29$ ) and the unit for the course of the operation, the device used to plan regular leave-year short-term plan for the long term. Opinions on the level ( $\bar{X} = 4.23$ ), respectively. Consistent with the research Pisut

Ratanawong (2009) studied of managerial policy at tourism sustainable organization development areas for North tourism sustainability: The case of the island and landing area. The research found that the role of sustainable tourism development of special area for sustainable tourism: A case study of Koh Chang and the Trat province linkage, in line with the mission set out in Sections 20 and 21 of the royal decree. Sustainable tourism a plan of action must be established for the policies and plans. Fulfillment and preparation policy and Strategic plan for special area development sustainable tourism must take into account the principles of town planning and the environment.

Leadership and resource allocation were at the highest level. The ( $\bar{X} = 4.52$ ) when considering the sort of averaging descending found that this process should therefore unit works to cool the oil at the well in working on this project the action. Travel opinion in most ( $\bar{X} = 4.56$ ), followed by the project, are introduced at the band's practice, this is cool; this is going to plan and set goals. The opinions were at a high level ( $\bar{X} = 4.47$ ) and the use of technology in operation at the Unit in collaboration with other relevant desired. Opinions on the level ( $\bar{X} = 4.38$ ), respectively. Suwimo Chommanus (2011) studied on the impact of tourism promotion policy. A case study of Koh Kretamphoe Pak Kret the results of the research revealed that the policy of promoting tourism according to the opinion of government officials the tourist private entrepreneur and local people. The overall picture is very agreeable Chawadee Kosol (2012) studied on the Effectiveness of Tourism Policy Implementation. The practice of the office of tourism and sports the results showed that the leadership was at a high level.

Structure of the unit Overall, it was at a high level ( $\bar{X} = 4.30$ ) when considering the average order from most to least find that the structure of the unit for the conformity to bring tourism policy into practice. The opinions were at a high level ( $\bar{X} = 4.33$ ), followed by operational unit can decide to modify the position, obtained by a water outage in the chain of command lines. The opinions were at a high level ( $\bar{X} = 4.30$ ) and the Unit's work at the operational obtained by a suitable date and time of the planet and are working to cool the system. Opinions on the level ( $\bar{X} = 4.27$ ), respectively. Consistent with the research of lucid hit SuwimonChommanus(2011) studied the impact of policies to promote tourism. A Case Study of KohKretamphoe Pak Kret results of the research revealed that the policy of promoting tourism according to the opinion of government officials the tourist Private entrepreneur and local people. Overall levels strongly agree Beach ChawadiKoson(2012) studied the effectiveness of policy implementation at tourism into the practice of the office of tourism and Sports the research found that the organizational structure at the very level that means. Tourism policy of tourism office and the sport achieved the desired result.

Budget support overall, the high level ( $\bar{X} = 4.28$ ) when considering the sort of averaging descending the new government may support the budget, at least at the port Perry transmission risk on the North course tourism. Opinion at a high level ( $\bar{X} = 4.31$ ), followed by the government for this to bring the new project to develop a treatment course tourism is a collection of policies that may need to provide this level of support of the fans are. The opinions were at a high level ( $\bar{X} = 4.30$ ), and the new government may support the creation of this the income action at tourism less attention than the course continues with a review at a high level ( $\bar{X} = 4.22$ ), respectively, consistent with the research of engineering Vitchai Rungruang (2010) study on tourism policy of Pakkret municipality. The opinions of tourists and the opinions of people about the development of the community landscape in Pak Kret Municipality. Amphoe Pak Kret, Nonthaburi. The study indicated that Development of community landscape for restoration as a tourist attraction



of municipality of Pak Kret group 1 is the management and the staff will focus on the policy, budget, personnel, performance, it is found that the policy is good. The budget for the development of the community as a tourist destination is sufficient. Personnel working on the development, it has the right number, but still lack knowledge understanding of the implementation work to achieve good performance even more lucid the SuvimonChanomnut ( 2011) studied the effects of policy. Support tourism a case study of KohKret amphoe Pak Kret. The results of the research revealed that the policy of promoting tourism according to the opinions of government officials the tourist Private entrepreneur and local people. The overall picture is very agreeable ChawadeeKosol(2012) studied on the effectiveness of tourism policy implementation. The practice of the office of tourism and sports the results showed that the budget was at a high level tourism policy of tourism office and the sport achieved the desired result.

## **5. Future Research**

### **1. Recommendations from the study.**

For recommendations from the study of this research, the researcher selected the results that the respondents had the least. The theoretical challenge / goal / objective should be evaluated in making direct traffic at together in activities / projects according to objective Lahore treatment at tourism as a continuation and a boy at the clear side. Regulations and procedures of the operation should have been doing procedural work is clear. The plan should provide a roadmap regularly making the transmission of short-term long-term plan to support its operations. Leadership and resource allocation should be the making of personnel that has the making of adequate activities / projects. The structure of the agency, the course agencies should work with a quick right on time that is normally required and the unit normally used to store system and support the budget should ask for financial support from the government to allow the government to support the construction of this the income the action at tourists than at the treatment course continuity.

### **2. Recommendations for the next study.**

You should conduct research studies alongside the positive qualities on assessments by making direct traffic at together in activities / projects according to objectiveLahoretreatment at tourism point at the obvious and the other side.

## **Acknowledgements**

Thank you for all support from faculty, Dean of Graduate School of Business and to all of the helpful staff at Sripatum University.

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## Causal Factors Influencing Operational Expectations Members of Direct Sales



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# Causal Factors Influencing Operational Expectations Members of Direct Sales

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## Abstract

Research causal factors influencing the expectation of members in the direct sales business purpose studied the marketing mix that influenced the expectation of direct sales members. Also, to study motivational factors influencing the expectation of members in the direct sales business. The population used in this study is 400 direct sales members. Survey Method is a tool for collecting data. The researchers set guidelines in conducting research on demographic speculation sampling, data collection, data preparation and analysis. The statistics used for data analysis frequency, percentage, mean, standard deviation and the hypothesis test analyze the regression of two or more variables multiple regression. The results showed that marketing mix factors influence the expectation of performance of direct selling member is overall importance is very high. Motivational factors influence the expectation of members in the direct sales business. Overall importance is very high. The results of hypothesis testing showed that marketing mix factor price products on the distribution channel. Promotion and process aspects influence of expectations on membership performance in direct selling business.

**Keywords:** Factors Influencing, Expectation, Direct Sales Business

## 1. Statement of Problems

At present, there are many direct sales companies with extensive management structure. Business in the form of a network or business language called multi-marketing system. This is a network that combines new knowledge and methods with the knowledge and traditional culture in harmony and tighten relationships with people in the direct sales organization to strengthen by soliciting membership and transferring knowledge and change experience. The strategy of direct sales organizations accelerated the development and expansion of their networks widely. Therefore, participants in the organization must be trained according to the tactics of each organization either directly or indirectly. In development, it provides education and training. It is the heart of the development of the sales system and the development of personnel to be able to work effectively.

Direct sales are a dynamic and vibrant business in today's global economy. There are many products and services traded through direct sales. This is an opportunity for consumers to have more options to buy and benefited to the entrepreneur who starts their own business easier (Association Direct sales, 2007, p. 5). Direct sales play an important role in the growth and development of the domestic economy following the business transaction systematically. It has a clear plan to distribute products to create opportunities for income generation and sustainable livelihoods (Naline Paiboon, 2007, p. 3) and it is a business that distributes and generates income to the masses. The opportunity and ability to make sales if the direct sales business is sustainable, it contributes to the overall prosperity of the economy according to (Susom Supinit 2004, page 65).

"Direct Sales" is the sale of goods or person-to-person service. There are no fixed stores. Sellers may be sellers, dealer's sales representatives, consultants or other names different. It is offering and demonstrating products to consumers at home (Direct Selling Association, 2007, p. 6; Peterson & Wotruba, 1996, p. 3). Direct Sellers act as retailers under their own proprietary business (Thai Business Direct Selling Association, 2004, p. 54).

From the above, researchers are interested to study "Factors Influencing the Success of Direct Selling Association of Thailand" as direct selling is an attractive distribution channel economic turmoil and the current high competition and also a channel. The opportunity for talented people to take the initiative and risky in the pursuit of success and the advancement in direct sales business, this research will guide the direct sales planning to achieve the highest satisfaction to be satisfied and work effectively.

## **2. Research objective**

1. To study factors influencing the success of Thai Direct Selling Association.
2. To study the level of factors influencing the success of Thai Direct Selling Association.

## **3. Literature Review**

### **Concepts and theories about motivation**

Kitti Thayakanont (1987: 40) gave the concept of motivation in a variety of ways, so that it was appropriate for each person because motivation must match the needs of the motivators. It should be appropriate and modest. In order to motivate subordinates to feel the desire to work to meet the boss's intentions should be used as follows.

- 1) Compliments must be complied with at reasonable occasions will increase the morale of the work to the subordinate.
- 2) Honor and recognition to be proud. And it is accepted by society around him and his supervisors.
- 3) Friendly, it will be warm when the boss gives sincere friendship.
- 4) Fairness the chief must be equitable in justice all subordinates are not choosy
- 5) Chief co-op should give subordinates the opportunity. Discuss with the supervisor and associates the appropriate opportunities, such as setting objectives or plan for solving problem.
- 6) Collaboration should work together on occasion. It will make him satisfied because he had the feeling that the boss was friendly and tirelessly with him.
- 7) Organized to suit people both types and quantities of work. The staff has done their job. The amount of work appropriated to the ability. It will make him happy, not bored.

8) Helping when jams or problems. The supervisor must help when problems arise in various ways, such as giving advice, thinking, solving problems, solving problems or crashes, these will make him feel that bosses are not abandoned or let him live alone.

9) To know the work. The workers will be very satisfied if you know the performance of him periodically. Make a proud of the success of the work. If it has a mistake, it will help him to improve.

10) To compete to provoke competition in the work between individuals or groups for work better in overcoming the other.

11) Trying to influence the large group to pull small groups by encouraging the large group to act as a good example in the work. This will make it easier for people to follow.

12) Having the equipment to work. It is important to motivate people to work and the speed of work.

13) Creating an atmosphere of work if the atmosphere is both physical and mental well. Clean working room not clear desk chair comfort all the staff is smiling not gossip, slander, etc. It will make everyone want to work.

14) Rewarding opportunities such as praise, praise, promotion, promotion, promotion Physical giving, etc.

15) Testing if a periodic test is performed regularly, the operator knows the result or errors in his own work. He has the opportunity to improve his work and proud of the success of his work.

#### **4. Scope of Research**

This research is a survey (Survey Research) to study the factors that influence the success of the direct selling association of Thailand. The research method consists of: population and sample tools used in the study data collection and data analysis.

##### **Populations and samples**

**The populations** are the salesman in the direct sales company. The company has joined the Thai direct selling association 9 companies are: 1 ) Joy and Coyne Corporation Co., Ltd. 2 ) Joy Mart Co., Ltd. 3 ) Star Sansine Co., Ltd. 4 ) Thai-German Untertak Products Co., Ltd. 5 ) O2 International Co., Ltd. 6 ) TRM Associated Co., International Co., Ltd. 7 ) Company Pudaeng 168 (Thailand) Co., Ltd. 8 ) Iyara Plannet Company Limited and 9 ) Gold Cat Marketing Co. , Ltd. The researcher cannot know the exact number.

**The samples** are a salesman in a direct sales company. There are 12 companies in the Thai direct selling association but they do not know the exact population. The researcher used the sample size by using the formula for the sample size in the case, which has a population of uncertain (Infinite population) (The Pigeon Rd, 2006: 46) were selected using a random sampling method quota (Quota sampling) by a ratio. For this questionnaire the sampling group consisted of 12 companies, 34 sampled companies and 400 samples.

##### **Tools used in the study.**

In this study, the tools used in this study were a questionnaire, which was constructed by collecting data, theories and related research. To get a questionnaire quality is the question about the marketing mix factors that influence the success of the Thai direct selling association.

### **Data collections**

The data is collected from two sources together. Primary data were collected using 400 questionnaires and secondary data studied data from relevant research papers researched and collected by government agencies and private sector as well as various reference theories associated.

### **Data analysis**

The researchers analyzed data from a survey by using computer program to determine statistically and using descriptive statistics to describe the data such as Mean and standard deviation.

## **5. Results/ Conclusion and Suggestion**

### **Marketing mix factors influencing business expectation of direct selling members**

Marketing mix factors influencing business expectation of direct selling members is importance of the overall level. On the other hand, the order of the mean was the product, followed by the personnel, followed by the physical characteristics. The second is the price, the process, distribution channels and the promotion side respectively.

Products, it is the importance of the overall level. On the other hand, the ranking of the average was found to be the most direct selling companies using modern tools and equipment. It is safe in the product; the second is the cosmetics used to see results in no time. Second is the variety of goods and it's a famous product respectively.

Price is important at a very high level. When considering each side, the order of the average was found to be the most purchased cosmetics cheaper than the convenience stores. The cosmetics purchased were inexpensive followed by cosmetics that were ordered at reasonable prices. The cosmetics have a clear price. The order can be paid by credit card.

Distribution channel, it is the importance of the overall level. On the other hand, the ranking of the mean was found to be the most convenient of the purchasing process followed by the fast delivery of the goods by the shop owner followed by the trustworthiness of the company and the second is the membership system to improve access and company or dealer easy to access in sequence.

The promotion is of medium importance. When considering each side, the order of the average was found that the most is the cosmetic shop, discounted price with members followed by the shop owner giving advice / consultation on the questions. To individual customers and the shop owner has organized activities for customers to participate, such as the popular vote to win prizes respectively.

Personality is important at a very high level. When considering each item, the order of the average was found to be the most sincere, attentive to all customers equally followed by good service quality and focus on customer satisfaction averages respectively.

Physical characteristic is importance of the overall level. When considering each side, the order of the average was found to be the most discounted price promotion with subscribers, followed by advice/consultation on various questions for individual customers and activities. Letting customers engage like vote for popular products in order to win prizes.



Process, it is the importance of the overall level. On the other hand, the ranking of the mean was found to be the most beneficial. The second most useful was the service safety and standards and service quality is fast respectively.

Consistent with the Chatyaporn Samerjai (2007 pages 51 - 55), said products and services determined whether the service strategy. It is in the business of producing goods or services. The visible, it is not a matter of what the seller gives to the customer. The concept is a strategy to offer quality products by telling the truth. By direct selling or solicitation, and buyers or subscribers can pay and receive the benefit of the agreement. Comply with the research Jirasak Thongklum (1997) studied the network and educational processes of direct selling members. It found that multi-layered direct selling systems were characterized by the creation and expansion of the network. Today many companies have adopted this marketing strategy. Because of it is a strategy to offer customers a relationship with customers in the form of kinship and people know each other. Anyway the trust is based on the basis. Involving or recommending a product or solicit membership is easier. This makes people less time to buy the daily necessities. It is a factor that encourages the direct sales business to prosper quickly and the finished goods we need product but no money to place quality product. If the customer is not satisfied can return and the customer also get the knowledge from dealers in the product details and techniques in how to use the product to get the most benefit.

## **6. Future Research**

### **1. Recommendations from the study.**

1. Products operators should maintain product quality standards. The price is clearly displayed in the sale. For customers to know about distribution channels should improve on the channel and promote more promotion to gain market share from other operators. Promotion should be a promotion. The promotion and promotion continues.

2. Management must create a compensation reward that meets the requirements. Membership in direct sales should be given. In the direct sales business there are more and more members and the members have made the business successful. Demand return there are a number of different ways to make a difference.

3. Create a clear expectation for the members. If you are dedicated to doing the work, it will work out well and the reward is very low. Companies can enhance motivation for the course members with more advanced training methods and how it works to make the company more successful.

### **2. Recommendations for the next research.**

1. Researchers have defined the sample in Bangkok area. However, members of business activity direct is selling a broad nationwide, so there should be a research member direct sales in other areas with which the findings. The difference may be from members living in Bangkok. The results will be used to fully utilize the market targeted audience.

2. Market competition is quite high with similar products make new contestants. The market share continues to hold. The proposal is proposed in the next research should study the marketing strategies. This is a guide to increase marketing goals.

## **Acknowledgements**

Thank you for all support from faculty, Dean of Graduate School of Business and to all of the helpful staff at Sripatum University.

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**Factors Affecting Consumer Behaviors Changes on Food Consumption**



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## Abstract

This study is done to develop the present know ledge on consumer behavior, in buying and consuming food products, of people living in large cities of Thailand. The study is done by reviewing the present literatures and the popular theoretical frameworks: the black box model of consumer behavior (Phillip Kotler, 2004). The study showed several factors that affect consumers' daily activity leading to the change in consumer buying behavior and consumption pattern on ready-made foods: Product factor, Time factor, Work factor, Convenience factor, Residential factor; leading to consumer buying process. Thus, being able to explain the factors that affect the consumption.

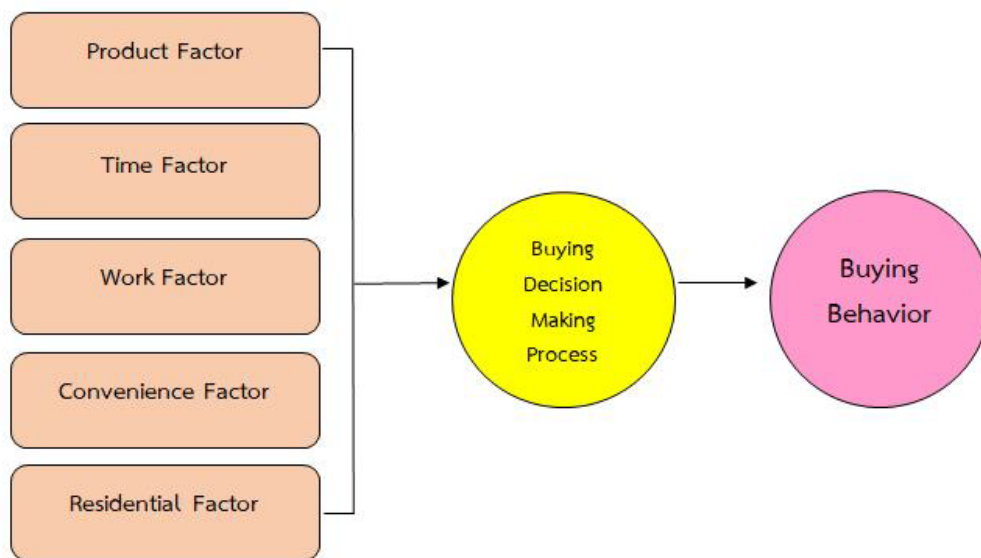
**Keywords:** Consumer behavior, Ready-Made Food, Consumption

## 1. Introduction

Since the Thai government has adopted the First National Economic and Social Development Plan in 1961, Thailand has evolved from a self-reliant agricultural country into a capitalist economy resulting in altering from social support into daily competition and struggling to bring comfort into family and household. The struggles in acquiring purchase power by individuals are for self and family comfort result in increased expenditures. From the above factors, results in migration of labor abandoning farming and agriculture to move to the cities to be employed in industrial and service sectors in the hope that they would make better income and living from these sectors employments. The influx of workers from rural to large cities leads to high density of jobs competition. Factors such as nature of work, distanced work places, crowded household and increased in cost of living, leading to change in consumer living behavior. One of the changing in consumer behavior is food consumption from cooking their own food to consuming ready-made food. This result in continuous growth in types of ready-made food products and brands in food markets, regardless restaurants and food shops. It is remarkable that limitations in growing daily activities can be factors stimulating the consumption of ready-made food. At the same time, various appliances, such as microwave ovens, have improved household equipment, while people themselves have shown to become less and less skilled at preparing meals (Berry et al. 2002, pp. 1-17; Olsen et al. 2009, pp. 762-783). The demand for food products is gradually increasing, which is why understanding consumer behavior in the convenience food market is an important issue (Brunner, Van der Horst, Siegrist 2010, pp. 498-506). Meanwhile place of habitant and cooking are becoming smaller which causes cooking activities to be difficult. Therefore, consumer started to adapt their food consumption culture from cooking activities into simple cooking or warning the ready-made food instead. Moreover, time limitation factor due to increasing number of daily activities had become the element that allows consumers in choosing to save time on cooking main dishes and consume ready-made food instead. Modern "convenience food" is designed in a comprehensive way that includes not only the recipe, processing and

preservation of food ingredients, but also the type of packaging material, packaging system, type of packaging, recommended storage and preparation for consumption (Adamczyk 2010, pp. 5-13; Dąbrowska and Babicz-Zielińska 2011, pp. 39-46).

## 2. Conceptual Framework



**Figure 1** Conceptual Framework of consumer buying behavior

The above conceptual framework is designed based on Philip Kotler Consumer behavior black box model. Referring to the Black Box Model of consumer behavior the author could extract the relevant factors into 4 factors which affect consumers' buying behavior of ready-made food.

Food is considered one of the four important factors in human life. Social change has led to a dramatic shift in the behavior of food consumption in Thailand, due to change in demanding employment hours and lifestyle. The five most important reasons for the consumption of ready-made food, ordered on the basis of the frequency sum of fairly decisive and very decisive, were that the respondents were pressed for time, liked the taste, were very hungry and wanted something quickly, were too tired to cook or didn't want to cook. (Mia K. Ahlgren, Inga-Britt Gustafsson and Gunnar Hall, *International Journal of Consumer Studies*, 29, 2005 : 489). Currently demanding lifestyle led to changing in food consumption behavior and the consumption trend was influenced by the Western society. The cause of change in food consumption behavior is due to several factors such as products factor, time factor, work factor, convenience factor and residential factor. The elaboration could be as follows.

### Product Factor

Nowadays, food business has been developed using various technologies both in the processing and production activities to meet the rapid changing in consumers' needs. The ready-made food are type of products which help to reduce the cooking time of consumers by relying on modern production technology and also ability to maintain nutrition and taste of food. Food choice is

a very complex process, and various models to describe it have been developed. These models usually assume that the person who makes the choice is also the one who will eat it. It is assumed that the individual is affected by, e.g. physiological, psychological, monetary and situational factors (Pilgrim 1957; Cardello 1994; Furst et al. 1996).

### **Time Factor**

The present livelihood are being enslaved by haste, cooking cultures are replaced with fast food and ready-made food. The hustle does not meant only hastening the current lifestyle but it also means hastily consumption and result in the production rush (Aomjai Wongmontha, The haste living culture, 2018 : 1). Time factor became a stimulus for food consumption behavior and culture from self-preparation and cooking into buying ready-made food. When people get lesser personal time at home, the cooking activity became time consuming and inconvenient, variety of ready-made food products became better consumption option. When people involved in lesser activity in cooking, their cooking skills tend to reduce (Marketing & Branding, 2010 : P 93) and eventually ready-made food would become better option in taste, production standard as well as time saving.

### **Work Factor**

Under the rapid growth in economy, technology and social conditions, working competitions are becoming more intense. Socio-economic growth has resulted in cultural change in the workplace, current social situation in the city showed that people spend more time in the office than at home and some spend private time to work too (Urban Society, October 2017). The object value society also results in people sharing their free time working on the second jobs. The over growing daily working period made the consumption activities to be hasten and it became factors that reduce food consumption time and rushing consumption. When work and working environments led to an unfavorable condition for consumers to eat on time, the simple cooking process has replaced the traditional cooking culture.

### **Convenience Factor**

Consumer behavior has changed due to time constraints and work habits. When daily activities are growing more hustle, consumers tend to search for more convenience and that became consumers' wants. Consumers have more value for convenience, which is influenced by their work and daily rushing activities, consumption of food on private vehicles or public transport also has increased steadily. From the rushing situation, arise the requirements and influence of ready-made food market. Due to the rapid technological advancement, food production and consumption patterns became different (Manopramote, W., M.B.A., February 2015, Graduate School, Bangkok University) because they shorten and make consumption pattern easier.

### **Residential Factor**

As cities and towns continue to grow in population and expand in physical terms, the conditions of housing in urban areas have continued to evoke considerable concern (Conference of the International Journal of Arts & Sciences, 2015). The limitation on the size of the residential is another factor that causes consumers to reduce their cooking activities. Residential style varies from houses to high buildings. As number of households and residences increase, the living area become limited and expensive. Therefore, leading to reducing in residential sizes and area such as condominiums, lodging, flat, etc. These types of residential has limited living space and some of them do not have kitchen. In addition, safety restrictions in the residents like condominiums, lodging

and flats make it more prohibitive and restrictive in residential buildings to actually cook their own food, due to safety reasons, therefore, consumer started to adapt consumption habit to consume ready-made food.

### **Buying Decision Making Process**

The final process in which the customer has considered the factors, he will choose to purchase what meets his needs best (Jetsadaporn SornSrikerd, 2012). The decision to choose a brand from the store, time and volume, to buy more or less depends on size of the demand. In this process consumers will gather various stimulants to make buying decision on ready-made food from stores or brands that they trust or have good perception on either store or brand. Decision making would generally base on consumption safety and taste. However, a number of additional factors often intervene before a purchase can be made (Sheth, 1974). The extend to which the negative attitudes of others will reduce a consumers' favorable attitude depends on two things: the intensity of others' negative attitudes and the consumers' motivation to comply with others' wish (Fishbein, 1967), for example, if attitudes of others towards particular types of ready-made food whether on quality or taste is negative the effect on consumers' decision on buying will reduce drastically (John Roberts 1992: P 27-28).

### **Buying Behavior**

The above factors affect the decision-making process of consumer behavior on ready-made food products. Consumer would adopt behaviors based on the experience of consuming certain types of ready-made food. Consumer expectations can be identified by the following factors:

- i. *Expectations in the convenience:* time and space limitations affect the cooking activities of consumers and, therefore, leading to the search on reducing cooking time and activities. According to Sloan, cooking at home is seen as a chore, and meal preparation is considered a very time-consuming activity. (M.K. Ahlgren et al. 2015 : 485).
- ii. *Expectations in food taste:* although the products are said to be ready-made food but consumers' expectations for food taste can also influence the consumer's next buying behavior. The unsatisfactory food taste will not be considered for the next option. However, the unsatisfactory taste of food did not result the abandoning of ready-made food consumption by consumers but they would go for another choice of ready-made food instead.
- iii. *Expectations on nutrients:* Although consumers understood the cooking characteristics of ready-made food but they would still expect some nutrition from the consumption. This is because expectations from the technology developed, most consumers are convinced that even if the ready-made food are cooked for a while. However, manufacturers can apply production technology to preserve food nutrients.

### **3. Conclusion**

The continuous development of the Thai government that leads Thailand to become more advanced in technology and modern communication. With the said development, Thailand has stepped into a capitalist economy and could attracts people from the countryside to flood into large cities in the hope of employment. With the over flowing immigration from countryside to large cities, it creates many troubles such as residential congestion (slum), health problems, crime issues, cost of living issues, etc.



As a result, people have higher living expenses, so they started to adopt some behaviors in the need to survive. One of the adopted habits is food consumption behavior. It appears that many people started to adopt behavior of ready-made food consumption. The factors affecting consumer behaviors changes on food consumption are product factor, time factor, work factor, convenience factor and residential factor. These factors have a great impact on the decision to buy ready-made food products. With following elements people built their buying decision: convenience, food taste and food nutrients. The present consumption of ready-made food is being influenced by the Western culture. Food consumption patterns are highly cultural (Mattsson & Helmersson 2007), and what is seen as food in one culture may not be seen as appropriate in another.

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## Communication Arts

**RCGR<sup>2nd</sup>  
2018**



0014

**Factors and Satisfaction Exposure Apply Avail of  
Followers in Facebook Fanpage “Write Feelings”**



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# **Factors and Satisfaction Exposure Apply Avail of Followers in Facebook Fanpage “Write Feelings”**

by

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## **Abstract**

A Study of factor and satisfaction exposure apply a avail of followers in Facebook Fanpage "Write Feelings" is intended to study Factors and Satisfaction that apply avail of followers in the Facebook fan page. "Writing feelings" is intended to study demographic characteristics. Behavior of using Facebook and communication factor Participation Factors and the satisfaction of the followers of the Facebook "Write Feelings" page is a quantitative research having 400 sets. It is tool to collect data from the sample group of people who like Facebook "Write Feelings" pages. The hypothesis is a t-test type one-way ANOVA. If there is a difference, it will be compared by using the LSD method and the Multiple Regression Analysis (MRA).

**Keywords:** Satisfaction, Facebook, Write Feelings

## **1. Background and Signification of the Research Problem**

Communication in the online era has begun to affect to many people. Making people start to pay attention to the Internet a lot. At present, there are many online media types that allow people to post both their own stories and other people stories to make people on the Internet to see and also comment with their own opinions. The top four popular online programs are Facebook, YouTube, Instagram and Twitter, respectively. The top four popular online programs are Facebook, YouTube, Instagram and Twitter, respectively. After presenting the various stories, It appears that a lot of people are interested since the founding of Facebook fan page named "Write Feelings" to date. June 7, 2018. There are people expressing feelings, forward, comment and with 143,582 followers. The researcher is curious what is the communication factor and what is the satisfaction of those who like it. Why are people interested in a "Write feeling" page? and the researcher is interested in the stories in the page, why people are so responsive and interested so the researcher will be able to work on topics that the researcher wishes to do the "Write Feelings" book and to create a website. Thai handwriting letter that the researcher would like to conserve to this Study will be a good guide in doing on the researcher's desire.

### *Objectives*

1. To study demographic characteristics that exposure apply avail of followers in Facebook Fanpage "Write Feelings"
2. To study the behavior of Facebook's followers in facebook fan page "Write Feelings" that apply avail of followers in Facebook Fanpage "Write Feelings"
3. To study the communication factors facebook's followers in fan page "Write Feelings "that apply avail of followers in Facebook Fanpage "Write Feelings"
4. To study the participation factors facebook's followers in fan page "Write Feelings "that apply avail of followers in Facebook Fanpage "Write Feelings"
5. To study the satisfaction factors facebook's followers in fan page "Write Feelings "that apply avail of followers in Facebook Fanpage "Write Feelings"

## **2. Concept, Theory, and Related Research**

A Study on factor and satisfaction exposure apply avail of followers in Facebook Fanpage "Write Feelings". The researcher studied theoretical concept throughout the relevant researchs to be a guide in a Study as following, concept of demographic characteristics, the concept of the behavior of using Facebook, the concept of communication factors, the concept of participation factors, the concept of satisfaction, Concepts and theories related to perception and relevant research.

## **3. Research Methodology**

A Study of "Factor and satisfaction exposure apply avail of followers in Facebook Fanpage "Write Feelings". This research is a survey research using a Quantitative Research method by having a Questionair as a research tool to collect and process data from a computer program by having details of population and sample group, research tools, formalating research tool, how to collect data, details of the research are as follows.

### *Population*

The population for this Study are male and female population who follow a Facebook page 143,582 people to date on June 7, 2018.

### *Sample Group Size*

The sample group size is determined by the TARO YAMANE table = 398.889 so the researcher set the sample group size to 400 people and the randomize as follows. This research has 400 targets and divide in 5 %of deviation and 95% of reliability. The research set a sameple group by using TARO YAMANE table.

### *Random Sampling*

The researcher uses Convenience Sampling from 400 people. Selecting a sample group by studying population who comment on the Write Feeling page . By asking them to fill up the online questionnaire via the page and the researcher will support in case of having question or confusion.



## Data Collection procedure

Data Source by collecting data in 2 type as following:

Primary data is to make questionnaire to use to collect data for 400 sets from the sample group who comment on Write Feeling page by asking them to fill out a questionnaire online via Facebook fan page, Write Feeling. The researcher will support in case of having question or confusion.

Secondary data is a documentary source. The research collected data by gathering related theoretical concept to a Study Behaviour from factors and the satisfaction that exposure apply avail of followers in Facebook Fanpage "Write Feelings" Collecting from the library of Sripatum University and resources from the Internet.

## 4. Results Analysis

1. Personal Factors of the Respondents, the majority of the respondents are female (204 persons) or 51% and male (196 persons) or 49%, age between 36-140 years old(139 person) or 34.8% following by age between 31 - 35 years old (69 persons) or 17.3% and the last is age between 46-50 years old (29 person) or 7.3%, single (311 persons) or 77.8 percent, following by the marriage (88 persons) or 22% and the last is divorce 1 person or 0.3%. Bachelor degree 174 persons or 43.5% following by master degree 124 person or 31% and High School / Vocational 1 person or 0.3%, government official / state enterprise employees 153 persons or 38.3%, following by private company employee 109 person or 27.3% and the last is others 2 persons or 0.5%, monthly income is between 15,000 - 25,000 baht for 161 persons or 40.3% following by 25,000 -35,000 baht 97 persons or 24.3% and the last is 35,001- 45,000 baht 2 person or 0.5%.

2. Information of respondents regarding Facebook followers' behavior in Facebook "Write Feeling" page is as follows:

Behavior factor of using facebook, the overall is at a high level ( $\bar{X} = 3.60$ ). When consider in each aspect, it found that the frequency of using facebook is at the highest ( $\bar{X} = 3.78$ ), followed by the frequency of daily use of Facebook ( $\bar{X} = 3.72$ ). The last is average time of using Facebook ( $\bar{X} = 3.17$ ). The time to use Facebook, overall is at a medium level ( $\bar{X} = 3.17$ ). When consider in each aspect, it found that between 18.01-24.00 hours is the highest ( $\bar{X} = 3.81$ ) and following by between 12.01-18.00 hours ( $\bar{X} = 3.44$ ) and the last is between 00.01-06.00 ( $\bar{x} = 2.31$ ). On the device that use Facebook application, the overall is at a high level ( $\bar{X} = 3.66$ ). When consider in each aspect, it found that using Facebook via smartphones is the highest ( $\bar{X} = 4.61$ ), followed by using Facebook via computer ( $\bar{X} = 3.36$ ), and last is using Facebook via Tablet or iPads has ( $\bar{X} = 3.01$ ). The reason why using Facebook, the overall is at a high level ( $\bar{X} = 3.57$ ). When consider in each aspect, it found that using Facebook for entertain, relax is at the highest( $\bar{X} = 4.19$ ) followed by using Facebook for motivation ( $\bar{X} = 3.73$ ). and the last is for post their story ( $\bar{X} = 2.91$ ). Frequency of daily use of Facebook, the overall is at a high level ( $\bar{X} = 3.72$ )( $\bar{X} = 3.98$ ) When consider in each aspect, it found that using Facebook 1 - 10 times ( $\bar{X} = 3.98$ ), followed by 11-20 times ( $\bar{X} = 3.75$ ). and the last is more than 20 times ( $\bar{X} = 3.45$ ). Frequency of the day that use Facebook the most, the overall is at a high level ( $\bar{X} = 3.78$ ). When consider in each aspect, it

found that Friday is at the highest level ( $\bar{X} = 3.98$ ), followed by Saturday, ( $\bar{X} = 3.88$ ), and the last is Thursday, ( $\bar{X} = 3.68$ ).

3. Information of the respondents about followers' communication factors in the Facebook fan page "Write Feeling", the overall is at a high level ( $\bar{X} = 4.18$ ). When consider in each aspect, it found that the Handwriting letter is the highest level ( $\bar{X} = 4.42$ ), followed by the article ( $\bar{X} = 4.24$ ). and the last is video clip ( $\bar{X} = 3.98$ ). The level of followers's communication factor in article aspect, the overall is at a high level ( $\bar{X} = 4.24$ ). When consider in each aspect, it found that the article that use correct gramma is at the highest ( $\bar{X} = 4.31$ ), followed by the content of articles that can be used in real life ( $\bar{X} = 4.29$ ). The last is the article that has a touching content ( $\bar{X} = 4.12$ ). Peoms aspect, the overall is at a high level ( $\bar{X} = 4.07$ ). When consider in each aspect, it found that the poem is useful to the society and should be continued and it is at the highest level( $\bar{X} = 4.21$ ), followed by the content of the poem that can use in real life ( $\bar{X} = 4.15$ ) the last is the poem that has a touching content ( $\bar{X} = 4.12$ ). Picture aspect, the overall is at a high level ( $\bar{X} = 4.16$ ). When consider in each aspect, it found that there is an understanding of the communication via picture and it is at the highest level ( $\bar{X} = 4.29$ ). Followed by the picture that beneficial to society. ( $\bar{X} = 4.13$ ) and the last is the piture that reflect emotions and feelings ( $\bar{X} = 4.11$ ). The handwriting letter aspect, the overall is at a high level ( $\bar{X} = 4.42$ ). When consider in each aspect, it found that the handwriting is unique. and it is at the highest mean ( $\bar{X} = 4.59$ ), followed by handwriting letter to be conserved ( $\bar{X} = 4.40$ ). The last is a Handwriting is beautiful ( $\bar{X} = 4.37$ ). Video clip, the overall mean is at a high level ( $\bar{X} = 3.98$ ). When consider in each aspect, it found that the Video clip that has a touching content is the highest ( $\bar{X} = 4.43$ ), followed by video clip content that can use in real life ( $\bar{X} = 3.87$ ). The last is the quality, beutiful and easy to understand ( $\bar{X} = 3.79$ ).

4. Information of the respondents on the participation factor of the followers in the Facebook fan page "Write Feeling", the overall is at a high level ( $\bar{X} = 4.22$ ). When considered in each aspect, it found that the participation factor of followers is at the highest ( $\bar{X} = 3.62$ ). Followed by comment ( $\bar{X} = 3.32$ ),the last is sharing ( $\bar{X} = 3.07$ ) and the expression aspect is at a high level ( $\bar{X} = 3.15$ ) when consider in each aspect, It found that clicking "Like" is the highest level( $\bar{X} = 3.91$ ). Followed by clicking "Love" ( $\bar{X} = 3.42$ ) and the last one is clicking "shock" ( $\bar{X} = 2.77$ ). Sharing, the overall is at a meduim level ( $\bar{X} = 3.07$ ). When consider in each aspect, it found that sharing to their own facebook page is the highest level ( $\bar{X} = 3.58$ ) followed by sharing to their own Facebook page ( $\bar{X} = 2.94$ ) and the last is clicking the "shock" icon ( $\bar{X} = 2.86$ ). Comment, the overall is at a meduim level ( $\bar{X} = 3.32$ ). When consider in each aspect, it found that the followers do not like to comment but like to read comments is the highest level ( $\bar{X} = 3.82$ ), followed by always comment ( $\bar{X} = 3.30$ ). controversial Comment( $\bar{X} = 2.93$ ). Follow, the overall is high level ( $\bar{X} = 3.62$ ). When consider in each aspect, it found that always follows is the highest level ( $\bar{X} = 3.73$ ), followed by recommend to friend ( $\bar{X} = 3.52$ ).

5. Information on respondents of satisfaction factor level of followers in facebook fan page "Write Feeling", the overall is at a high level ( $\bar{X} = 4.04$ ). When consider in each aspect, It found that the satisfaction of handwriting letter is the highest ( $\bar{X} = 4.21$ ) Followed by satisfaction of the poem.( $\bar{X} = 4.13$ ) and the last one is the satisfaction of video content ( $\bar{X} = 3.84$ ).

6. Information of the respondents apply avail of followers in facebook fan page "Write Feeling" , the overall is at a high level ( $\bar{X} = 4.07$ ). When consider in each aspect, it found that articles, poems, picutes, handwriting letter, VDO Clip that appeared on "Write Feeling" page is at the highest level ( $\bar{X} = 4.14$ ). Followed by articles, poems, picutes, handwriting letter, VDO Clip that appeared on "Write Feeling" page that can be used in a real life ( $\bar{X} = 4.11$ ) and the last is articles, poems, picutes, handwriting letter, VDO Clip that appeared on "Write Feeling" page to be reserved. ( $\bar{X} = 3.91$ )

## 5. Discussion

Hypothesis 1 The different demographic characteristics differently apply avail of followers in Facebook Fanpage "Write Feelings". The results show that age, status, education, occupation and monthly income apply avail of followers in Facebook Fanpage "Write Feelings" according to a Study of Pitchayawee Kanapol (2010). A Study of attitude application and satisfaction of the communication via social networks. Case studies of students and staffs at Chalerm Kanchana College. Phetchaboon.

Hypothesis 2, the diefferent behaviors of the Facebook follower in "Write Feeling" page differently apply avail of followers in Facebook Fanpage "Write Feelings" Test of the hypothesis by multiple linear regression analysis found that the overall behaviors of using Facebook apply avail of followers in Facebook Fanpage "Write Feelings" according to A Study of Nucharee Panthong (2012). A Study of Factor influencing behavior of using social networking in Bangkok.

Hypothesis 3, the different behaviors of the Facebook followers in "Write Feeling" page apply a avail of followers in Facebook Fanpage "Write Feelings". Test of the hypothesis by multiple linear regression found that communication via facebook fan page contists of articles, poems, piicture, writing letter and VDO clips apply avail of followers in Facebook Fanpage "Write Feelings" according to a definition of facebook on Wikipedia (2012) indicated that Facebook is a social network media that service through website to connect between each person who have their own social network over the internet.

Hypothesis 4, the different of participation factor of facebook's followers of Write Feeling page in Facebook fan page differently apply avail of followers in Facebook Fanpage "Write Feelings". Test of the hypothesis by multiple linear regression analysis found that the overall participation factor of the followers in Facebook consisted of: expression, sharing, comment and the follow apply avail of followers in Facebook Fanpage "Write Feelings" according to A study of Chutamane Kyanant (2011) A study of behavior and impact of online social network. The purpose is to know the characteristics. Demographic Behavior of using Facebook via social network and the impact from using social networking.

Hypothesis 5, the different of satisfaction of followers Write Feeling page differently apply avail of followers in Facebook Fanpage "Write Feelings. Test of the hypothesis by multiple linear regression analysis found that the overall satisfaction factor of followers in Facebook apply avail of followers in Facebook Fanpage "Write Feelings" Page according to a Study of Boonyu korPornprasert (2557) A Study of Behavior of using Facebook in Bangkok.

Hypothesis 6 demographic characteristics Behavior of using Facebook. Communication factor, Participation Factors and satisfaction is related to apply avail of followers in Facebook Fanpage "Write Feelings. Test of the hypothesis by multiple regression analysis showed that the

overall of demographic characteristics, behavior of using Facebook, Communication factor, Participation factors and Satisfaction is related to apply avail of followers in Facebook Fanpage "Write Feelings". According to a Study by Thipatra Pengchan (2011). The motivation of high school students to the Use of Social Networking of [www.facebook.com](http://www.facebook.com).

## **6. Recommendation**

From a study of the demographic characteristics of Facebook's followers of "Write Feelings" page. Most of them are female, age between 36-40 years old, single, bachelor degree, Government officer/state employees and monthly income between 15,001-25,00 baht, so the development of "Write Feelings" page should be consistent with the target group in terms of gender to meet this target group, satisfaction of using facebook will make the target to return to the website, such as the beautiful design and easy to use. Accessible from multiple devices with complete information and fast.

In the study, factors and satisfaction exposure apply avail of followers in Facebook Fanpage "Write Feelings" should have both English and Thai language because users are worldwide. Therefore there should be a research in wide are of both Thai and foreigners. to make the data more accuracy and should study and research on the problems and the disadvantages of using the Facebook Fanpage "Write Feelings" page is to prevent further social problems.

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**The Study of Satisfaction of Tourist Behavior of Public Relations  
Strategy of EcoTourism, Kung, Bangkachao, Samut Prakan**

**RCGR<sup>2nd</sup>  
2018**

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# **The Study of Satisfaction of Tourist Behavior of Public Relations Strategy of EcoTourism, Kung, Bangkachao, Samut Prakan**

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## **Abstract**

Research of "A Study of Satisfaction of Tourist Behaviors of public relations strategy of ecotourism Kung Bangkachao, Samut Prakan Province" aims to study the demographic characteristics that affects the satisfaction of tourist behavior of public relation strategy of ecotourism, Kung Bangkachao, Samut Prakan Province and to study travel behavior by public relations of Kung Bangkachao, Samut Prakan Province that affects the satisfaction of tourist behaviors of public relation strategy of ecotourism, Kung Bangkachao, Samut Prakan Province. This study collected 400 samples and used a questionnaire as a research tool. It found that the difference of gender, age, status, education and average monthly income affects differently to the Satisfaction of Tourist Behaviors of public relations strategy of ecotourism Kung Bangkachao, Samut Prakan Province. However a difference of an occupation make a different effect on the Satisfaction of Tourist Behaviors of public relations strategy of ecotourism Kung Bangkachao, Samut Prakan Province. The demographic characteristics does not correlate with the Satisfaction of Tourist Behaviors of public relation strategy of ecotourism Kung Bangkachao, Samut Prakan Province but Tourist Behaviors of public relation strategy of ecotourism Kung Bangkachao and the ecotourism Kung Bangkachao, Samut Prakan province are related to the satisfaction of tourist behavior.

**Keywords:** Satisfaction, Public Relation Strategy, Eco Tourism Kung Bangkachao Samut Prakan

## **1. Introduction**

Tourism industry has an important role in the economic development of many countries around the world so governments of each countries have focused on enhancing their competitiveness in order to get the market share in global travel market. Especially Asian countries have set a marketing strategy to attract more tourists from all over the world. Therefore, the tourism mission is to be included in country development in all dimensions (Ministry of Tourism and Sports: 2015-2017).

Thailand realizes the importance of tourism as a key mechanism to maintain stability and driving country's economy. The National Tourism Board has developed a national tourism development plan to be the master plan for tourism development of the country. Past overall operation has been achieved in terms of a number of tourist and income from tourism industry, however in terms of product and service development found that there are several limitations to achieving a set goal which reflect Travel and Tourism Competitiveness Index of World Economic Forum or WEF. In 2013, Thailand's tourism competitiveness is ranked 43 out of 140 countries, or 9 out of 25 in the Asia-Pacific region. Travel and tourism standards remain the key weakness in Thailand and the second weakness is the availability of infrastructure and business environment. (Ministry of Tourism and Sports: 2015-2017)

Public relations will be used to promote products, personnel, places, concepts, and activities of the organization, such as business that uses public relations to revive customer interest. Using public relations to attract tourists or investors to visit or invest in the country or the company uses public relations to deal with the crisis caused by the misconception in the product of the user, etc.

Public relations will help individuals, organizations, and places to pass on their identity to a larger audience in a shorter amount of time effectively. So that the target audience will have exposure behavior and response to identity communication. In different ways, depending on the type of media used in public relations, such as personal media, internet and printing media. Therefore, individuals, organizations and places should emphasize to the use of Public relations.

Green lung or it is well known as the "green area" is a large famous green area for being the lung of Bangkok people. It is an important natural heritage in terms of the traditional farming conservation area of the Chao Phraya River. In addition, the ecosystem is diverse due to the influence of a fresh water from Chao Phraya River and the Gulf of Thailand. It has been said that the ecology of the green area at Bangkachao is an ecosystem.

From the importance of tourism and public relations as mentioned above. Nowadays, there are individuals, organizations and places are using self-public relations strategies in order to be more well known to the target group as well as the related organization in the ecotourism Kung Bangkachao, Samut Prakan province that place an importance on the use of public relations to be well known and attract tourists to travel and experience the beautiful ecotourism and various attractive places. For this reason, the researcher is interested in A Study of Satisfaction of Tourist Behaviors of public relations strategy of ecotourism Kung Bangkachao, Samut Prakan Province" topic.

### *1.1 Objectives*

1. To study the demographic characteristics that affects the satisfaction of Tourist Behaviors of public relations strategy of ecotourism Kung Bangkachao, Samut Prakan Province.
2. To study tourism behavior with public relations of Kung Bangkachao, Samut Prakan Province that affect the satisfaction of tourist behavior of public relations strategy of ecotourism Kung Bangkachao, Samut Prakan Province.
3. To study the ecotourism Kung Bangkachao, Samut Prakan province, which affect the satisfaction of tourist behavior of public relations strategy of ecotourism Kung Bangkachao, Samut Prakan Province.



## 1.2 Hypothesis

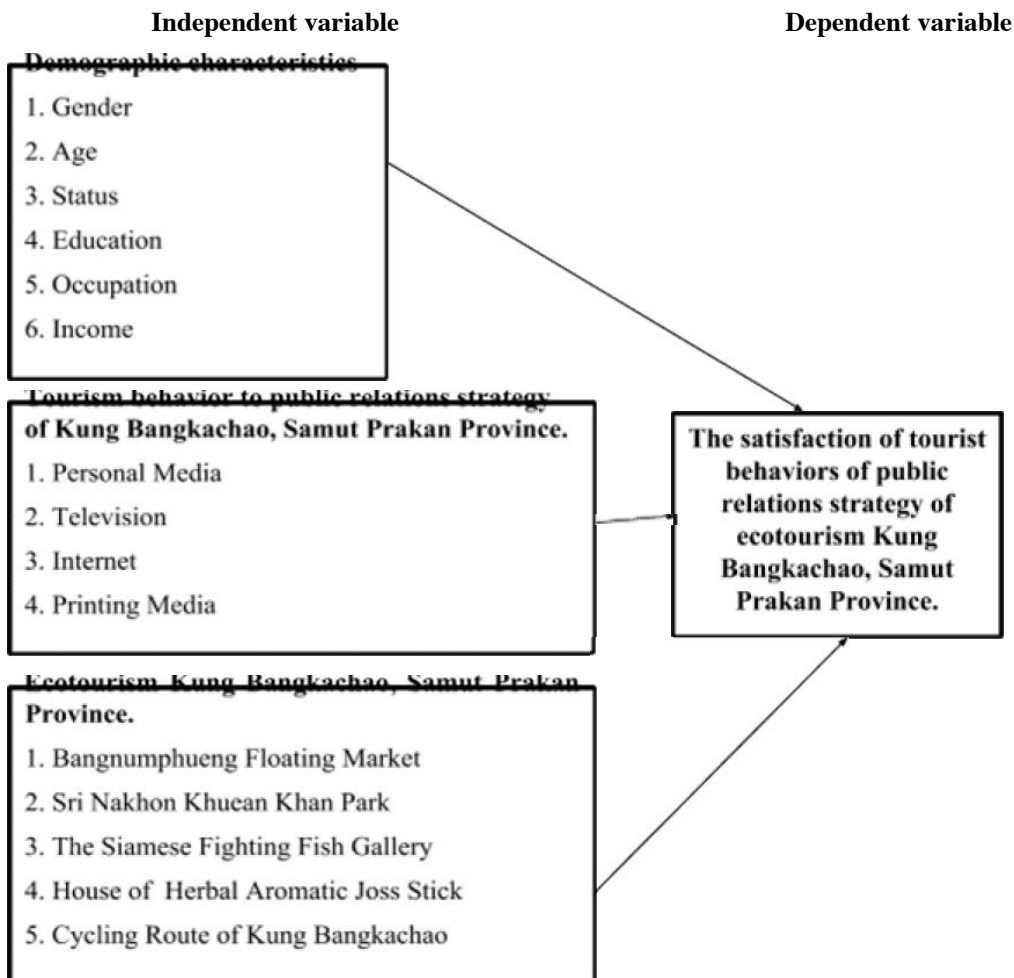
1. The different between demographic characteristics differently affect to the satisfaction of tourist behavior of public relations strategy of ecotourism Kung Bangkachao, Samut Prakan Province.

2. Tourism Behaviors with public relations of Kung Bangkachao, Samut Prakan Province affects the satisfaction of tourist behaviors of public relation strategy of ecotourism Kung Bangkachao, Samut Prakan Province.

3. Ecotourism Kung Bangkachao, Samut Prakan Province affects the satisfaction of tourist behavior of public relations strategy of ecotourism Kung Bangkachao, Samut Prakan Province.

4. Demographic characteristics, tourism behaviors of Kung Bang Kachao. Samut Prakan province and ecotourism of Kung Bangkachao, Samut Prakan Province is correlated with the satisfaction of tourist behaviors of public relations strategy of ecotourism Kung Bangkachao, Samut Prakan Province.

## 1.3 Conceptual Framework



## 2. Literature review

A Study of the satisfaction of tourist behaviors of public relations strategy of ecotourism Kung Bangkachao, Samut Prakan Province. The researcher studies document and related research as following

1. The concept of demographic characteristics.
2. The concept of tourism behavior of public relations strategy of ecotourism Kung Bangkachao, Samut Prakan Province.
3. The concept of ecotourism Kung Bangkachao, Samut Prakan Province.
4. Concepts and theories of communication.
5. Concepts and theories of satisfaction.
6. Concepts and theories of perception.
7. Related documents and research.

## 3. Research Methodology

"A Study of the satisfaction of tourist behaviors of public relations strategy of ecotourism Kung Bangkachao, Samut Prakan Province" is a survey research using a quantitative analysis by using questionnaire as a research tool to collect and process data from computer programs. Details of the research as following

### 3.1 Population

The population in this study are male and female tourist who come to travel to the ecotourism Kung Bangkachao, Samut Prakan Province.

### 3.2 Sample Group

Sample group are male and female tourists who come to travel to the ecotourism Kung Bangkachao, Samut Prakan Province by randomized as a purposive sampling method from a sample group of population.

### 3.3 Sample Group Size

The researcher have determined a sample group by calculating from taro yamane table.

$$n = \frac{N}{1 + Ne^2}$$

n = a number of sample group

N = population size

e<sup>2</sup> = deviation of sample = 0.05

The acceptable deviation of sampling random is 5% as following formula.

$$\begin{aligned} n &= \frac{1,875,955}{1 + 1,875,955 (0.05)^2} \\ &= 399.914 \end{aligned}$$

Therefore the researcher set the sample to 400 people and randomize a sample group as following. This study has 400 people of a sample group and divide to the sample group with 5% deviation and 95% reliability by using Taro Yamane table.

### 3.4 Research Tools

The tools used in this study is Close-ended questions and open-ended questions covering the needed study topics 5 parts as following

Close-ended questions and open-ended questions consists of 5 parts as following

Part 1: General question about demographic characteristics.

Part 2: A question about opinions on the tourist behaviors of public relations strategy of ecotourism Kung Bangkachao, Samut Prakan

Part 3: A question about the ecotourism's opinions of Kung Bangkachao, Samut Prakan.

Part 4: A question about opinions on the satisfaction of tourist behaviors of public relations strategy of ecotourism Kung Bangkachao, Samut Prakan

Part 5: Additional Recommendation

### 3.5 Data Collection

The Researcher collected data from the sample group. The data collection method is to collect the questionnaires at the actual place. From tourists who visited the ecotourism Kung Bangkachao, Samut Prakan Province. The researcher clarified the source and purpose to the sample group including how to collect data to have the same understanding. The data collection period is from December 2017 to December 2018.

## 4. Conclusion

### **Part 1: Demographic characteristics.**

Most of the sample group is female which has 231 people or 57.80%, age between 25- 30 years old 132 people or 33%, single 256 people or 64%, bachelor degree/equal 185 people or 46.2%, private company employees 151 people or 37.8%. Monthly income between 10,000 – 30,000 baht 184 people or 46%.

### **Part 2: the tourist behavior of public relations strategy of ecotourism Kung Bangkachao, Samut Prakan.**

The sample group has overall opinions on tourism behavior of the public relations of Kung Bangkachao, Samut Prakan Province in a high level (= 3.75, S.D. = 0.74). Tourism behavior by perceiving news from television is the highest (= 3.97, SD = 0.83). and following by the personal media (= 3.94, S.D. =0.83) and internet (= 3.91, SD = 0.92) and printing media (= 3.79, SD = 0.97).

Opinions on the tourist behavior of public relations of Kung Bangkachao, Samut Prakan: Overall is at a high level (= 3.86, S.D. = 0.62). Opinions on the tourist behavior of public relations of Kung Bangkachao, Samut Prakan. Internet is the highest level (= 3.99, S.D. =0.72) And following by a personal media(= 3.86, S.D. = 0.78), Television (= 3.77, S.D. = 0.69) and printing media (= 3.77, S.D. = 0.69)

Opinions on the tourist behaviors of public relations of Kung Bangkachao, Samut Prakan: The personal media was at the high level (= 3.86, S.D. = 0.78) Opinion by each aspect, Personal media of public relations of Kung Bangkachao Samut Prakan Province giving a explanation and

interesting content and the personal media is reliable with highest level (= 3.91, S.D. = 0.89) and (= 3.91, S.D. = 0.91) Following by percieving a personal media of Kung Bangkokachao Samut Prakan province can encourage the tourist to come to visit (= 3.84, S.D. = 0.93) and the Personal media can give the useful information of Kung Bang Kachao, Samut Prakan Province effectively (= 3.81, S.D. = 0.97)

Opinions on tourism behavior with public relations of Kung Bangkokachao, Samut Prakan province: the television is at a high level (= 3.86, S.D. = 0.78). by the opion in each aspect, TV media has often published Kung Bangkokachao, Samut Prakan province at the highest level (= 3.87, S.D. = 0.91), following by television can encourage tourist to come to visit Kung Bangkokachao, Samut Prakan province (= 3.83, S.D. = 0.86), television is using public relations strategy of Kung Bangkokachao, Samut Prakan province clearly and a beautiful scene. (= 3.82, S.D. = 0.84). Television has nocticeably published tourism of Kung Bangkokachao, Samut Prakan Province in High quality and interesting (= 3.74, S.D. = 0.89)

Opinions on tourism behavior of public relations of Kung Bangkokachao, Samut Prakan: Internet media is at a high level (= 3.99, S.D. = 0.72). by having opinions in each aspect, Internet media ecourage tourists to come to visit Kung Bangkokachao, Samut Prakan province at the highest level (= 4.09, S.D. = 0.86) following by internet is published Kung Bangkokachao information completely and interestedly (= 4.07, S.D. = 0.89). Internet media of Kung Bangkokachao, Samut Prakan Province has variety channels to access in several channels such as Facebook, Youtube(= 3.93, S.D. = 0.89) and the Internet media using public relations strategy of Kung Bangkokachao, Samut Prakan Province (3.88, S.D. = 0.87) quickly and easily.

Opinions on tourism behaviors of public relations of Kung Bang Kachao Samut Prakan: printing media is at a high level (= 3.77, S.D. = 0.69) by having opinions in each aspect, printing media uses public relations strategy of Kung Bangkokachao, Samut Prakan Province most obvious and beautiful (= 3.82, S.D. = 0.82) following by a printing media can encourage tourists to visit Kung Bangkokachao, Samut Prakan Province (= 3.79, S.D. = 0.85). The printing media has published information in various channels such as brochure, sighboard, leaflet and travel books etc. (= 3.77, S.D. = 0.84). and the printing media has published information of Kung Bangkokachao, Samut Prakan Province (= 3.72, S.D. = 0.89).

### **Part 3: Opinions on the ecotourism of Kung Bangkokachao, Samut Prakan province.**

Opinions of sample group of ecotourism of Kung Bangkokachao, Samut Prakan province, the overall is in a high level (= 3.82, S.D. = 0.60). by having opinion on Sri Nakhon Khuean Khan Park on the highest level (= 3.88, S.D. = 0.65). following by, Bangnumphueng Floating Market (= 3.83, SD = 0.71), House of Herbal Aromatic Joss Stick (= 3.81, SD = 0.67). Cycling Route of Kung Bangkokachao (= 3.79, S.D. = 0.72) and The Siamese Fighting Fish Gallery (= 3.78, SD = 0.69).

Opinions of sample group of ecotourism Kung Bangkokachao, Samut Prakan province, the overall picture is in a high level (= 3.83, S.D. = 0.71) having opinoins each aspect, Bangnumphueng Floating Market has the most orderly management (= 3.94, SD = 0.93), followed by Bangnumphueng Floating Market has various kinds of goods (= 3.89, SD = 0.77). Bangnumphueng Floating Market has various kinds of activities such as making a merit including other activities with villagers (= 3.76, SD = 0.90) and Bangnumphueng Floating Market throughout uses public relations strategy such as guidepost, brochures.(= 3.74, S.D. = 0.87).

Opinions of sample group of ecotourism of Kung Bangkokachao, Samut Prakan province: Sri Nakhon Khuean Khan Park, overall picture is in a high level (= 3.88, S.D. = 0.65) by having

opinions in each aspect as following Sri Nakhon Khuean Khan Park has a shady nature. It is the most suitable for ecotourism and relaxation (3.94, SD = 0.79) followed by Sri Nakhon Khuean Khan has a convenient cycling route (3.89, SD = 0.81). SD = 0.80), and Sri Nakhon Khuean Khan throughout uses public relations strategy such as guidepost, brochures etc. (= 3.80, SD = 0.82).

Opinions of the most of sample group of ecotourism Kung Bangkachao, Samut Prakan province: The Siamese Fighting Fish Gallery, the overall picture is in a high level (= 3.78, S.D. = 0.69) by having opinions in each aspect, The Siamese Fighting Fish Gallery offers a variety of activities such as breeding of fish. Nature study in the Siamese Fighting Fish Gallery, etc. (= 3.81, S.D. = 0.87), followed by the Siamese Fighting Fish Gallery is suitable for study and ecotourism of Kung Bangkachao, Samut Prakan province (= 3.80, S.D. = 0.77). the Siamese Fighting Fish Gallery has variety of activities such as breeding of fish. Nature study in the Siamese Fighting Fish Gallery, etc. (= 3.78, S.D. = 0.92). and the Siamese Fighting Fish Gallery has a shady nature which is suitable for ecotourism Kung Bangkachao, Samut Prakan province (= 3.75, S.D. = 0.86).

Opinions of sample group of ecotourism of Kung Bangkachao, Samut Prakan province: House of Herbal Aromatic Joss Stick, overall picture is at a high level (= 3.81, S.D. = 0.67). by having opinions in each aspect, Herbal Aromatic Joss Stick uses local herbs to create a Joss Stick at the highest (= 3.89, S.D. = 0.72). followed by House of Herbal Aromatic Joss Stick throughout has a shady nature which is suitable for ecotourism. (= 3.82, S.D. = 0.81) House of Herbal Aromatic Joss Stick uses public relations such as guidepost, brochures etc. (= 3.77, SD = 0.91) and House of Herbal Aromatic Joss Stick has variety of activities such as making your own aromatic joss stick (= 3.75, SD = 0.92).

Opinions of sample group of ecotourism Kung Bangkachao, Samut Prakan province: Cycling Route of Kung Bangkachao, the overall picture is in a high level (= 3.79, S.D. = 0.72) such as the interesting cycling route and a unique public relations of Kung Bangkachao, Samut Prakan province. followed by Cycling Route of Kung Bangkachao is very convenient, such as road sign, ecotourism along the route (= 3.83, SD = 0.87). Cycling Route of Kung Bangkachao has a shade a long the way. (= 3.77, S.D. = 0.89), and Cycling Route of Kung Bangkachao regularly uses public relations strategy (= 3.76, S.D. = 0.85).

#### **Part 4: Opinions on the satisfaction of tourist behaviors of public relations strategy of ecotourism Kung Bangkachao, Samut Prakan.**

The sample group's opinions on the satisfaction of tourist behavior of public relations strategy of ecotourism of Kung Bangkachao, Samut Prakan Overall picture is at a high level (= 3.86, S.D. = 0.71). having opinion in each aspect, the satisfaction of public relations strategy of ecotourism of cycling route of Kung Bangkachao is the highest (= 3.93, S.D. = 1.00) followed by ecotourism Kung Bangkachao shady is abundance, the forest is shady and there are various kind of activities (= 3.92, S.D. = 0.82) and (= 3.92, S.D. = 0.95). ecotourism Kung Bangkachao, Samut Prakan has clear picture of public relations strategy and it is different from others such as cycling route of Bangkacho etc. (= 3.89, S.D. = 0.84) The public relations strategy of ecotourism of Kung Bangkachao in every media has a consistency (= 3.88, SD = 0.86). having a satisfaction of public relations strategy of Bangnamphung floating market (= 3.88, SD = 0.89) 0.99) having a satisfaction of public relations strategy with the public relations strategy of he Siamese Fighting Fish Gallery (= 3.82, SD = 0.97). Public relations strategy of Kung Bangkrachao making tourist to have more interest to visit (= 3.81, S.D. = 0.87) and Public relations strategy of Kung Bangkrachao is interesting such as activities to enjoy. (= 3.76 =, S.D. = 0.92).

## **Part 5: Additional Suggestion**

Most of the sample group gives additional suggestion that should increase public relation via media Internet, such as Facebook to be increased up to 60%, followed by to promote via travel books. 30.00% and should improve the billboard to be more interest 10.00%

## **5. Suggestion**

### *5.1 Suggestion from a Study*

1. The Study found that the sample group's opinions of tourism behavior by public relations of Kung Bangkachao, Samut Prakan Province with the Internet is the highest level. Therefore related person should consider to increase public relations of Kung Bangkachao by internet such as Facebook to affect more satisfaction of tourist behaviors of Kung Bangkachao, Samut Prakan province.

2. The Study shown that the sample group was satisfied with public relations strategy such as fun activities at a lowest level. Relevant persons should increase more interesting activities because some people like to have fun activities.

### *5.2 Suggestions for a next study*

1. Should study about behaviors of exposure and satisfaction with public relations strategy of Kung Bangkachao, Samut Prakan Province.

2. Should study public relation strategy of ecotourism Kung Bangkachao, Samut Prakan province that affect to ecotourism behavior of Kung Bangkachao, Samut Prakan province.

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**The Study of Exposures to Villain Protagonists Gaming  
Affecting the Imitation of the Adolescence in Bangkok**



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# **The Study of Exposures to Villain Protagonists Gaming Affecting the Imitation of the Adolescence in Bangkok**

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## **Abstract**

The research investigation of the exposure to villain protagonist behavior in computer games which influences imitation behavior in Generation Z aims to 1) study the demographic characteristics of populations who expose to violent computer games which result in the imitation behavior of Generation Z in Bangkok 2) study the main character of villain protagonist computer games which result in the imitation behavior of Generation Z in Bangkok. 3) study the content of villain protagonist computer games which result in the imitation behavior of Generation Z in Bangkok. The samples in this research are 400 Generation Z teenagers living in Bangkok. The research findings reported that the demographic characteristics namely gender, age, status, education level and occupation has no relevance to the imitation behavior of Generation Z in Bangkok; however, the monthly salaries has shown relationship with the imitation behavior of Generation Z in Bangkok. Also, in terms of exposure to media, the findings indicated that teenagers were most exposed to computer game whereas places where they were exposed to computer games and frequency of exposure to computer game per week has no relationship with imitation behavior of Generation Z in Bangkok. Instead, the approximate duration of exposure to computer games per time was estimated to be correlated with the imitation behavior of Generation Z in Bangkok. Furthermore, the role and the content of villain protagonist computer games demonstrated some correlation with the imitation behavior of Generation Z in Bangkok

**Keywords:** Exposure Behavior, Imitation, Computer Games, Villain Protagonist Computer Game

## **1. Introduction**

Nowadays, games have taken the important roles our everyday lives due to its accessibility. The games can be accessed without boundary of age and gender. Since game marketing has become more competitive, the manufacturers try to develop their game contents to gauge interest in their products. Accordingly, most game contents are violent and cast the players as villains so the games become more exciting. At present time, more and more villain protagonist games are introduced, leading to anxiety among parents and the seniors in the country; they believe violent content in the

games have led the teenagers attempt to imitate violent behavior and villain characters in the game. The evidences could be clearly seen from media in general. After the crime scene, the criminal were found either youth or adolescents, both early adolescents and adolescents. Most of them claimed that they committed crime because they wanted to imitate the characters' behavior in the violent computer game. The example obtained from Manager Online, (3<sup>rd</sup> August, 2008, Publication) stated that a Matthayom 6 teenager from a famous high school was planning of criminal conduct aimed at killing the taxi chauffeur and robbery. The police caught the boy just at the time when he tried to escape with the taxi but ended with failure since he couldn't drive. The boy confessed that he just needed money and the game he played has made him thought it was easy. He planned to buy a knife and get the lay of the land. He also claimed that he didn't mean to kill anyone but the victim tried to resist. From this example, the teenager became the offender, claiming that he imitated GTA game to commit crime. The real motivation might be either money or the imitation behavior from GTA, the game that related to crime. Also, it could be that the teenager just needed money and decided to commit a crime on his own without the motivation from GTA at all. Accordingly, the researcher would like to study the issue and conduct a research to find out to what extent the villain protagonist computer games can motivate the imitation behavior of Generation Z in terms of the games' content and the villain protagonists found in wide ranges of computer games nowadays. In this research, the examples are GTA 5, Mafia, Assassin's Creed, Watch dogs and Hitman. The contents in the games mentioned previously are related to crime, robbery, killing and doing illegal business and thus, they become more popular among people in the society. From many aspects in the society, it is believe that computer gaming behavior could lead to the imitation behavior. So, this research is conducted to study the correlation between violent and villain protagonist computer games and imitation behavior and to what extent such games affect the imitation behavior of human beings. The findings will be published to benefit all computer game industries to further develop and improve the content and the script of the game to be more appropriate as another type of entertainment media for everyone at all ages. Also, the findings will be useful as a guideline for the parents to help their children to expose to appropriate media based on their ages as well as to educate them the differences between the virtual world and the world in reality.

### *1.1 Research Objectives*

1. To study the demographic characteristics of population who expose to violent computer games which affect the imitation behavior of Generation Z in Bangkok
2. To study the main character of villain protagonist computer games which affect the imitation behavior of Generation Z in Bangkok
3. To study the content of villain protagonist computer games which affect the imitation behavior of Generation Z in Bangkok.

### *1.2 Research Hypotheses*

1. Different demographic characteristics affect the different imitation behavior of Generation Z teenagers in Bangkok
2. Different exposure to media behaviors affects the different imitation behaviors of Generation Z teenagers in Bangkok.
3. The villain protagonist as major character in the computer game affects the imitation behavior of Generation Z teenagers in Bangkok.
4. The role of villain protagonist computer games in terms of media content affect the imitation behavior of Generation Z characters in Bangkok.
5. The demographic characteristics of population, exposure to media behavior. The villain protagonist as major character in the computer, the role of villain protagonist computer games in

terms of media content have relationship with the imitation behavior of Generation Z teenagers in Bangkok.

## 2. Literature Review

In this research on “The exposure to villain protagonist behavior in computer games which influences imitation behavior in Generation Z in Bangkok, the concepts, theories as well as relevant studies applied as guidelines for the topics are provided as follows:

1. Concepts of demographic characteristics
2. Concepts and theories of media exposure behavior
3. Concepts of villain protagonist as major character in the computer game
4. Concepts of villain protagonist computer games in terms of media content
5. Concepts of imitation behavior in teenagers
6. Concepts and theories of adolescent psychology
7. Relevant studies

## 3. Research Methodology

**Population:** The population in this study is male and female population in Bangkok. They are adolescence aged between 15-25 years old. The numbers of populations are 809,288 people aged between 15 and 25 years. (Information derived from the statistics system of registration 2017)

**Sample size:** The researcher applied Taro Yamane formula to calculate number of samples for the research. The sample size was 399,802; therefore, the sample size required for this research is 400 people. The sampling methods are conducted as follow: This research requires 400 samples. The sample is then divided for 5% deviation and 95% reliability. The researcher calculate sample group by using Taro Yamane’s Table.

**Sampling method:** Convenient sampling method was applied to this study from the sample population of 400 people. The samples were selected from the adolescence in Bangkok. Questionnaire surveys were distributed in shopping centers and game shops in Bangkok which were considered the assembly points of teenagers who love computer game.

**Data Collection:** Source of data for data collection can be divided into 2 categories namely.

**Research instruments:** Close-ended questions and open-ended questions that cover the area of study were applied to this research.

**Pilot experiment:** Pre-test was applied as the pilot experiment to this research instrument for accuracy and validity of the questions in survey questionnaires. Thirty (30) survey questionnaires were conducted with qualified candidates. After complete, the researcher consulted with the advisor for revision before conduct research in real situation. 1. Validity test. 2. Reliability test.

**Data collection:** The researcher collected the data from sample group. The data were collected after samples complete survey questionnaires according to random sampling method. The researcher clarified the purpose and the objectives to sample group, including data collect method for mutual understanding. The data were collected from August 2018 to September 2018.

**Statistics applied to data analysis:** Based on the variables and the collected data, statistic techniques for data analysis were provided as follow:

1. Descriptive Statistics: 1.1 Percentage (%) was applied to analyze and explain demographic variables of the samples namely gender, age, education level, personal monthly income and domicile, including types of exposure to computer games and behaviors of computer game consumption. 1.2 Mean ( $\bar{x}$ ) is applied to analyze and explain the variation factors related to the role of villain protagonists which motivates villain character imitation. 1.3. Standard Deviation (SD) was applied to analyze and explain variation factors related to the content of villain protagonists which motivate villain character imitation.

2. Inferential Statistics: 1) Apply t-test statistics in case that there were 2 groups of variable and F-test with One-Way ANOVA.

When the findings indicated the difference with statistical significance, multiple comparisons introduced by Scheffé was applied. 2 One-way ANOVA was employed when the finding was statistically significance, and then applied multiple comparison of Scheffé's. 3.) Multiple Regression Analysis 5. Pearson's Correlation coefficient test was employed to find relationship.

**Data Analysis: Hypothesis No.1.** Different demographic characteristics affect different imitation behavior of villain characters among Generation Z in Bangkok. It can be concluded that different gender, age, status and occupation do not affect different imitation behavior among Generation Z in Bangkok. However, the level of education and average monthly income was significantly different at the 0.05.

**Hypothesis 2:** Different exposure behaviors results in different imitation behaviors among adolescence in Bangkok. It can be concluded that channel to which the adolescence expose to computer games, location of computer game exposure and frequency of exposure to computer game do not affect different imitation behavior among Generation Z in Bangkok. However, the average duration per time to which the teenagers exposed to computer game resulted in different imitation behaviors among Generation Z in Bangkok which was significantly different at 0.05.

**Hypothesis 3:** The villain protagonist as major character in the computer game affects the imitation behavior of Generation Z teenagers in Bangkok. It can be concluded that computer games in which villain protagonists play the major role namely 2. Mafia 3 (Lincoln Clay) the influential mafia bosses who conducts criminal acts while seeking revenge for his father; 3. Assassin's Creed Syndicate (Jacob Frye and Evie Frye) the master assassins such as plotting to assassinate other person, climbing others' houses for stealing; 4. Watch dog (Marcus Holloway) hackers such as ATM, red light and data theft; 5. Hit Man (Agent 47) the assassin-for-hire affected the imitation behaviors among adolescence in Bangkok; however, GTA 5 (Michael, Franklin, Trevor), the criminal do not affect the imitation behaviors of teenagers in Bangkok.

**Hypothesis 4:** The role of villain protagonist computer games in terms of media content affect the imitation behavior of Generation Z characters in Bangkok. In summary, GTA 5 (Michael, Franklin, Trevor) crime mission; Mafia 3 (Lincoln Clay) founder of the mafia gang and seek revenge for his father; Watch dog (Marcus Holloway) the hacker who try to find evidence to be acquitted affect the imitation behavior among teenagers in Bangkok; however, Assassin's creed Syndicate (Jacob Frye and Evie Frye), the assassins and war criminals, and Hit Man (Agent 47), the assassin-for-hire do not affect the imitation behavior among teenagers in Bangkok.

**Hypothesis 5:** The demographic characteristics of population, exposure to media behavior. The villain protagonist as major character in the computer, the role of villain protagonist computer games in terms of media content have relationship with the imitation behavior of Generation Z teenagers in Bangkok. It can be concluded that demographic characteristics namely gender, age, status, level of education and occupation has no relationship with the imitation behavior among teenagers in Bangkok; However, average monthly income correlated with the imitation behavior among Generation Z in Bangkok. The most exposed to computer game whereas location where they were exposed to computer games and frequency of exposure to computer game per week has no relationship with the imitation behavior of Generation Z in Bangkok. The duration to which computer games were exposed per time was found correlated with the imitation behavior of Generation Z in Bangkok. The villain protagonist as major character in the computer game and the role of villain protagonist computer games in terms of media content were correlated with the imitation behavior of Generation Z teenagers in Bangkok.

#### 4. Discussion

1. Most of the sample group exposed to computer games through the internet due to accessibility and convenience. Location to which they were exposed to computer game was home. The time period spent on exposure to computer game was approximately 3 hours or more. The frequent of exposure to computer games was every day. This is consistent with the research of Saruta Promma (2014) to investigate computer game behavior and emotional intelligence: case study of students in elementary school in Mueng District, Nakhon Si Thammarat Province. The findings found that most elementary students in Mueng District, Nakhon Si Thammarat Province spent time playing games at home.

2. The samples' opinion towards the villain protagonist as major character in the computer game was moderate. They agreed with GTA 5 (Michael, Franklin, Trevor), the criminal the most, followed Hitman (Agent 47), the assassin-for-hire, Assassin's Creed Syndicate (Jacob Frye and Evie Frye), the assassin group, Watch dog (Marcus Holloway), the hacker and Mafia 3 (Lincoln Clay), the influential mafia boss respectively. This probably because GTA 5 is the genre of game (Action & Adventure) with the contents related to criminal, robbery and illegal business that illustrated through 3 characters: **Michael, Franklin, Trevor. The players could be any of the 3 whose characters are different.** The game focuses on robbery, auto vehicle stealth and crimes. This game was considered villain protagonist game in terms of character the most. The details related to villain protagonist game in terms of character are provided as follow: 2.1 GTA 5 (Michael, Franklin, Trevor), the criminals. The opinion towards role of protagonists was strongly agree whereas Mafia 3 (Lincoln Clay), the influential mafia boss was moderate; furthermore, the samples agreed the most that the role of the character in Mafia 3 was too severe. 2.3 The Assassin's Creed Syndicate (Jacob Frye and Evie Frye), the leader assassin. The samples agree moderately; also they agreed the most with the roles of characters in Assassin's creed Syndicate in terms of content. 2.4 Watch dog (Marcus Holloway) the hackers. The sample moderately agreed; they stated that, in terms of content, when the person is accused of doing something wrong, the person need to find the evidence to declare the innocence the same way as the character in the game. It relates to real life situation the most. 2.5 Hit Man (Agent 47), the assassin-for-hire. The sample moderately agreed. They stated that, in terms of protagonist's role, being the assassin-for-hire is extremely illegal. The discussion here could reveal that each computer games contain different role of characters as well as their contents (Kittithares Phetwaikoon, 2015, p. 132).

4. Concepts of villain protagonist computer games in terms of media content were moderate. They strongly agreed with Hit Man (Agent 47), the assassin-to-hire, followed by Assassin's Creed Syndicate (Jacob Frye and Evie Frye), the assassins and war criminals, Watch Dog (Marcus Holloway), the hacker seeking for evidence to be acquitted, Mafia 3 (Lincoln Clay) founder of mafia gang and seek revenge for his father and GTA 5 (Michael, Franklin, Trevor) crime mission respectively. The reasons might be that each computer game has different content. Also, the genres of games are varied, for example, action, adventure, sport, etc. (Kittithares Petwaikoon, 2015 p.20). The details of villain protagonist computer games in terms of media content are described as follow:

3.1 GTA 5 (Michael, Franklin, Trevor) crime mission: The samples disagree; they agreed the most with auto vehicles stealth which might be adopted in real life situation.

3.2 Mafia 3 (Lincoln Clay) the founder of mafia gang and seek revenge for his father. The sample agreed the least; however, they agreed the most with content of the game regarding seek more power to become the leader.

Assassin's Creed Syndicate (Jacob Frye and Evie Frye), the groups assassin and war criminal, The samples moderately agreed; the opinions towards Assassin's Creed Syndicate was players of Assassin's creed Syndicate already realized that killing people as in the game is considered illegal.

3.3 Watch dog (Marcus Holloway) the hacker who tries to find evidence to be acquitted. The sample moderate agree and providing feedbacks; in reality, the hackers can access to virtually any system on the earth, just like in the games.

3.4 Hit Man (Agent 47), the assassin-for-hire. The sample agreed moderately. They commented that the players of Hit Man realize that killing people as the main character does in the game is considered extremely illegal in the real world.

4. Opinions towards the imitation behaviors among Generation Z in Bangkok were at low level. They agreed the most that "The teenagers playing violent games can separate between real life and virtual world in computer game", followed by "To what extent do you think the teenagers could imitate the unethical and misconducts of the villain protagonists in the game"; the samples, however, agreed the least with "Have how many teenagers can imitate the morality of the characters in the game? And the least was "I use to imitate the villain protagonists behaviors in real life". To conclude, the findings found that the exposure to villain protagonist games of Generation Z in Bangkok has low effect on the imitation behaviors among Generation Z teenager in Bangkok.

The findings was in line with Bandura's imitation behavior theory (1971) which stated that there are 3 forms of social learning through media1) Observation Learning: the learners are more open to new forms of practice published through media; are open to the new form of new patterns of behaviors. 2) Inhibitory Effect: when the model is punished, motivation of the imitator will be decreased because they are afraid of being punished. 3) Disinhibitory Effect: The media which reward the model of their violation to social norms which can motivate the imitation behavior which is opposed to the social norms or the trend.

# Information Technology

**RCGR<sup>2nd</sup>  
2018**





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**Factors affecting the purchase decision via  
Facebook Live Channel Facebook Live**

**RCGR<sup>2nd</sup>  
2018**

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# Factors Affecting the Purchase Decision via Facebook Live Channel Facebook Live

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## Abstract

This research purpose is to study consumers' general information and factors affecting their decision to purchase via Facebook Live Channel. The samples were 400 consumers who purchased the products online. The research instruments were questionnaire. Analyze data using the Pro Department. Statistics used are frequency, percentage, mean, standard deviation, and compare the difference And the F test with the variance analysis Determine Fearson's Correlation Coefficient, and multiple regression analysis by setting the P-value at 0.05

**Keywords:** Social Network, Purchase decision, Facebook, Facebook Live

## 1. Introduction

From past to present Human data communications have evolved over time, with significant changes. There is a lot of technology and nowadays technology has become a necessity in human life.

There are several ways in which human communication technology can be used. One of them is Social Network, a channel that people use to communicate information in all areas to create a new business that is the business of online commerce. E-Commerce, or E-Commerce, is a business channel that makes it easier for entrepreneurs to reach their customers. Online society is the mainstream media in the present world. It influences the behavior of people and consumers very much. Marketing through social media. The marketing system with integrated marketing communications. To advertise and convey the news about the product to the target customers. Business owners can choose to reach their target audience. Submitting the information to the target audience ensures that the target audience is responding or rejecting. Adapt to each target group, save time, personal style. The cost of activities is low as well.

In order to satisfying with target customers, marketing through social media is the online marketing of social media, including Facebook, Instagram, twitter, which is the popular social media today, and when there are places where people are gathered. It is a goal for businesses market access.

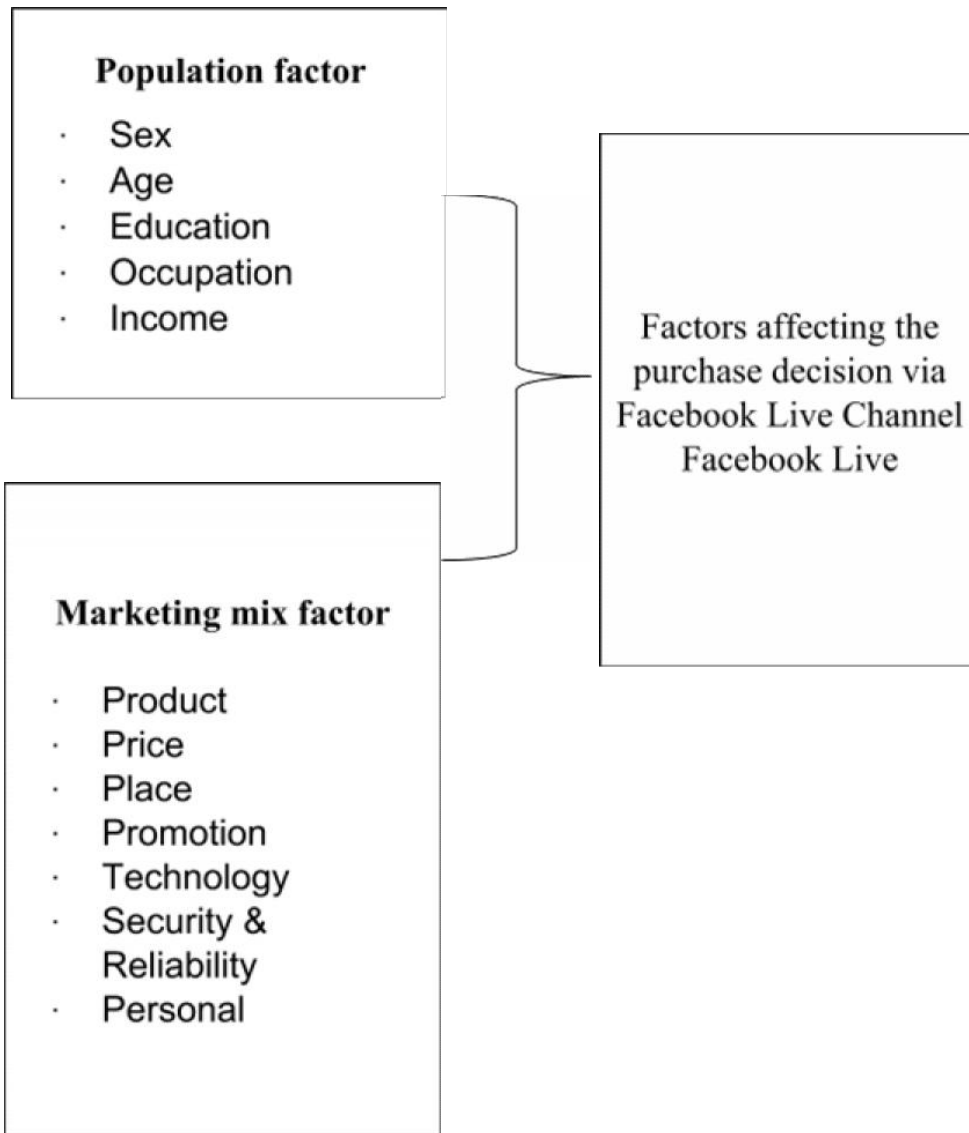
This year it is very clear that online live is more amazing. Video content has begun to influence marketing strategy. The popularity has increased dramatically over the past few years as it is easily accessible and users are getting tired of old-fashioned media. The trend of users to watch. The "live broadcast" more and want to update the information up to date, so it makes online live more popular. Especially with the latest launch. Facebook Live (Facebook Live) and the landslide. For the live broadcast Both the live and the audience will need information systems. Quality technology to reach Creating a relationship between traders and consumers. Or advertising in time, minutes, minutes. Overall, the live broadcast via Facebook Live (Facebook Live) is that. It is a conversation between the seller and the buyer through the video to make trading easier. See more real products. In addition, buyers can make more careful decisions about their purchase decisions. Because live broadcasts are animations that are noticeable and visual and real. The buyer can decide whether the product is reliable or not. In addition, creating live marketing content can create a variety of commercials that can be presented in the form of interactive discussions that can be entertaining. And attract consumers to watch and make a purchase.

This is due to the launch of Facebook Live and social media marketing. Researchers have recognized this importance and need to study. Online Marketing Factors influencing the decision to purchase via live Facebook Live (Facebook Live) channel of consumers. The results of this study. Online operators can be used to develop live sales channels in ways that can attract customers. Stimulate trading via live. In addition, the development of small and large businesses using online live broadcasting tools to expand the current customer base. By broadcasting via online media, one channel is created. The sale is easy. In addition, the researcher is aware that the study of the live marketing process through online society will increase. To create another channel sales business. To adapt quickly to keep up with technology and competitors in various ways. Non-traditional To be used with the consumer.

Current behavior, the consumer can be assessed by research. It enables the development of business strategy through social media in the form of live broadcast. It also includes the creation of a productive relationship between traders and consumers in the future through online media.

## **2. Research Objectives**

1. To study the decision-making behavior of online consumers via Facebook Live Channel.
2. To study the factors affecting the purchase via Facebook live channel. Include demographic factors.



**Figure 1** Conceptual Framework

### 3. Expected Benefits of Research

The researcher expects this research to know the behavior and factors. The decision to buy products through the live channel Facebook. To be able to benefit investors or entrepreneurs who are interested. To create content through live Facebook (Facebook Live) where the researcher and entrepreneur can expand the business in marketing planning to use this tool. They also have a better understanding of consumer decision-making processes. The results of this study can also be extended to other social media tools.

### 4. Concept, theory, and research

#### 4.1 Concept and theories about demographics.

Yubun Bengunkraki (1999, 44-52). Discussed the concept of demography. Human behavior is caused by external factors. It is believed that people with demarcated characteristics will had different behaviors.

Siriwan Sareerat and others. (1995, 41-42) Discussed that the demographic aspect (Demographic) consists of sex, age, education level, occupation, income, as well as criteria used in market segmentation. The details are as follows:

1. Sex: Males and females differ in many aspects, from the body, the mind, and even the emotional state of feeling.
2. Age: Age will determine how much individual an individual experiences. Difference of age will make people different. The age will affect both mind or the behavior in different aspects of the Individual.
3. Education: Education is another thing that influences an individual's thoughts or attitudes. People have different education levels. It makes the mind and attitude are different. Highly educated people tend to have better ideas and attitudes than those with lower education.
4. Income: Income levels are what determines behavior or lifestyle patterns. Choosing products such as low income people will buy cheaper products than people who have a lot of income.

From the concept of demography mentioned above. Can be concluded. Demographic factors are important factors for marketers to use as a basis for market segmentation such as gender, age, education level, income, etc. Individuals with different demographic characteristics. There are different ideas, attitudes and behaviors.

## **4.2 Concepts and theories of information technology.**

Information Technology It is an innovation. The technology involved in information processing begins with the receipt, transmission, storage, processing, display and dissemination of information. Application of technology and services.

Rogers & Shoemaker (1971) Information technology refers to the application of knowledge. Understanding of communication systems and computer use. In the search for information exchange. And the communication is fast and accurate.

Nongnuch Chan (2006) Information technology refers to communication technology that combines electronic computer knowledge. The information from the messenger to the recipient is convenient, fast and easy to manage.

## **4.3 Concepts and theories about decision making.**

Decision Making is the process of choosing one of the many alternatives. Consumers often have to make choices in the choices of products and services available. By choosing a product or service based on the information or limitations of each situation. Therefore, decision making is an important process and is under the mind of consumers. (Chattana Pongjai, 2007).

Thongchai Santiwong (1995) defined the meaning of decision. Begin to consider the problem in detail. To be able to find a solution. Each of these alternatives is appropriate for the constraints of the problem. Therefore, it is necessary to find the best choice. This can be fixed.

## **4.4 The concept and theory of marketing mix (7P's)**

Siriran Serirat (1998) cites Philip Kotler's concept of service mix as a concept that is relevant to a service business that has a marketing mix. 7Ps to formulate marketing strategies, which include:

1. Product is what the seller must give the customer. Must meet the needs of customers. And customers will have the benefit and value of the product. In general, the product is divided into two types: tangible products and intangible products.

2. Price (Price) means the price of goods. Customers will compare the value with the price of the item. Therefore, product pricing should take into account the appropriateness of the benefits and the value to the customer.

3. Place means activities related to atmosphere or environment to present or sell products to customers. This affects the perception of customers on the value and benefits of the products that the seller wants to offer. The entrepreneur will have to consider both the location and the way to present or the way to sell goods.

4. Marketing Promotion is an important tool in communication between the seller and the buyer. The purpose is to inform the news. Encourage the buyer to have a positive attitude towards the product and the shop. And to make the buyer more interested in the product.

5. Person or Employee means the owner or distributor. It must be able to satisfy the customer differently and above the competition and must establish good relationships with customers on a regular basis.

6. Physical Evidence and Presentation: Creating and presenting physical characteristics to customers. To impress customers. By trying to build overall quality. Whether it is a beautiful storefront. Negotiation must be gentle. And fast service. Or other benefits. The customer should receive.

7. Process is an activity related to the way and practice in customer service. To impress customers.

#### **4.5 Social Media Marketing Concepts and Theories**

Social marketing is a form of internet marketing tool that utilizes online media to distribute and create value for the market. By creating communication and branding to meet the needs. Basically, creating social marketing is creating marketing activities, including content, images, animation, and audio for the main purpose of marketing to distribute content to consumers. Online marketing is a new trend in business to reach the target audience easily. In addition, social marketing can develop a variety of channels to reach a wide range of consumer needs and activities, such as email or online advertising (Kaur, 2016).

### **5. Related Research**

Trust and quality of information systems that influence the decision to buy products via Facebook live channels of online consumers in Bangkok. The data were analyzed by multivariate logistic regression analysis. The study indicated that Factors influencing the decision to buy via Facebook live channel of online consumers in Bangkok. The statistical significance at .05 level was that of social media marketing. Entertainment Trust factor Quality Factors of Information Systems Quality system and service. By jointly forecasting the decision to buy products through live channels Facebook live in consumers. 67.8%, while social media marketing Interaction, Popularity, Specificity.

Word of mouth and quality of information systems. The quality of the data does not affect the decision to buy the product through live channels.

Pisit Foster (2557) studied Trust and the nature of business through social media influences the purchase intent of social media. The data were analyzed by multivariate regression analysis. The study indicated that The majority of respondents were female. Age from 20 to 30 years old with a bachelor degree, a career as a private company. Facebook is the social media that influences the decision to buy the most. Frequently used social media more than 10 times a week. And the average price per time that most respondents buy social media is around 500 - 1,000 baht.

Jutarat Kiattrissee (2558) studied the Factors affecting the purchase of goods through the application. Online consumers in Bangkok metropolitan area. Data were collected from 405 samples via online questionnaire. The data were analyzed for statistical purposes. Research with the program. The study indicated that The factors affecting the purchase decision via the online application of consumers in Bangkok metropolitan area and the metropolitan area were statistically significant at the level of 0.05. There were 4 factors in order of descending order as follows: 1) Product factor Distribution channels 2) Safety and reliability factors; 3) Price and quality factors; Variety of products in the application. 4) The public relations factor. Communication with consumers And the reputation of the application.

Piyamaporn helped Chu Chu (2559) studied the subject. Factors influencing the purchase decision through social media. The statistic used for data analysis was descriptive statistics, frequency, percentage, mean and standard deviation. And quantitative statistics. The study indicated that The majority of respondents were female. Age between 26-33 years old. Undergraduate degree And the average monthly income. The most commonly used social networking site is Facebook. The



most frequently purchased item is fashion, with a purchase of 2-3 times a month and the average amount spent on each purchase is less than 1,000.

## 6. Method

For the population used in this research is the consumer who has purchased the product through live Facebook (Facebook Live), which do not know the exact population. How to determine the sample size from the percentage estimate. Unknown population using the Taro Yamane formula at a 95% confidence level and a tolerance of no more than 5%, the sample size used in this study was 400 for ease of analysis.

In this study, Used as a questionnaire (Questionnaire) to collect data. This questionnaire was created to cover and meet the objectives of the study. It is divided into 3 parts.

**Part 1** The questionnaire was used to collect general information of the respondents, including sex, age, educational level, occupation and monthly income.

**Part 2** The questionnaire about the online shopping habits of live consumers is the online channel that used to purchase the product. Popular items purchased through online channels. Frequency of purchase through online channels. And the average purchase price per session. The questionnaire is a check list.

**Part 3** is a question about the evaluation of the purchase via live Facebook (Facebook Live) that there are opinions on factors such as product factors. Price factor Channel factors Marketing Promotion Factor Technology Adoption Factors Safety and reliability factors And personal service factors. Including decision level. Consumer buying The questions in this section were rated by the rating scales. The criteria for determining the weight of the evaluation were 5 levels according to Five-Point Likert Scales method.

After the data has been collected. The researcher completed the self-examination questionnaire as soon as possible. The researcher analyzed the data. Data processing by software. The statistics used to analyze the data.

1. Descriptive Statistics: Frequency, Percentage, Mean, and Standard Deviation. The data used in the analysis are as follows

- 1.1 General information of the respondents. Analysis by frequency, percentage,
- 1.2 Assess the importance of the marketing mix that influences the decision to buy the product via Live Channel. And assess the frequency of the behavior of consumers who purchase products through live channels. Facebook. Analysis by means of Mean and Standard Deviation.

2. Inferential Statistics to test the relationship between independent variables and variables in various assumptions. The reliability of the data is 95%.

2.1. T-Test was used to compare differences between two groups and to test the F-Test with one-way ANOVA. There are two or more variables.

2.2 Find the Pearson's Product Moment Correlation Coefficient.



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**Factors Affecting the Students and the Parents' Adaptation towards  
the Electronic Payment System, For the Tuition Fees Of Thai Business  
Administration Technological College via Smartphones**



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# **Factors Affecting the Students and the Parents' Adaptation towards the Electronic Payment System, For the Tuition Fees Of Thai Business Administration Technological College via Smartphones**

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## **Abstract**

The objective of this research is to study about the factors affecting the adaptation, by the parents and students, of paying the tuition fees by Electronic Payment System via smartphones. The sample groups consist of 310 parents and students of Thai Business Administration Technological College, Bangkok, Thailand. The questionnaires, used as the instruments, are divided into 3 parts. First part checks personal status of the respondents using a series of checklist. The second part is composed of questions related to factors which affect the respondents' decision of adapting the payment system. And the third part is the questionnaire related to the decision whether the respondents would adapt the payment method or not. For the reliability test of the instruments, the Cornbach Coefficient value is equal to 0.913. The results of this study are as following: 1) there are at least 4 factors which highly affect the decision to adapt the electronic tuition fee payment via smartphones of the parents and the students, including: personal attitude, conformity with reference groups, confident of online services and perception of risks, 2) there are 3 factors which highly encourage the adaptation of the electronic payment system including: perception of the benefits, perception of easy usage and the respondents' determination to use the system, 3) various degree of the attitude, conformity with reference groups, confident of online services and perception of risks of the whole picture affect different degrees of adaptation. If taking all aspects into consideration, the result shows each of the factors differ.

**Keywords:** Adaptation, Electronic Payment

## 1. Introduction

From the past until the present, human communication has rapidly changed and constantly developed. The major catalyst is technology which, now a day, has become an indispensable part of human daily life.

Various technologies are used as the means of communication and one of them is the online network which is used for almost all dimensions. It gives rise to a new type business call “E-Commerce” enables the business enterprises to reach for the customers faster than ever using the Internet. Recently, the E-Commerce has been attracting Thai commercial entities because of the increasing channels for the online consumers to purchase products and services, whether through Facebook, Line, Instagram or via other online stores.

Therefore, contemporary entrepreneurs must be able to utilize the online network as an instrument to increase their sale value. Proper uses of the internet can stimulate business growth. Presently, many entrepreneurs have been operating their off-line storefronts in conjunction with their online stores. On the other hand, most of the newer entrepreneurs operate only online store since it does not require large amount of capital and, it can operate around the clock.

The development of telecommunication helps stimulating the growth of Thai E-Commerce. Increasing Internet speed enable rapid data transfer to be more convenient. The reducing price of Internet-accessible devices such as smartphones and computers enable the consumers to easily acquire the devices which result in the increasing Internet accessibility. The above factors flavor the expansion of E-Commerce in Thailand. In addition, Kasikorn Research Center has anticipated that the tendency of Thai E-Commerce Expansion in 2016 is about 15 – 20% which has been increased about 230,000 – 240,000 million Baht over 2015.

As technology advances and economy expands, the complexity of payment system becomes more important and been developed to cope with the demands of business sectors, financial institutions and the consumers. Computer and communication technology have been increasingly incorporated into monetary and banking system. Commercial banks have been developing systems which making transition from conventional fiat monetary system, to electronic system. The innovation of Internet and its commercial integration has created a new platform for Electronic Commerce which allows trading of goods and services, advertisements, and money transfers electronically. It also reduces the cost and increase the efficiency of businesses. Electronic Commerce Transaction process would not be completed without the Payment System.

Electronic Payment System, or E-Payment for short, depends upon electronic devices. Although there are several ways to complete the transaction such as making payment with a credit card online through the Internet network with encrypted security enhancement, the fiat payment using bank checks, bank transfers, or crypto-currencies in a form of digital money stored in a smart card or hard drive, the advantages of Electronic payment outweigh them. The benefits of Electronic Payment for the organizations are rapid monetary transactions. The usual means of transportation are unnecessary. It saves time and expenses, reduces the risks of handling large amount of cash.

Electronic Payment System also increases the efficiency of monetary management since the payments are made online and real-time. Urgent payment can be made regardless of time and distance. The receivers can acquire the payment and manage the amount within in time. The factors which revolutionize the payment system are including the advancement of Information Technology, and behavior of the consumers which open up to the technology. These result in the new behavioral

patterns of using payment services through high-speed internet services and mobile devices, such as mobile phones, tablets, and laptop computers. The developments of numerous applications are able to support a wide array of consumers' activities. Also, the government has been increasingly developing various telecommunication infrastructures and pushing Digital Economy hoping to drive the country's economy. By incorporating digital technology, we can increase the proficiency of competitiveness and to add value of domestic products, through innovations and creativities. The mentioned factors would open up new opportunities for business sectors, thus stimulate the consumer to use the Electronic Payment Services.

The authors would like to conduct a research to study the factors which may affect the adaptation of the Electronic Payment System, via smartphones. The results of this study can be used as a data for business sectors and governmental organization to support any developments of Digital Technology for business transactions or to increase the efficiency of electronic monetary transfers. For the entrepreneurs who already have employed Electronic Payment System, they can increase and effectively implement the system uses to further reduce operational cost and other expenses. The data also can be used as a guide line to improve satisfactory and develop convenient customer services for public consumers. Furthermore, the use of Digital Technology to enhance Thailand's Electronic Payment System is also in conjunction with the government's policy of Digital Economy.

### *Objective*

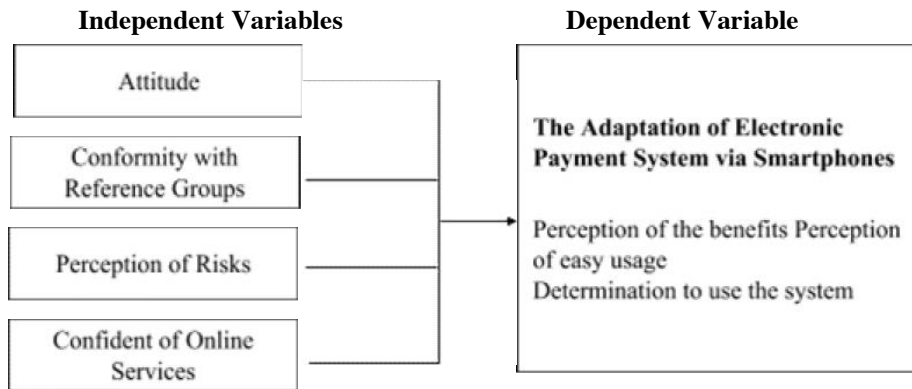
To study about the factors which affect the decision to adaptation the payment of tuition fees through Electronic Payment System by the parents and students of Thai Business Administration Technological College, Bangkok, Thailand via smartphones.

### *Research Hypothesis*

1. Personal attitude which affects the adaptation of paying the tuition fees through Electronic Payment System by the parents and students of Thai Business Administration Technological College, Bangkok, Thailand via smartphones.
2. Conformity with reference groups affects the adaptation of paying the tuition fees through Electronic Payment System by the parents and students of Thai Business Administration Technological College, Bangkok, Thailand via smartphones.
3. Personal confident of online services affects the adaptation of paying the tuition fees through Electronic Payment System by the parents and students of Thai Business Administration Technological College, Bangkok, Thailand via smartphones.
4. Perception of risks affects the adaptation of paying the tuition fees through Electronic Payment System by the parents and students of Thai Business Administration Technological College, Bangkok, Thailand via smartphones.

## Theoretical Framework

In this research, the research authors have observed several factors which affect the decision of whether the parents and students of Thai Business Administration Technological College would adapt the Electronic Payment System to pay for tuition fees using their smartphones or mobile devices. The theoretical framework is as following figure 1.



**Figure 1** Illustration of the Theoretical Framework

## 2. Literature Review

### 2.1 Concepts and Theories Related to Consumer Behaviors

Consumer Behaviors can be defined as a process of decision making and the manners of each individual to make an assessment of procuring the payment for products and services. The assessment of behaviors related purchasing and spending of the consumers depends upon personal factors, psychological factors, and socio-cultural factors as the external stimulants that induce the decision of purchasing. In meanwhile, the process of such decision making is including the perception of problems, data gathering, evaluation of alternatives, making decision to purchase and post-purchase behaviors.

#### Theories of Adaptation

The adaptation of innovations means the decision to accept and utilize the innovations to their possible full potential considering as a better solution and to be more beneficial. Innovations adaptation of the individuals begins with the process of the initial exposure to the innovation. Then, such individuals are convinced to make a decision of either accepting or rejecting the innovation, proceed with actions according to the decision and confirm the actions' outcome. The time taken during the process, short or long, depends on each individual's characteristics and the types of innovations. [Orathai Luanwan, 2012, p. 6]



## Concept of Adaptation

The public can be educated through the process of learning. Personal adaptation can occur spontaneously through self-learning and, such learning would be accomplished through the individuals' direct operational experience. When the individuals are sure about the benefits of such innovations, they would be keen to invest or make purchase of the innovation.

To summarize, adaptation is an act of each individual's consenting to receive such innovations and willingly acts upon. Such behaviors of each person would change through a process and would take time [Orathai Luanwan, 2012, p. 6].

Adaptation Process can be defined as a type of psychological process of each individual starting from the first reception of the changes through the acceptance and utilization [Jirawat Wongsawatdiwat, 1986].

## Theories of Technological Adaptation

The Theory of Reasoned Action (TRA) by Ajzen [Ajzen, 1991] mentions about the actions according to reasons that, each individual's decision to act or not to act is based upon the acquired data. Any course of action or behavior is determined by behavioral intention which composed of 2 factors: first, Personal Attitude toward the behavior and, second, personal perception of either social pressure or social influence is present. The concept of the majority of people would appropriately act or refrain from acting is called Behavioral Conformation of Subjective Norm. Generally, a person would intend to act, any one of the behaviors, after an assessment whether it would result in positive outcomes toward him, her or the significant others. The positive outcome indicates that such behavior can be an appropriate course of action. Once Personal Attitude and conformation of Subjective Norm are consisted with one another, the intention to act would arise. In addition, the scholars should weigh between Personal Attitude and conformation of Subjective Norm to be able to better understand and explain the behavioral intention. [Ajzen, 1991; Fishben, 1990] Both Personal Attitude and conformation of Subjective Norm are based on beliefs. The beliefs which are the foundation of Personal Attitude called Behavioral Belief, while the Subjective Norm is based upon the beliefs according to the reference group. Even though, each person possesses many forms of belief, there always be a belief, which governs the attitude toward particular behaviors, influenced by and conformed to the reference group. To certain extent, people combine their belief in the reference group who are important to them with the expectation of the group toward themselves, think they should or should not perform particular behaviors. Such behaviors are especially affected by the intensity of Normative Beliefs and Motivation to comply with the Reference. The aim of this theory is to predict and understand human behaviors. [Ajzen & Fishbein, 1980] The initial agreement of this theory is that human's intention to act or not to act is governed by Behavioral Criteria, which proposes that factors determining human's intention is Attitude and Conformation of Reference.

## *2.2 Literature Survey*

Kunnatee Aksornkan (2007) has studied about the adaptation of the management system of E-Budgeting, from the factors affected personal and operational adaptation. The result has shown that there are significant differences between personal adaptation and operational adaptation point of view. By comparing the task effectiveness, the personnel are not familiar with the E-Budgeting system and still attached to the conventional system while personnel foreseen the advantage of new technology that would assist the work faster and more effectively. From the operational point of view, the system is moderately complex to operate. The protocol is hard to understand, the usage is

cumbersome and fairly complex. A large number of simultaneous users cause the system to halt or produce more errors which cause more lost-working time. Therefore, the degree of adaptation to the system is only modulate since the users view the system as complex and may actually obstruct their work tasks.

Chutinon Nakalertkawe's (2010) the Adaptation of E-Service Technology has studied about factors which affect the use of E-Service to make payment for services. The ricks perception, security and privacy are the factors, in means time, the users can perceive that the ease of usage would also affect their perception toward the advantage of functionalities.

Pornpong Jongprasitpon's (2009) Online Payment of the Internet Users found that the Internet users prioritize on the factors of security risks and benefits of online payment, which is extremely fast. Learning how to make an online payment is relatively easy. Some online stores offer cheaper prices or give more discounts than conventional shops, which attract more users to choose online payments instead of cash payments. Demographic factors, increasing personal experience of computer and internet usage among the population result in the increasing trend of online payment adaptation.

### **3. Research Methodology**

The sample populations in this research are 1,613 students or parents of Thai Business Administration Technological College that were randomly selected by systematic sampling and simple random sampling based on the number of students or parents of Thai Business Administration Technological College. The sample size in the questionnaires was used to compare the sample size from the Krejcie and Morgan tables. The total sample size was 310. The questionnaires were divided into 3 parts.

Part 1 Physical Factors, a series of check list to acquire personal status, divided into 11 categories.

Part 2 Influential Factors on the decision making to accept electronic payment method by parents and students of Thai Business Administration Technological College through via Smartphone devices. These questionnaires were based on 5 rating scales, divided into 4 categories 13 numbers and testing on total reliability was 0.98.

Part 3 E-Payment Acceptance of parents and students of Thai Business Administration Technological College via Smartphone Devices. These questionnaires were based on 5 rating scale, and divided into 3 categories 8 numbers.

### **4. Research Methodology**

1. The researcher asked for a letter from the Graduate School, The field of educational administration, Sripatum University, for a permission to conduct the research with the sample group at Thai Business Administration Technological College.

2. Researchers sent all documents and make an appointment for the returning date of the questionnaires.

3. The researcher picked up all 310 questionnaires, or 100%

4. Check the returned questionnaires and select only the completed questionnaires for data analysis.

Statistics used in data analysis were comparative analysis, factors analysis on decision making payment of tuition fee by the parents and students in Thai Business Administration Technological College, suing E-Payment via Smartphone Devices, and Classification Factors influencing on the decision making of the sample by using hypothesis test. F-Test was the case that the first variable had only two options. And one-way ANOVA test was used for the first variable had two or more alternatives, it could be tested by using the Least Significant Difference (LSD)

## 5. Results Analysis

1. The affecting factors on the decision making to accept the payment electronically of parents and students of Thai Business Administration Technological College via Smartphones including: personal attitude, conformity with reference groups, confident of online services and perception of risks were at a high level. While the Bloggers' Feedback / Website Ads influenced on using electronic payment service via Smartphone devices was moderate.

2. Adaptation of Electronic Education Payment made by Parents and Students of Thai Business Administration Technological College via Smartphone Devices influenced by the factors of perception of the benefits, perception of easy usage and the respondents' determination to use the system were at a high level.

- From the comparison of Personal Attitudes affecting the adaptation of Electronic Student Payment by Parents and Students of Thai Business Administration Technological College via Smartphone Devices, it was found that the F value was statistically significant at .05 indicating that attitudes had an effect on the acceptance of electronic tuition payment by parents and students of Thai Business Administration Technological College. When considering each aspect, it was found that all aspects had different effects on acceptance.
- From the comparative results of conformity with reference groups affecting the adaptation of the electronic payment by parents and students of Thai Technology College, it shows that the F value was statistically significant at the .05 level indicating that the electronic payment acceptance of the parents and students of the College of Technology, Thailand, through smartphone devices. The results of the study showed that all aspects were different.
- The results of the confident of online services comparison affect the adaptation of the electronic payment by parents and students of Thai Technology College shows that the F value was statistically significant at .05. The acceptance of electronic student payment by parents and students of Thai Technology College, The difference in online confidence among the respondents was found to be different.
- For the Perceptions of Risk affecting the adaptation of the electronic payment by parents and students of Thai Technology College via Smartphone Devices, it was found that the F value was statistically significant at the .05 level indicating that the electronic payment acceptance of the parents and students of the Thai Technology College was via the smartphone device. The difference in perception of risk was found to be different, and it was found that each aspect was different.

## 6. Discussion

The factors affecting the decision to adapt the payment of electronic education of parents and students of Thai Business Administration Technological College via Smartphone Devices can be discussed as following:

1. Factors influencing the decision to accept and adapt to the E-Payment method by parents and students of Thai Business Administration Technological College via Smartphone Devices were high, included personal attitude, conformity with reference groups, confident of online services and perception of risks.

2. Adaptation of E-Payments made by parents and students of Thai Business Administration Technological College, which was classified by the differences attitude, are diverse as a whole, resulting in different degrees of adaptation. When considering each dimension, each of the dimensions is different from one another.

This study produce similar result with a research of Angkarn Meewanukul (2010), the study has shown that the factors affecting the intention to use financial transactions through 3G innovation of consumers Perception of easy usage and Confidence of Online transactions affect the customers' intention to use financial transactions through 3G innovation. The attitude towards personal intention to use financial transactions through the most innovative 3G represents is mostly positive. Interestingly, the introduction of 3G innovation increases the transactions.

3. The degree of Adaptation of Electronic Payment, for tuition fee, made by Parent and Student of Thai Business Administration Technological College were different. From the text above, the finding is similar to The Theory of Reasoned Action (TRA). It is possible to predict the behavior of a person. There are two important determinants: behavioral attitudes and the conformation to the reference group in that behavior. Theoretical model of acceptance of technology (TAM) states that the extended knowledge from rational action theory can predict the acceptance of such service. There are 3 important variables that are affecting: the benefits of E-Payment, the easy usage and the sample group' personal determination.

4. Degree of adaptation of the Electronic Payment System by parent and student of Thai Business Administration Technological College via Smartphone were different due to the perception of risk was found to be different for each individual, and it was found that each aspect was also different.

The above finding is in conjunction with the research of Orathai Luanwan (2012). It has found that personal factors would influence the adaptation of Information Technology. The government officials, at Chaeng Wattana, Bangkok Thailand, have found that personal aspects affecting the acceptance of different technologies according to the characteristics of each individual including sex, income and education. However, the factor of their respective professions has no effect to the adaptation of technology. The personal factors of perception of the benefits and perception of easy usage are vastly different from person to person depending on personal nature and their respective professions. All personnel recognize the benefits of such technology, but it doesn't affect the adaptation. In addition, the research of Chutanon Nakharntee (2010) the Adaptation of E-Service Technology has shown that the ricks perception, security and privacy are the factors. The users also perceive that easy usage would also influence their perception toward the benefits of such system.

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**RCGR<sup>2nd</sup>  
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## Abstract

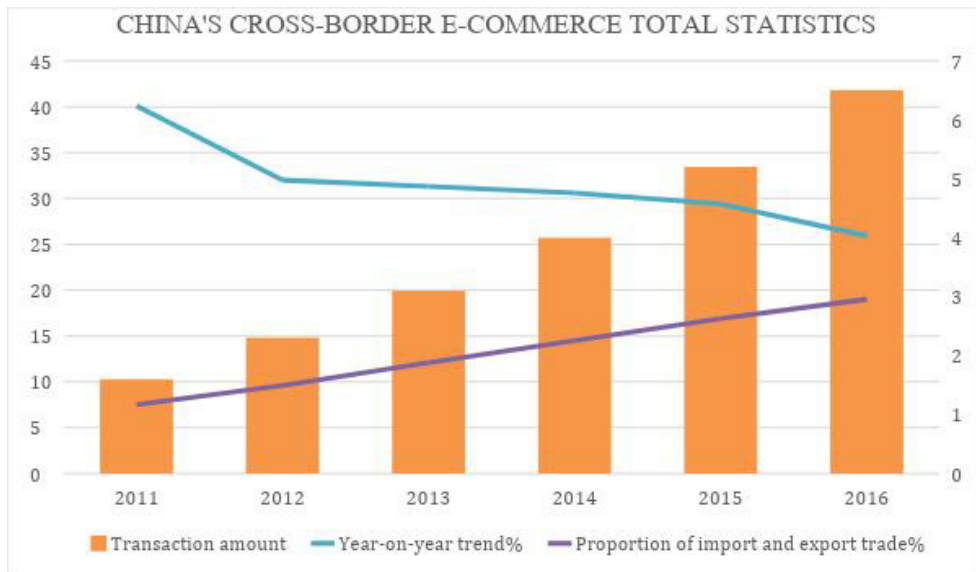
In recent years, the international economic development has entered a low tide, and the development of traditional international trade in China's small and medium-sized enterprises has been greatly affected. With the rapid development of e-commerce, cross-border e-commerce has begun to rise. Cross-border e-commerce is a huge development opportunity for SMEs, bringing many favorable conditions, but at the same time there are new problems and challenges. This paper analyzes the opportunities and challenges of SMEs' cross-border e-commerce and proposes relatively relevant measures.

**Keywords:** SMEs, Cross-Border, E-commerce

## 1. Introduction

In 2012, Cross-border eCommerce sales reached \$300 billion-, while global online trade is expected to soar to \$1.4 trillion by 2015, presenting multi-channel retailers with limitless business opportunities for international expansion. In China and the US alone, half a billion online shoppers surf the web each day for the best deals. Global acquirers can help retailers with innovative solutions to overcome challenges posed by serving a diverse audience with varying consumer expectations, in multiple languages, solutions which can make cross-border ecommerce domestic and truly profitable.

International ecommerce is called cross-border ecommerce, when consumers buy online from merchants, located in other countries and jurisdictions. Online trade between consumers and merchants which share one common language and border or which make use of the same currency are not always perceived as cross-border by consumers. EU neighbors which speak a common language, united by SEPA, are just one example. The process of cross-border e-commerce generally includes communication based on e-commerce platform, online payment by means of agreement, and cross-border logistics for goods transportation and completion of transactions. Cross-border e-commerce is essentially an organic combination of e-commerce and international trade and international logistics. Since 2012 like Figure 1 China's cross-border e-commerce has developed rapidly.



**Figure 1** China's cross-border e-commerce total statistics

## 2. Cross-border e-commerce Situation

The internet enables consumers to shop globally, by purchasing products and services across their border, driven by a common language, a common border, special offers, or simply because the product or service isn't available in the consumer's own region. The increasing popularity of tablets and smartphones, allows consumers worldwide to compare prices, connect with other consumers via social media, to discuss products and services, to select a web shop independent of its location and to transfer payments via their PC, laptop, mobile phone or tablet at any place, anytime, anywhere.

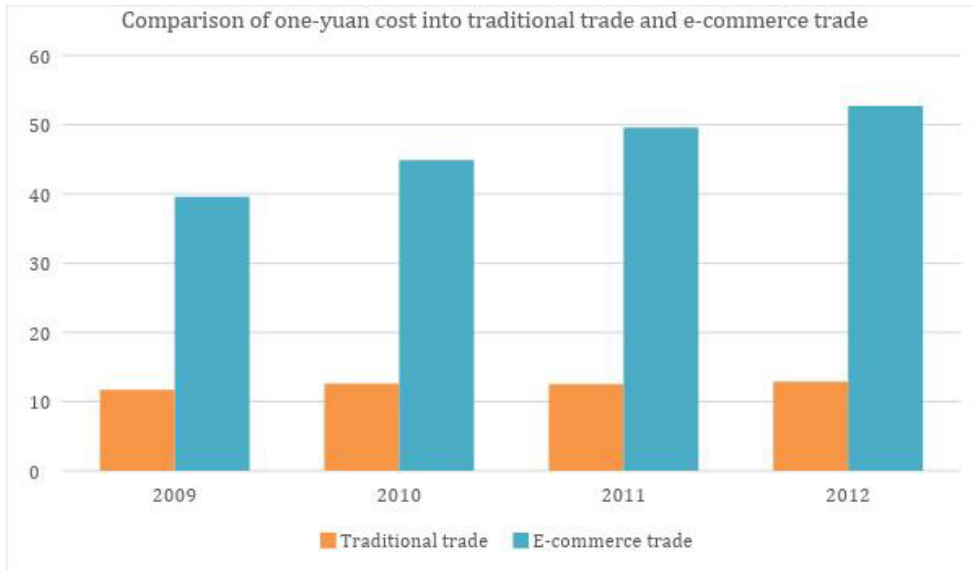
Not only consumers, Merchants and Payment Service Providers profit the opportunities, presented by global ecommerce; banks have come to realize, that offering acquiring services to successful stakeholders engaged in online trade, can be more profitable than selling banking products. Online Retailers, Card Processors and Payment Service Providers have hardly been affected by the economic crisis; on the contrary, these stakeholders have risen like a phoenix from the ashes, in an age when international expansion through global online trade has become big business.

## 3. Cross-border e-commerce is an opportunity for Chinese SMEs

### 3.1. Cross-border e-commerce effectively reduces costs and streamlines sales

In a cross-border e-commerce environment, companies can conduct global market searches through the Internet. First of all, it is possible to purchase low-cost raw material supplies in a wider market and effectively reduce the production cost of goods. Secondly, enterprises can directly conduct advertising and sales of goods through cross-border e-commerce platforms, and immediately conduct sales communication and negotiation, and streamline the sales of goods. Thirdly, traditional

trade needs to go through multiple sales links from manufacturers, exporters, importers, distributors, retailers, etc. In the cross-border e-commerce environment, trade eliminates intermediate links and enhances the profit margin of commodities. Once again, cross-border e-commerce digitizes documents and documents, and material costs are greatly reduced. For example, in Figure 2, with one yuan as the investment cost, the benefits of cross-border e-commerce are much higher than the benefits of traditional trade, and are growing year by year.



**Figure 2** Comparison of one-yuan cost into traditional trade and e-commerce trade

From: <http://image.baidu.com/search/detail?ct=503316480&z=0%24122%sd3411%e-commercetrade%02056%q9294%r241>

### 3.2 Cross-border e-commerce barriers are low, marketing advantages are obvious

Cross-border e-commerce has a relatively low threshold, and Chinese SMEs can participate in it. Even if they do not have import and export qualifications, they can obtain agency clearance services on cross-border e-commerce platforms, which provides Chinese SMEs with Opportunities for development can participate in foreign trade activities at a lower cost. The enterprise marketing market has expanded, and the open Internet space and the information dissemination characteristics of the Internet itself have made marketing more effective. China's SMEs are no longer tied to the traditional market, and the funding and manpower constraints are compensated for in the marketing process.

### 3.3 Improve brand image and transaction rate

In the process of the development of small and medium-sized enterprises in China, due to various factors such as capital and manpower, the brand image is difficult to establish, and the problems such as small business volume are more prominent. Cross-border e-commerce has broken the original restrictions, and the information and service information of products can be widely spread. SMEs can publish their own information quickly and accurately, and deal with transaction information in real time, bringing more convenience to enterprises and customers. Order volume and transaction rate continue to rise. Moreover, in the platform of cross-border e-commerce, SMEs can

quickly receive feedback from customers, and after-sales and other services lay the foundation for the increase in transaction rate. The brand image of SMEs themselves has also been continuously established in information dissemination and transaction opportunities.

### **3.4 China's national policy support**

The rapid development of e-commerce has attracted the attention of the state. In 2012, the total transaction volume of cross-border e-commerce in China reached 2 trillion yuan, an increase of about 32.0%. In the following years, cross-border e-commerce has always maintained a rapid development trend, and its scale has been continuously expanded and its influence has been continuously deepened. China has set up a number of policies to support this, and has taken the lead in establishing cross-border e-commerce pilots in cities such as Shanghai and Hangzhou. At the same time, it has explored and guided the development of cross-border e-commerce, and promoted the steady development of cross-border e-commerce. Especially for the retail support of cross-border e-commerce, the new policy of collecting export tax rebates for cross-border e-commerce platforms has provided strong support for SMEs to develop cross-border e-commerce.

## **4. The main problems in the development of cross-border e-commerce for Chinese SMEs**

### **4.1 Logistics transportation and customs clearance problems**

The biggest cost for SMEs to conduct cross-border e-commerce lies in logistics and transportation. Among cross-border e-commerce, small-scale logistics and transportation mainly include international logistics, domestic logistics parcels, and warehouse-type transportation. Among them, the international logistics speed block is extremely high, which is not suitable for the use of small and medium-sized enterprises; the logistics packet is slow. The extension of the trading cycle is not conducive to rapid order formation; warehouse transportation costs are too high, and SMEs are difficult to support. Therefore, the problem of logistics and transportation is still a difficult point in the development of cross-border e-commerce for small and medium-sized enterprises.

Cross-border e-commerce involves entry and exit issues in multiple countries. Different countries have different standards for entry and exit management, but they have a high degree of emphasis on customs safety. In the process of customs inspection of goods, it often takes a lot of time, which is not conducive to the rapid completion of transactions. In addition, the customs of all countries have not fully opened up the import and export of small-sized goods. When the number of retail goods is large, it is necessary to declare the goods, which makes it difficult for SMEs to cross-border e-commerce.

### **4.2 Vicious competition caused by competitive pressure**

The low threshold and high income of cross-border e-commerce have attracted a large number of enterprises, and the competitive pressure of SMEs in cross-border e-commerce has been increasing. In the process of product sales, vicious competition has emerged. In addition, SMEs do not have a deep understanding of cross-border e-commerce. They often follow the trend to join the ranks of cross-border e-commerce. They have a shallow understanding of cross-border e-commerce and lack professional marketing methods. Insufficient analysis of market demand, insufficient development of customer sources, blindly began vicious competition such as price wars.

In addition, SMEs often lack their own brand awareness and legal awareness, and have caused problems such as intellectual property infringement and counterfeiting in the process of competition. Due to problems in knowledge products and the phenomenon of customs detention caused by counterfeiting, the laws and regulations vary from country to country. The unified credit norms and credit management system have not been applied in cross-border e-commerce, and cross-border electricity has been applied. The overall credit of the business is in jeopardy.

#### **4.3 Lack of talent for SMEs**

Cross-border e-commerce has a global market space. Customers from all over the world, different languages, habits, backgrounds and other factors cause communication difficulties. Therefore, it is necessary to communicate with talents with certain foreign language level to cross-border customers. Understand communication. On the other hand, cross-border e-commerce often requires the maintenance, update, website design and daily technical support of the information platform, including security issues, etc., which require professional personnel to perform proficient operations. In addition, cross-border e-commerce operations, market development, customer source mining, and market dynamics require professional talents to conduct operational analysis, while SMEs often lack sufficient capital and treatment attractiveness, resulting in a shortage of talent.

#### **4.4 The challenge of currency payments to cross-border e-commerce**

International expansion through cross-border ecommerce can only be realized after online Merchants have overcome a number of challenges.

A solid partner in the targeted region can help the Merchant analyze and understand local business customs, consumer preferences and cultural differences, which affect decisions around inventory management and product marketing. Marketing strategies will have to be customized, to reach a different audience in a foreign market and a different infrastructure might require local logistic and delivery services. A “One size fits all” approach might prove to be a pitfall. Consumers often have high expectations around logistics and timely delivery and shipping costs are important drivers determining consumer preferences. Merchants which offer free or cheap delivery attract more consumers.

After geography (common borders), language is another important driver. Common language and culture reduces the barriers and saves the retailer high transaction costs involved in adapting websites and promotional copy. However, in order to reach an international audience, the retailer will have to invest in translations and in local proofreaders, who understands local terminology and culture. Multilingual customer support is crucial for customer loyalty.

Consumers prefer to pay in their local currency. Global expansion requires multi-currency conversion and settlement in currencies defined by major card schemes, including interchange rates. Banks in other jurisdictions have to be compliant with local legal requirements. Global payment solution providers with regional partners in the card payment sector, partners which have acquired expertise in the technical, innovative and legal aspects of online sales, can help merchants to manage transactions over one secure payment gateway.

Even though credit card payment remain preferred payment method worldwide, accounting for 58% of all non-cash payment transactions in 2012, new payment methods have become popular in different regions. Boleto bancario in Brazil, COD in Germany, IDEAL in the Netherlands, etc. and

in some countries payments are only collected after the products have been delivered. In some countries, disappointed consumers have the legal right to send merchandise back within a specified period of time. The merchant has to manage logistics, including chargebacks.

Notwithstanding the above challenges, global online trade is expected to grow to \$1.4 trillion by 2015 and cross-border e-commerce has already surpassed \$300 billion; testimony to the fact that the digital highway provides retailers with unprecedented business opportunities for international expansion.

## **5. Main measures for the development of cross-border e-commerce existing problems in Chinese SMEs**

SMEs should support the development of cross-border e-commerce and leave the country without policies and regulations. In addition, SMEs should proceed from themselves and take measures to solve various problems in development. First of all, cultivate a talent team, use school-enterprise cooperation and other methods to train professionals, including e-commerce, international trade, IT design and other talents to form a team to conduct research and exploration of cross-border e-commerce, research and investigation of the market environment, adapt to cross The development of environmental e-commerce. At the same time, strengthen its own brand building, and establish a legislative concept to attract customers with service and quality. Secondly, to ensure the speed of logistics, choose a reliable logistics and transportation mode, follow up and feedback on logistics, improve customer satisfaction with enterprise services in the case of ensuring logistics, and improve the negative impact of logistics problems through reasonable communication and service.

## **6. Conclusion**

Under China's "One Belt, One Road" policy, cross-border e-commerce has more and more opportunities for SMEs. Although faced with difficulties, it is the current development goal to achieve faster and more convenient. SMEs also have more measures to improve their own businesses, not blindly investing, rational analysis of current market conditions and then invest. For the future development of enterprises, cross-border e-commerce has become the main goal of enterprise development. With the increasingly fierce competition for product homogenization in the past few years, more and more Chinese companies are beginning to realize the importance of brands in the cross-border e-commerce field, and major mainstream cross-border e-commerce platforms have also been launched. Your own brand new deal. But brand building is not an easy task. He needs all kinds of factors, especially for start-ups. Even the first thing to realize is the risk in the brand creation process. In fact, from a global perspective, brand excess may be the true face of this era, such as food, clothing and other traditional industries, Europe and the United States and other developed countries' brands are very strong. But this does not mean that there is no chance for the brand to be created, because "Made in China" has always been deeply rooted in the hearts of people with low prices and good quality.

Therefore, for developing countries along the "One Belt, One Road", if they can use the advantages of cross-border e-commerce to carry out accurate brand marketing in the form of big data, the opportunities of Chinese brands may be much larger than traditional European and American brands. At the same time, although in the traditional industry, Chinese brands are temporarily inferior to European and American brands, but in related emerging technology industries

such as drones, the market share of Chinese brands far exceeds that of overseas similar brands. Therefore, for the start-up enterprises, on the one hand, the test is the courage and wisdom of the enterprise itself, on the other hand, it also tests whether the enterprise can seize the rare opportunity of the national policy in time to meet the difficulties.

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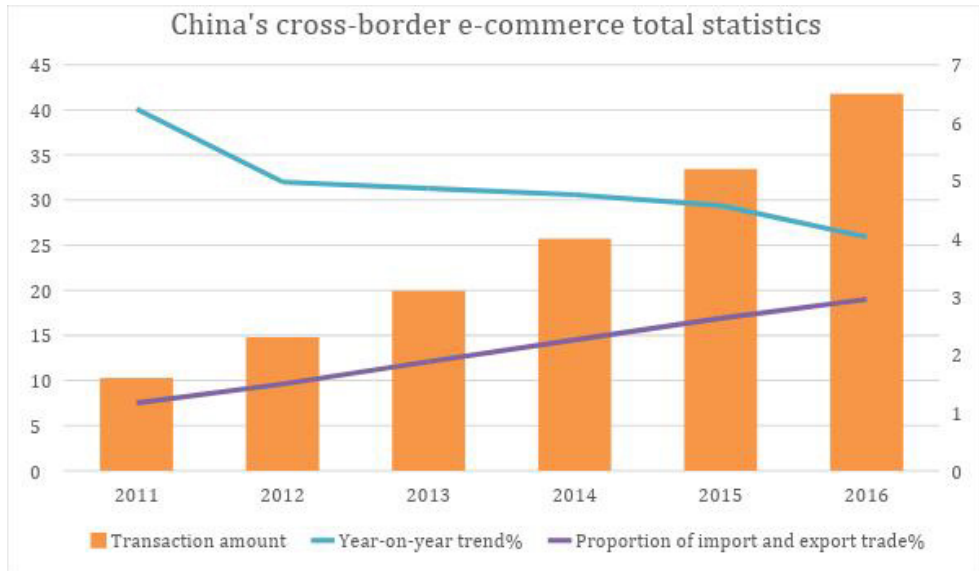
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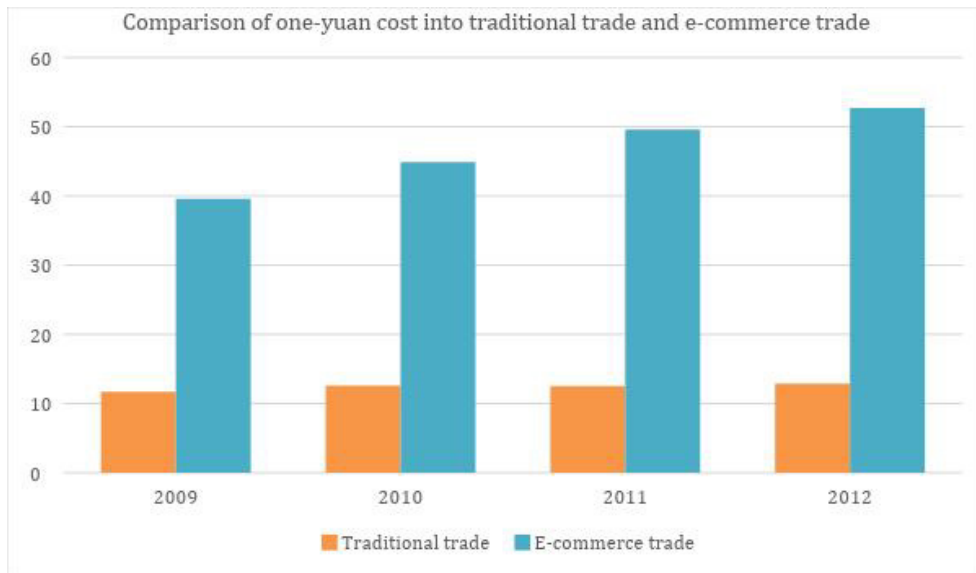
## Appendices



**Figure 1** China's cross-border e-commerce total statistics

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**Social Network Usage Behavior Influencing Elder's  
Happiness in Phrom Khiri, Nakhon Si Thammarat**



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# **Social Network Usage Behavior Influencing Elder's Happiness in Phrom Khiri, Nakhon Si Thammarat**

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## **Abstract**

A research "Social Network Usage Behavior influencing elder's happiness in Phrom Khiri, Nakhon Si Thammarat" aimed to study personal's factor which influence Social Network Usage Behavior, and to study Social Network Usage Behavior which influence elder's happiness in Phrom Khiri, Nakhon Si Thammarat. The samples consisted of 400 elders in Phrom Khiri, Nakhon Si Thammarat. Research methodology was collecting data, by questionnaire. Analyse by Frequency, Percentage, Average, Standard deviation, F-Test, One-way ANOVA (One-way analysis of variance). The results revealed that Elder in Phrom Khiri, Nakhon Si Thammarat accessed social network more than one time per day. The most popular usage period was 12.01-16.00. Mostly decided to use mobile phone, and to access "Facebook". Also found that Social Network Usage Behavior influencing elder's happiness in Phrom Khiri, Nakhon Si Thammarat, was on Family, Health, Entertainment, Self Esteem and Social, respectively.

**Keyword:** Social Network Usage Behavior, Elder, Happiness

## **1. Introduction**

Currently, Social Network is the link of communication between people in Internet network which is the essence in life style changing, able to change people's behavior rapidly. It's communication channel through media which too much popular to be a part of culture of internet's user nowadays, and have an influence in people's daily lifestyle who wider adopt and learn more about Social media whether it be Facebook, Line, Instagram, or Youtube, supporting more convenient communication, both with or without face-to-face conversation, exchange knowledge, sharing information and worldwide communication.

In Thailand, there's increasing on elderly population that ready to become Aged Society. The proportion of elder (Aged above 60 years) was increased and reached 20 percentage in 2018, elderly

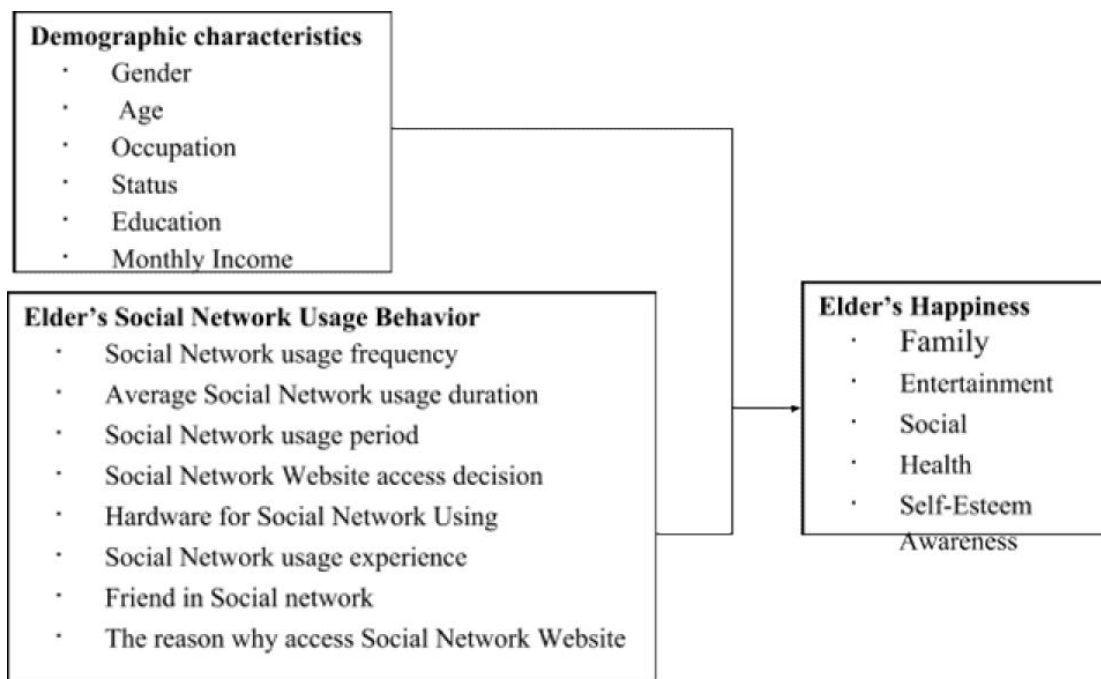
population are now bigger than young population in estimated ration 1/5 of Thai population. Elderly population's proportion was rapid increased because family changing, Decreased marriage rate and Increased single, divorce, single-parent rate caused dropped average fertility rate to get less new born in family.

Elder adapt to learn new things by themselves, and to gain self-reliance such as Technology learning, Social network which hardly to avoid the elder. To keep up with the times, technology issue is importance and influence elder's lifestyle to pay more attention and more access to social network because they have plenty free time then become loneliness and worry in many things such as family, health or others. Elder decide to use social network to get themselves happy whether it be Facebook, Line, Youtube, or Line. Talking to family members both with or without face-to-face, is the support to narrow the space between elder and younger, communication friend, experience sharing in social media, and entertainment provider to relief them, support learning and to remind them about their self-esteem. Once elder get to learn and realize to adapt the changing, affect a good way. Social network usage provided them a happiness and healthy. So, it's necessary to study social network usage behavior influencing elder's happiness, to understand social network usage behavior and whatever factor influencing elder's happiness.

### 1.1 Conceptual Framework

#### Independent Variables

#### Dependent Variables



## *1.2 Purpose of the Research*

1. To study personal factor influencing social network usage behavior
2. To study social network usage behavior effecting elder's happiness in Phrom Khiri, Nakhon Si Thammarat

## *1.3 Research Hypothesis*

Hypothesis 1 The sample's Personal different factor influencing elder's happiness who use different social network

Hypothesis 2 Different social network usage behavior influencing elder's happiness who use different social network

## **2. Literature Review**

Pratueang Bhumphattarakhom (1991, page 9) said, Learning caused human behavior. Especially, Behaviorism Psychologist believed that learning caused human behavior, by the way it's not included unusual behavior by abnormal body and nervous system. They tried to study in relation between one stimulus and another, which focus on overt behavior.

Kewarin La-eardeen (2014, page 6) defined Online Consumer Behavior as personal action which directly relate to social network usage.

Thanyawat Kabkam (2010) explained about social network, defined as various responsive social media through internet network, consisted of internal interaction.

### *Definition of Elder*

The word, to call aged people. Normally use to call people with aged who has white hair, wrinkled face, slow movement. Thai Dictionary of the Royal Society defined "aged" as having lived long, to become old. (Sasiphan Yodphet, 2001) But this word wasn't popular especially for elder and academic who consider this word affect depress and hopelessness. Therefore, elderly associate conference by Laung Attasitsunthorn, General, Pol.Gen. as chairman, purposed to call "Elder" on December 1<sup>st</sup>, 1969 until now. This word indicated respect to elder as people who full of seniority, ability and experience. (Sasiphan Yodphet, 2001)

### *Definition of Happiness*

Kornkrit Jongchadkarn (2010) said, happiness is the best thing in human life, is the things that human lives to looking for. Happiness is different to people, some happy by eating a great food, some by property that show their wealth, some by developed other or some by having warm family.

Samai Sirithingthaworn (2004) said, happiness is emotion state that everyone has right to have it and able to reach in every situation even it's too exaggerated or garbled to strive to get real happiness and see what it like.

### **3. Research Methodology**

#### *3.1 Population and Samples*

The research population are Elder aged 60-70 years and above in Phrom Khiri, Nakhon Si Thammarat amount 3,929 (Population statistic of Elder in Phrom Khiri, Nakhon Si Thammarat, 2018)

The participant collected by Simple Sampling, with Taro Yamance's Standard error of mean (Kanlaya Wanichbancha. 2006:75) at the confident level of 0.85 and approximation error of 0.05

#### *3.2 Research Instrument*

Instrument for this research is Questionnaire, divided to 4 section;

Section 1 personal's factor Questionnaire, which is Check-list content 6 items. Those consisted of question about Gender, Age, Occupation, Marriage status, Education level and Monthly income. There're Multiple Choice Questions, to get only one answer from participants.

Section 2 Elder's social network usage behavior Questionnaire, which is Close Ended Question, in Multiple Choices.

Section 3 Elder's happiness on social network usage Questionnaire, consisted of family, social, entertainment, health and self-esteem awareness, which is Liker Scale.

Section 4 Problem and Difficulty, and Suggestion about social network usage behavior influencing elder's happiness in Phrom Khiri, Nakhon Si Thammarat. It's open space for participant to inform Problem and Difficulty, and Suggestion.

#### *3.3 Statistic on Data Analysis*

Refer to indicated factor and collected data, the researcher analyzed to get result by Analysis Software. Analyzed statistic are;

1. Basic Statistic, to explain the samples by Frequency, Percentage, Mean and Standard Deviation.
2. Test Statistic T-test, in condition of two-group variable.
3. Test Statistic F-test, by One-way analysis of variance (One-way ANOVA). Once found statistical significance difference, then test the difference paired by Scheffé.

### **4. Results Analysis**

#### **Part 1 Participant's General Information**

Most participants are female, size of 218, estimated 54.5 percentage. Participants Aged 65-69 years are 177, estimated 44.3 percentage. There're 123 agriculturists, estimated 30.8 percentage. Married participants are 269, estimated 67.3 percentage, educated secondary education 143, estimated 44 percentage, and 140 participants has monthly income between 2,001-5,000 baht.



## **Part 2 Social Network Usage Behavior of elder in Phrom Khiri, Nakhon Si Thammarat**

187 participants accessed to social network more than one time per day, estimated 46.8 percentage. 206 participants, most average duration to accessed social network is 1-2 hours, estimated 51.5 percentage. 126 participants, most period to accessed social network is 12.01-16.00, estimated 31.5 percentage. 184 participants, most accessed Facebook, estimated 46 percentage. 270 participants used mobile phone to access social network, estimated 67.5. 226 participants, most experienced in social network accessed is 2-3 years, estimated 56.5 percentage. 120 participants most having friend in social network around 201-500, estimated 30 percentage. 316 participants, most contacting people they know to accessed social network, estimated 41.2 percentage.

## **Part 3 Social Network Usage Behavior influencing Elder's Happiness in Phrom Khiri, Nakhon Si Thammarat**

Most participant, mostly agree about Social Network Usage Behavior influencing Elder's Happiness in Phrom Khiri, Nakhon Si Thammarat, averaged 4.14. Once separately considered, most average factor is Family, Entertainment, and Health, averaged 4.15. Social, averaged 4.01. And self-esteem awareness, averaged 4.02.

### **Family factor**

Most of participants, most rated Social Network Usage Behavior influencing Elder's Happiness in Phrom Khiri, Nakhon Si Thammarat is Family factor, averaged 4.39. Once separately considered, most average reason is providing family talking such as Facetime, Line or Chat, averaged 4.65. Next reason is providing good relationship, averaged 4.28. And the reason is decreased loneliness, averaged 4.20.

### **Entertainment Factor**

Most of participants, much rated Social Network Usage Behavior influencing Elder's Happiness in Phrom Khiri, Nakhon Si Thammarat is Entertainment factor, averaged 4.02. Once separately considered, most average reason is providing Entertainment such as Movie, or Song, averaged 4.10. Next reason is decreasing stress, averaged 4.01. And the reason is giving news, averaged 3.94.

### **Social Factor**

Most of participants, much rated Social Network Usage Behavior influencing Elder's Happiness in Phrom Khiri, Nakhon Si Thammarat is Social factor, averaged 4.06. Once separately considered, most average reason is providing sharing channel such as Story, Picture, or Video, averaged 4.65. Next reason is providing contact channel, averaged 4.19. And the reason is giving social movement information, averaged 4.06.

### **Health Factor**

Most of participants, much rated Social Network Usage Behavior influencing Elder's Happiness in Phrom Khiri, Nakhon Si Thammarat is Health factor, averaged 4.15. Once separately considered, most average reason is decreasing stress to get better health, averaged 4.37. Next reason is providing humour, decreasing pressure to be more cheerful, averaged 4.18. The reason is

providing remembering ability practice, to prevent Alzheimer's disease, averaged 4.07. And the reason is providing health information access, averaged 3.98.

### **Self-Esteem Awareness Factor**

Most of participants, much rated Social Network Usage Behavior influencing Elder's Happiness in Phrom Khiri, Nakhon Si Thammarat is Self-Esteem Awareness factor, averaged 4.02. Once separately considered, most average reason is providing up-to-date feeling, averaged 4.10. Next reason is providing free-time activity, to get a better mental health, averaged 4.06. The reason is decreased encumbered feeling, averaged 4.03. The reason is providing them the self-help, averaged 4.00. And the reason is providing new things in social, averaged 3.96.

### **Part 4 Hypothesis testing**

#### **Hypothesis 1 Different Personal's Factor of Participants influencing Different Social Network Elderly User's Happiness**

- 1.1 Refer to comparison of social network elder user's difference happiness, classify by Gender, found that Gender of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness, not differently at the significance Level of 0.05 ( $T = -1.535$ , Sig = 0.127).
- 1.2 Refer to comparison of social network elder user's difference happiness, classify by Occupation, found that Marriage Status of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness, differently at the significance Level of 0.05. Except Self-Esteem Awareness, not differently.
- 1.3 Refer to comparison of social network elder user's difference happiness, classify by Marriage Status, found that Marriage Status of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness, not differently. Except Family factor, different at the significance Level of 0.05.
- 1.4 Refer to comparison of social network elder user's difference happiness, classify by Education Level, found that Marriage Status of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness, not differently. Except Self-Esteem awareness factor, different at the significance Level of 0.05.
- 1.5 Refer to comparison of social network elder user's difference happiness, classify by Monthly Income, found that Marriage Status of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness, not differently. Except Entertainment, Social and Health factor, different at the significance Level of 0.05.

#### **Hypothesis 2 Different Social Network Usage Behavior influencing Different social network Elderly user's happiness**

- 2.1 Refer to comparison of social network elder user's difference happiness, classify by Frequency of Social Network Using, found that different Frequency of Social Network Using of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness, not differently. Except Entertainment, different at the significance Level of 0.05.
- 2.2 Refer to comparison of social network elder user's difference happiness, classify by Time Average of Social Network Using, found that different Time Average of Social Network Using of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness, not differently. Except Entertainment, different at the significance Level of 0.05.
- 2.3 Refer to comparison of social network elder user's difference happiness, classify by Time Period of Social Network Using, found that different Time Period of Social Network

- Using of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness, not differently at the significance Level of 0.05.
- 2.4 Refer to comparison of social network elder user's difference happiness, classify by Most Social Network Access, found that Most Social Network different Access of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness, not differently. Except Family and Entertainment, different at the significance Level of 0.05.
  - 2.5 Refer to comparison of social network elder user's difference happiness, classify by Social Network Accessed Equipment, found that Social Network different Accessed Equipment of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness, differently at the significance Level of 0.05. Except Self-Esteem Awareness, not different.
  - 2.6 Refer to comparison of social network elder user's difference happiness, classify by Experience of Social Network Using, found that different Experience of Social Network Using of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness, differently at the significance Level of 0.05.
  - 2.7 Refer to comparison of social network elder user's difference happiness, classify by Friend who has access same Social Network, found that Friend who has access different Social Network of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness, differently at the significance Level of 0.05. Except Family, not different.
  - 2.8 Refer to comparison of social network elder user's difference happiness, classify by Reason of Social Network Using, found that different Reason of Social Network Using of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness, not differently at the significance Level of 0.05.
  - 2.9 Refer to comparison of social network elder user's difference happiness, classify by The Finding New Friend Reason of Social Network Using, found that The Finding New Friend Reason of Social Network Using of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness, not differently at the significance Level of 0.05.
  - 2.10 Refer to comparison of social network elder user's difference happiness, classify by The Updating Status and Picture Reason of Social Network Using, found The Updating Status and Picture Reason of Social Network Using of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness, not differently. Except Family, different at the significance Level of 0.05.
  - 2.11 Refer to comparison of social network elder user's difference happiness, classify by The Entertainment Reason of Social Network Using, found that The Entertainment Reason of Social Network Using of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness, not differently at the significance Level of 0.05.
  - 2.12 Refer to comparison of social network elder user's difference happiness, classify by The Playing Game Reason of Social Network Using, found The Playing Game Reason of Social Network Using of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness, not differently. Except Self-Esteem Awareness, different at the significance Level of 0.05.
  - 2.13 Refer to comparison of social network elder user's difference happiness, classify by The Updating Product Information Reason of Social Network Using, found that The Updating Product Information Reason of Social Network Using of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness, not differently at the significance Level of 0.05.

## 5. Discussion

### *Social Network Usage Behavior*

The research revealed that, most of participant accessed to social network more than one time per day, average duration to accessed social network is 1-2 hours, most period to accessed social network is 12.01-16.00 and most accessed Facebook with mobile phone. Most experienced in social network accessed is 2-3 years, most having friend in social network around 201-500, and most contacting people they know to accessed social network.

The research revealed that, most of participant accessed to social network by the reason of Contacting people they know at the most, then Updating Information, Getting Partner, Getting New Friends, Being Entertained, Playing Game, Updating Status, Personal Information, Picture, Work Pieces, respectively. It's clearly that elder decided to access social network for contacting people they know at the most, which indicated that Social Network Usage Behavior influencing Elder's happiness is Using social network to contact people they know.

Most participant, mostly agree about Social Network Usage Behavior influencing Elder's Happiness in Phrom Khiri, Nakhon Si Thammarat. Once separately considered, most average factor is Family, then Entertainment, Health, Social, And Self-Esteem Awareness, respectively. It's indicated that Social Network Usage Behavior influencing Elder's happiness is Family factor, because they able to access social network to contact family, to firm family bond and to not getting loneliness.

### **Hypothesis 1 Different Personal's Factor of Participants influencing Different Social Network Elderly User's Happiness**

Hypothesis testing 1 found that, refer to comparison of social network elder user's difference happiness, classify by Gender, found that different Gender of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness, not differently. It's might because, whatever Gender was able to access social network. So, Gender not influencing social network using.

Hypothesis testing 1 found that, refer to comparison of social network elder user's difference happiness, classify by Occupation, found that different Occupation of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness differently, included Family, Entertainment, Social, Health, except Self-Esteem Awareness. It's might because, Human being was aware on their self-esteem. So, there's no difference in this factor. In the other way, family, social, health and entertainment for each people were surely difference.

Hypothesis testing 1 found that, refer to comparison of social network elder user's difference happiness, classify by Marriage Status, found that different Marriage Status of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness not differently, except Family. It's indicated that Elder's status not influenced to social network using, because every kind of status in social was able to access social network.

Hypothesis testing 1 found that, refer to comparison of social network elder user's difference happiness, classify by Education Level, found that different Education Level of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness not differently, except Self-Esteem Awareness. It's might because, people who has upper education level seem to aware their self-esteem better than lower level.

Hypothesis testing 1 found that, refer to comparison of social network elder user's difference happiness, classify by Monthly Income, found that different Monthly Income of Elder in Phrom Khiri, Nakhon Si Thammarat influenced elder's happiness not differently, except Entertainment,

Social and Health. It's might because, people in different monthly income has different purpose to access social network whether it be Entertainment, Social or Health.

### **Hypothesis 2 Different Social Network Usage Behavior influencing Different social network Elderly user's happiness**

Hypothesis testing 2 found that, refer to comparison of social network elder user's difference happiness whether it be Family, Social, Health and Self-Esteem Awareness are not difference, except Entertainment. It's might because, each elder has different purpose on using social network base on difference passion.

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## Cloud Computing: Overview and Research Issues

**RCGR<sup>2nd</sup>  
2018**

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# Cloud Computing: Overview and Research Issues

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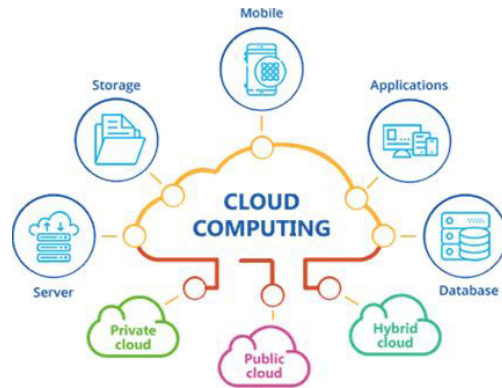
## Abstract

Nowadays, as cloud computing is a technology of rapid development and a great perspective. This has caused concern for the IT world. Cloud computing resource is Internet computing in which shared information, resources, and software are provided to terminals and portable devices on demand, such as a power network. Cloud computing is a product of a combination of grid computing, distributed computing, parallel computing, and ubiquitous computing. Its goal is to create and predict complex service environments with powerful computing capabilities using a set of relatively inexpensive computing objects and using modern deployment models such as SaaS (software as a service), PaaS (platform as a service) IaaS. This document will look at the source data and service models, as well as present the existing research problems and the implications for cloud computing, such as security, reliability, confidentiality, etc.

**Keywords:** Cloud, Cloud Computing, Internet

## 1. Introduction

Cloud computing is a computing platform which supporting on processing, storage, server, database and applications over the internet which referred as cloud. All the cloud service administer by Cloud computing provider such as Google, IBM, Amazon Web Services. It gained widespread user over the world for decades since it established in 2008, it become a billion dollar industry. The main concept of Cloud computing is to reduce strain process on users while access utility program from various type of devices including PCs, laptops, smartphones even tablets, for same purpose that can be accessed from any connected devices as needed. Cloud computing divided in three main models 1. Public Cloud 2. Private Cloud 3. Hybrid Cloud. Cost savings, Flexibility, Mobility and Manageability are some of cloud computing advantages. Somehow Security is the most important problem of this platform. The figure 1 show it's work and type on cloud by internet connected.



**Figure 1** Cloud Computing Major Concept and Models [1]

## 2. Literature Review

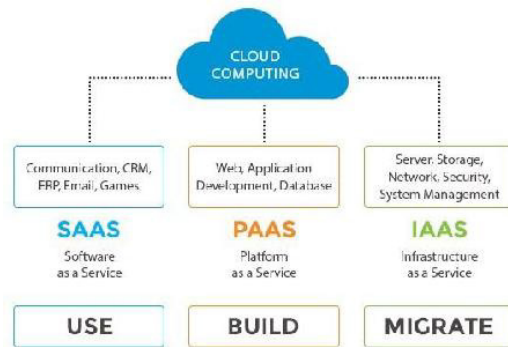
### 2.1 Cloud computing overview

#### Characteristics

The U.S. National Institute of Standards and Technology (NIST) defines cloud computing as having the following essential characteristics. [2]

- **On-demand self-service:** Users able to gain capabilities such as server time or computing network storage as needed by automatically without human interaction.
- **Ubiquitous or Broad network access:** Cloud computing resources are available and access through standard network in every platforms (eg., PCs, laptops, mobile phones)
- **Location-independent resource pooling:** Mostly users do not know wherever this computing resources are at. Because it's pooled to serve various of users with different virtual and physically resources progressing according the demand.
- **Rapid elasticity:** Capabilities can be elastically provisioned and released, in some cases automatically, to scale rapidly outward and inward commensurate with demand. To the consumer, the capabilities available for provisioning often appear to be unlimited and can be appropriated in any quantity at any time. [3]
- **Measured service:** It usage will be measured and billed based on resources were used.

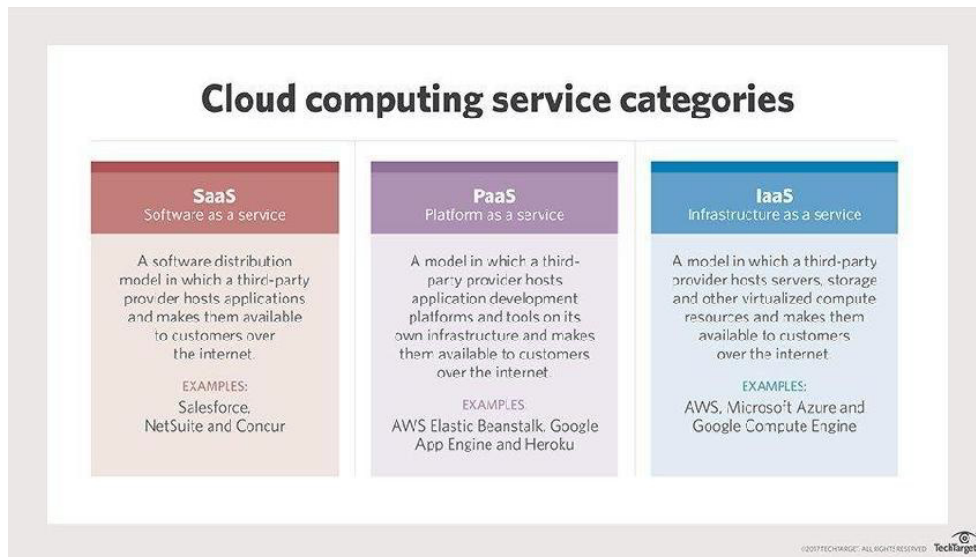
## Basic type of services



**Figure 2** Basic Type of Cloud Computing Services [4]

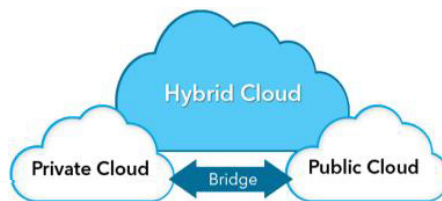
- **Infrastructure as a service (IaaS):** This service hosted by third-party which called as Cloud Service Providers (CSPs) that run the information systems for using on processing, storage, server, database and applications. Users only pay for the amount that they used. (eg., Amazon use its spare capacity to develop themselves that offer cloud for countless IT services)
- **Software as a service (SaaS):** Customers able to use software of CPSs' applications which provided in they own cloud infrastructure over the network. (eg., Google Application that can be use from web browser)
- **Platform as a service (PaaS):** Customers use infrastructure and programming tools supported by the CSPs to develop their own applications. (eg., IBM offer Bluemix software development and testing on its cloud infrastructure ) [5]

Third-party cloud computing provider allows organizations to focus on their core business, rather than spending IT resources on computer infrastructure and maintenance. Supporting point out that cloud computing can make companies to reduce cost of IT infrastructure. Administrator also claim that it allows companies to speed up their applications, improve manageability and maintenance, and also allow IT departments to more quickly tune resources to meet changed. Providers mostly use a coverage model that can lead to unexpected operating costs.



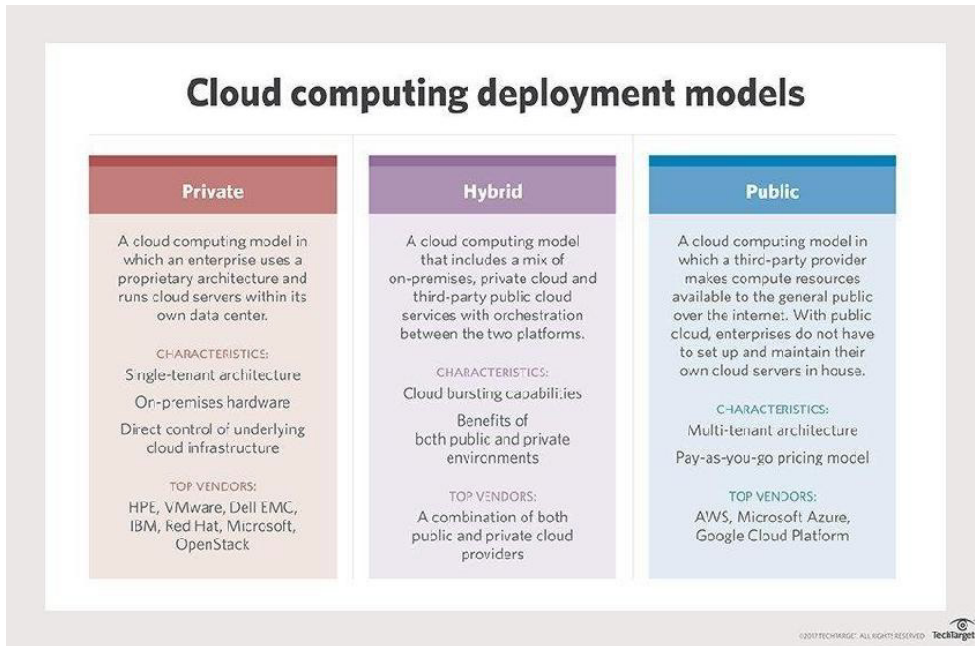
**Figure 3** Cloud Computing Service Categories [6]

## 2.2 Models



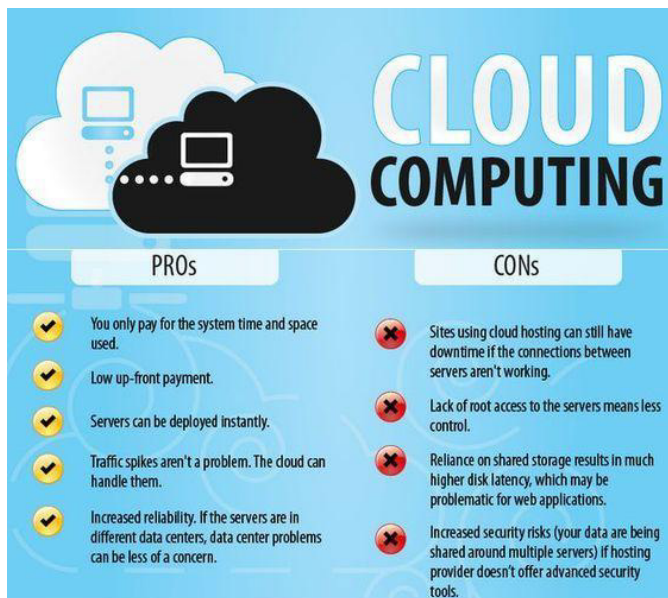
- **Public Cloud:** Own and administrate by CSPs. It can accessed from public. This model usually using in organization which not own its infrastructure for saving cost (invest in software it cost a lot to maintain it) and customers have to pay only the CPU cycles and storage that have been used.
- **Private Cloud:** This model can be operated by its own organization or third-party. Mostly taking care on application for internal IT infrastructure as in private, organization focus on flexibility of accessing to data and control by its own.
- **Hybrid Cloud:** Combination of private and public cloud services, many big company like to use kind of this model for their infrastructure and its very useful for Business to Consumer (B2C) as well as Business to Business (B2B) interactions.

In additional, present many organizations are trying on using multi-cloud. As hybrid cloud is also popular because its flexibility in term of availability for solution choices and reduced cost is not highly as multi-cloud model. But multi-cloud do have risks affect from multiple providers.



**Figure 5** Cloud Computing Deployment Models [8]

### Advantages/Disadvantages [9]



**Figure 6** Cloud Computing Pros Cons

## Advantages

- **Cost Savings:** The main reason of changing manual to cloud computing is to reduce cost which organizations can often reduce annual operating costs by using cloud storage. Users can see additional cost savings, since remotely storing information does not require for internal power.
- **Reliability:** Now cloud computing is reliable more than its IT infrastructure and most of CSPs are well-known with high trust rating.
- **Accessibility: As present internet can be access 24/7 or anywhere, cloud also counted as this process but sometimes it .** IT infrastructure updates and maintenance are eliminated, as all resources are maintained by the service provider. You enjoy a simple web-based user interface for accessing software, applications and services – without the need for installation - and an SLA ensures the timely and guaranteed delivery, management and maintenance of your IT services.

## Disadvantages

- **Security:** Hackers could find ways to gain access to data, scan, exploit a loophole and look for vulnerabilities on the cloud server to gain access to the data.

## 3. Conclusion

The advantages of cloud computing is much too sensible, is kind of value effective and it's economical. The drawbacks are incidental and almost negligible. The decision to take cloud primarily based services is nice with saving substantial prices with regards to installation and maintenance, reduced time eriod, virtually negligible men concerned in observance the servers and no collateral investment with regards to the infrastructure needed to accommodate the servers in-house. [10]

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[3] The NIST Definition of Cloud Computing

Recommendations of the National Institute of Standards and Technology Timothy Grance and Peter Mill

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## The Technological Impacts on the Turnover of Insurance Business



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# The Technological Impacts on the Turnover of Insurance Business

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## Abstract

To apply “Thailand 4.0” policy in Thailand has an important role making both state and private institutes and organizations be motivated according to the technological systems and innovations were brought to move the country and made the operation process in many terms be more shorten and smarter. Moreover the financial and insurance business had to adjust itself in order to enhance enough efficiency for the coming changes and had to efficiently move the operation and rise the added value of the business. This article has the purpose for reporting the impacts in terms of innovations and technologies caused by “Thailand 4.0” policy which was applied for moving the domestic business by applying the technologies and internet to develop the tools and products affecting to the insurance business including the report of the survey on the efficiency and success of service. The collected data, at present, was the secondary data emphasizing to collect the data from other researches for reporting the impacts on the insurance business.

**Keywords:** Technology, Internet, Insurance, Fintech

## 1. Introduction

According to the economic and social conditions at present, Thailand stepped into the period of “Thailand 4.0” which was the policy vision changing the traditional economy to the economy moved by the innovations (Value-Based Economy). The main idea was to change from producing the “consumer goods” to “innovative goods”, from emphasizing to manufacture goods to give more good service. Therefore, “Thailand 4.0” enhanced the way which was from traditional SMEs or SMEs, which the government had to support all the time, to become smart enterprises and Startups. This made the newborn companies had the higher quality and changed from traditional services having quite low added value to high value services. According to the above policy, technologies had an important role on operating business and applying the technologies for enhancing tools and products used for more services being easier and faster to reach the facilitation and being able to respond all customers’ need. The technologies were used for developing the operation systems no matter the data management system or the invention of innovations for applying to the business operation and any financial transactions such as the financial data transfer, the financial transactions affecting directly to the financial business. The used technologies like Fintech was the service of electronical finances used for the financial transactions online based on the reliability of the system organization and data collection etc. Besides, Insurtech, best known as startup, was a new technology used in the business like “Blockchain”. And then, the technology like “Internet of Things” could be applied. This made the customers’ follow-up be “Real-time”. Moreover, “the Artificial Intelligence: AI” and “the Robotics Process Automation: RPA” were used and emphasized to apply the technologies to the financial industry better.

Technologies applied to the business operation affected customers to see the importance of the life quality using the technologies for facilitation, made the financial institutes have to adjust themselves and to present the new proper products, to consider customers' profit as the most important things, give the service which was convenient, fast, and easier to be reached, respond the problem of customers' need which could relate to customers simply to the services such as the transactions via mobile phone, Internet banking, and Application like Netbank, the payment via mobile phone called Bitcoin which was the digital currency. The insurance business concerned to the financial institutes serving customers via the financial transactions. The financial institutes had much important role on moving the insurance business. In the digital period, it was necessary to consider to keep and protect customers' benefits including to encourage to understand more about the insurance and the benefits from the insurance contract. Besides, there still was the policy encouraging to develop the informative system and the business to be more proper and up to date as the complete business operation form. Technologies affected to the turnover of insurance business including the risks occurring with the insurance business in the future. At present time, the insurance business was encountering with the problem on changing the policy structure for developing the quality and the efficiency for the services of insurance business following up the technologies to see how to follow up the period of "Thailand 4.0". This affected to the insurance industry not only in Thailand but also around the world. In order to handle with the changes to the digital period, it would cause the higher competition in terms of controlling the risks which might happen and reducing the cost of expenses. According to the survey "Insurance Skills 2017", the center for the study of financial innovation (CSFI) together with PwC made it for examining the insurance entrepreneurs' opinion. They studied the risk factors affecting to the insurance business operation the most in next 2-3 years. The results were found that the change management was the first important factor in terms of the risk on the operation for reducing the impacts caused by the changes and encouraging to adjust and admit the insurance business with technologies including to make new efficiency for bearing the changes efficiently under the set goal for the good financial turnover and the increased distribution channels so that the business could grow up. Besides, there were the cyber risks from the marketing competition of insurance business because tools in terms of technologies developed for enhancing forms and steps of services now. They were designed for facilitating the operation to be faster, easier to be controlled and managed. It was believed that technologies affected to the turnover of insurance business.

## **2. Principles and Reasons**

To step into period of "Thailand 4.0", it was the policy vision changing the traditional economy to the one moved by innovations (Value-Based Economy). It changed from moving the country with industry to move the country with technologies. This made technologies have an important role on operating lots of business including technologies affecting to the turnover of insurance business.

## **3. Objective**

1. In order to report the technological impacts on the turnover of insurance business

#### 4. Scope

Technologies and internet were applied to improve tools and products for increasing the financial turnover, the distribution channels, and the service forms used for the facility, the rapidness, the reliability, the current data accuracy, and for responding to all customers' need with technologies and internet increasing the efficiency in operating and affecting to the turnover of insurance business.

#### 5. Discussion

Nowadays, the period of "Thailand 4.0" changed from moving the country with industry to move the country with technologies, the creativity, and innovations, from emphasizing to manufacture the products to emphasize the service. The insurance business was the service business concerning with data collection as the important issue and there were lots of data about customers' insurance documents, the insurance contracts, insurance forms, asset data protected by the insurance, the cover aspects and benefits, the claim documents, and the expenses for claiming. They all were the important data (Rattakorn Phulthraphy. 2017, Page 1), customers' insurance documents, such as the insurance books, the insurance tables, and the detailing forms. Besides, there were still other documents used with the insurance like data having customers' personal information including the benefits data which was the income compensation of the lost from death and old. The life insurance had many advantages including the concerning documents such as the cover protection, the saving, the insurance premium which could be deducted from the taxes of customers' insurance, the insurer, the assured, and the beneficiary. It could be seen that the insurance operation had to include the data of fine and the documents requiring the rights from the insurance.

The insurance business had to have the correct data which were not repeated, imitated; it had to collect the data rapidly, reliably, and could transfer the data to the institutes concerning to the business or the responsible institutes (Rattakorn Phulthraphy. 2017, page 1).

The office of insurance commission determined the operating directions of office of insurance commission as "the motivation of the insurance in the digital period" so that it corresponded to the insurance business tending to apply the technologies to revolt the business form (Chatchai Tanajindalurt. 2017, January) Most customers gave the importance to the better living style and the better life quality. They realized the importance of financial plans. This made the insurance business adjust itself by mainly considering customers' benefits including the fast service and creating the trust in the data system of insurance business giving the simple service for avoiding the risks affecting to the insurance business. Therefore, technologies and internet had to have the important role on the operation.

The insurance business began to apply these technologies which were 1. Bigdata, 2. Blockchain, 3. Fintech, 4. Internet banking, 5. Mobile application for applying for developing the tools, the insurance products, the data management system, the distribution channels, the forms designed for the services so that they brought the better financial turnover and approached to customers easily for responding to customers' need including the facility, reducing the operation redundancy so that it could follow in the needs and the decision of insurance business.

Bigdata was tons of data about insurance business in everything which might was the precise structured data such as data collected in tables or semi-structured data such as Log data or even unstructured data such as the interaction data via social media – Facebook, twitter, or media files. These data were waiting for being analyzed for the business and being developed mainly for sale and

market. To improve products and services to be faster and up to date was understood the marketing condition and customers' behavior. The data might come from the interior or exterior business collected by contacting to suppliers or every channel contacting to customers. Nevertheless, all of them were still the raw data waiting for evaluating and analyzing for bring the results to make the business value. These data might not be in the insurance business form being used immediately. Yet, there might be some useful data for the business. These data could be analyzed for the possible opportunity and helped to determine the directions of the insurance business rapidly.

For tools and technologies developing the innovations in terms of variety of services, there were various services for responding the problem on operating the insurance business such as Fintech, Blockchain, Internet of Things (IOT), and Bizagi BPM Suite. However, the idea about Blockchain and the idea about Internet of things had to rely on the informative system including the structure base system of communication for rapidly transferring the large amount of data together with the security, the honesty, and the reliability because the data of insurance business would be improved to be current and could not correct the data at all. Moreover, the conditions of the insurance could be examined for transferring the insurance premium automatically and could be identified the customers' name. The insurance business could transfer the data from the concerning institutes immediately or share the data. This made customers recognize their own rights; every concerning institute could acknowledge the assured's data rapidly because of the technologies used in the insurance business. So the customers around the world could be reached easily and it helped to motivate the customers; the customers' behavior and need could be more acknowledged.

Fintech was the service of financial management on the electronics, the online transaction based on trust in data collective system. To apply Fintech to the insurance business had to be ready and understand, analyze the share data for making the decision of investors, causing the highest benefit. The form would be applied to the complete services in every step so that the operation process of insurance business which were to offer the insurance, consider the insurance, transfer the insurance premium, extent the insurance, and pay for claiming the insurance being reached by customers easier (Pichet Chayamane. 2018, Page 1).

Blockchain was a form of data collection. The system did not have the center or did not rely on the medium but it could be reliable a lot. In other words, everybody would have the same documents. When the data were enhanced, all of them would be enhanced at the same time. It could assure that these documents were absolutely reliable and would not be imitated. Therefore, everybody could approach and receive the same data. When the transactions were operated, they would be recorded into the blocks and the data could not be changed. It could be said that the behind technologies applied to move the operation system was the central system. (Rattakorn Phulthraphy. 2017, page 1)

Besides, there was still the development of tools for the finance and the insurance which was the innovative development for increasing the benefits and reducing the risks which might happen from the insurance business because of the human mistakes. When the handbooks being used for operating, the automatic process still gave the services real time. Its purpose was for noticing the important data date such as the automatic robots which was the artificial intelligence process and calculated the knowledge, the transformation in the business process, to make the prototype (BPM), the change management and the excellence in operation. For the business applying, up to date, tools and technologies were pushed by the financial institutes for developing the ability in controlling the expenses of the operation and reducing operation time. The automatic operation of business was important to help to make a decision on evaluating the services and facilitating via technologies such as to deposit and withdraw money, to save money, to give the loan.

Bizagi BPM Suite was a series supporting the process making the model of automatic system and the software operation and Cloud solution system which helped the users to manage the process completely. Bizagi Modeler was a business process, tools making models and documents. These helped users to make the documents having the steps of process operation by using industrial standard. BPMN was a program being able to speak in various languages such as English, Spanish, German, French, Portuguese, Russian, Chinese, Italian, and Japanese. It could even cooperate with Cloud system. So, it could fill in the data smoothly “no time or geography limit”. It was the tool developing the operation process automatically and it pushed the profits and the business interest to be more popular for using the services and it was even important for the insurance business.

Internet banking was an online website of banks having high security. Customers could approach, manage, examine, or do any financial transactions via it by themselves easily no matter paying the bills such as telephone bills, water bills, electricity bills, online shopping, including to pay for the insurance and deposit and withdraw money, transfer money or check the amount of money.

Mobile application was a developed program applied for mobile devices such as cell phones. The program helped to respond the customers’ need and support the cell phone users to use it easily including to extent the services via mobile phone which was convenient anywhere, any time. The applied samples were Mobile applications for Real Estate: the customers’ data collection, the reservation, the house and condominium sale, Mobile applications for Retail or Wholesale: the distributors, or sale through the sellers including the insurance applications via mobile phones. These made the insurance business be more flexible.

However, the entrepreneurs of the insurance business were still worried about the regulations which might affect to the higher cost including the managed fame of insurance business which were more in risks from a lot of factors affecting directly to the operation and the financial status of insurance business such as the risk from the insurance concerning to the variance and the uncertainty affecting to the compensation and the expected cash flow in the future, the risk in terms of the operation about the ability coping with the situation changing from the insurant industrial period to the digital period even a new form of competition, the integration, and the cost reduction which resulted from technologies having more roles in the market of the insurance business such as the driverless cars, the internet of things, and the artificial intelligence, the risk from the climate changing in the world tending to cause the severe disasters which might affect to the lost value of the insurance business which had to be responsible and compensate to the insured, the risk from the insurance claim such as the changed regulations or disciplines controlling the casualty insurance business, the changes of financial status of the insured, a risk from the cessation of informative system having come mistakes in various factors; this loss was a risk which might affecting to the business and the continuous operation of the insurance business.

Moreover, the exterior risks such as the investment relating to the conditions of economy, politic, society, and finance including changes of concerning law. These risks were the exterior factors which could not be controlled. The risk in terms of marketing was from the changing variable in the market such as the interest rate, the international currency rate, the derivatives price, the asset price, the real estate price, and the consumption price. These might cause the fluctuation of asset value, debt, and business fund. The risk in terms of give the loan was from the lack of the reliability or the ability in operation following the contract with parties such as the one issuing the debt securities, the assured, the trading partner, the business alliance, and the insurer. And the risk from the insurance premium rate of new assured affecting to all assured had to buy the insurance or reinsure for the next year, use the new rate of insurance premium. At present, the insurance enhanced the regulations of the insurance premium rate emphasizing the benefits of the minimum cover in case

of the death for outsiders as the constant amount, the insurance premium rate of personal accident, the medical fee etc (Krichkamol Nitithrm. 2005, Page 2).

Technologies and Internet had the role on the operation of insurance business concerning to the financial turnover, the distribution channels, the growth and the service forms now.

Factors from the recovered economy resulted by the recovery of the private sector and the increased employment resulted in the people to increase their income. Besides, the policy even encouraged to develop the informative system and the business properly and up to date. It made the insurance business grow up. The turnover tended to be better; there was 50% of chance to grow up according to the circulation of new cars at Motor Expo. This increased the financial turnover of insurance business corresponding to the research on the analysis of the risks of banks and the security system in Pakistan. It was found that the financial turnover relied on a lot of factors as following. The factor of high risk led to the fluctuation of asset. Thus, this factor was measured by the high ratio of the compensation (CP) minus with the low ratio of the requirement. The second factor was the factor in terms of the operation or the basic factor of banks and insurance companies. According to the results, they were found that the risk in terms of the marketing affected very much to the surplus turnover of the share. It showed that the factor on macroeconomics had the very important role on determining the behavior of the marketing of the banks.

The distribution channels were extended via Mobile application and they gave the importance to the strictness with the controlled quality of selling the insurance products having the quality and the international standard. There were a lot of channels offering to sell the insurance products such as the representatives, the agents even in the central sector and the regional sector, the banks, and any other distribution channels. Moreover, the government was the center of the insurance industry together with banks which encouraged requiring the compensation for rushing the important role in the economic system.

To growth of the insurance business moving into the digital period had to consider the preservation and the protection of customers' benefits and encourage to understand about the insurance and the benefits if the insurance together with the factors from the recovered economy in the private sector which increased the employment and people's income. Therefore, it was found that there were the growth of insurance business and the correspondence with the insurance like merging the investment like Unit Link and the pension insurance. This showed that people saved more money including the economic condition in Thailand and customers' purchasing power tending to be better. These motivated the insurance premium to better grow up. According to the competition in terms of the liberalization of the insurance premium, it corresponded to the tendency of the insurance business in 2018 which rose for 5% from last year (Itsariya Sattakulpibul. 2018, Page 2).

At present, there were a lot of service forms of the insurance business resulted from applying technologies and internet to the business operation and now the insurance business had the services which customers could compare the price and the worth immediately via Mobile Application. Besides, there was the facility for contacting to the officers via the digital channels like online chat. When the insurance had been bought, the customers could use Facebook account to connect and have a look the information of their insurance immediately.

As the states above, the entrepreneurs of the insurance business believed that technologies directly affected to the turnover of the insurance business because now, a lot of insurance business brought the technological innovations to have the important role in the operation resulting the insurance business be develop varieties of forms concerning with the services. This made the

business grow up, be able to increase the profits and the distribution channels of the insurance business in customers' group. In many dimensions, the reason why the insurance business applied the technological innovations not only to be more convenient and increase the rapidness in services but also increase the trust in lots of terms such as the communication, the data transmission, the examination and the security of data, the data approach, the informative system having the benefit to customers and being the purchasing channels of the entrepreneurs being able to reach their customers.

## 6. Conclusion

According to the results, the changing economic condition in Thailand, at present, in the period of "Thailand 4.0" resulted to the insurance business was the service business and collected lots of important data. This made the insurance business adjust itself. It had to consider customers' benefits and the efficiency of managing the fast and convenient services and make the reliability to customers. The data base system had to be developed to be up to date and the forms had to be simple and flexible for the services and for fulfilling the capacity in the competition and avoiding the risks affecting to the insurance business itself. Therefore, the technological innovation and internet were brought to have more roles in operations. No matter Bigdata, Blockchain, Fintech, Internet banking and Mobile Application, these technologies resulted to the insurance having lots of better service forms. This made the business grow up, be able to increase the distribution channels of the insurance. It was sure that it made the turnover of insurance business gain more profits. Therefore, it could be seen that the technological innovation and internet affected to the turnover of the insurance business.

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# Logistics and Supply Chain Management

**RCGR<sup>2nd</sup>  
2018**



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**Risk Assessment Affecting Flight Dispatcher in  
XYX Company at Don Mueang International Airport**



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# **Risk Assessment Affecting Flight Dispatcher in XYX Company at Don Mueang International Airport**

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## **Abstract**

This qualitative research topic Risk assessment that affects flight dispatcher in XYX Company at Don Mueang International Airport has objective aim to study risk factor in flight dispatcher, to study risk factors that affect flight dispatcher and to assess risk that affect flight dispatcher. This research has 10 flight dispatchers of XYZ Company as population, tool is semi-structure interview. Result of this research found that 10 interviewees had 5 male and 5 female, 7 interviewees age between 25-30 years old, 2 interviewees age between 31-35 year old, and 1 interviewee age between 36-40 years old. 6 interviewees had working experience between 0-5 years, 3 interviewees had working experience between 6-10 years, and 1 interviewee had working experience between 16-20 years. The most three risk factors in flight dispatcher is in Liveware (less of sleep and fatigued), next is Hardware (computer) and environment (noise disturb), last one is software respectively.

**Keywords:** Risk Assessment, Flight Dispatcher

## **1. Introduction**

From Thailand logistic development plan No.3 (2017-2021), first strategy Develop transport infrastructure and logistic networks along the strategic route to reduce transportation costs and optimize transit and logistics networks that link the origin and destination of logistics routes such as Rail, Sea, and Air. In the Air transport part Thai Government promotes to develop Suvarnabhumi Airport, Don Mueang International Airport, and U-Tapao Rayong-Pattaya International Airport. Expand capacity of regional airport in order to prepare for the increasing demand of freight transport, improve airport management process for maintain quality of safety, availability of equipment, facilitate passengers and cargo, and emergency responding to meet international standard and comply with memorandum of international cooperation (Source: Office of the National Economic and Social Development Board/NESDB).

Air transportation is a part of logistic which has many components such as Airport, Airline, and Air traffic service. Activities in air transport must have risk assessment to ensure safety first. There are many of careers in airline such as Pilot, cabin crew, and ground service but it still has another important career in airline called “Flight dispatcher” or “Table pilot” who planning flight route and correspond with captain in every flight. The character of flight dispatcher is they will be in the airline office to analyze weather and suggest to pilot, calculate weight and balance of aircraft and also monitor flight since take off from departure’ airport until landing to the destination’s airport. Nature of this career has many factors that affect its, research was found that knowledge of working as flight dispatcher, pressure while working, and ability to deal with problem (Siuaya Buapong, 2016).

For the reason above researcher has interested to research in topic Risk assessment that affects flight dispatcher in XYZ Company at Don Mueang International Airport. Result from research is expected to be a benefit to prevent risks that affect safety in air transport.

### *1.1 Objective*

- 1.2.1 To study risk factor in flight dispatcher
- 1.2.2 To study risk factors that affect flight dispatcher
- 1.2.3 To assess risk that affect flight dispatcher

### *1.2 Research Question*

- 1.3.1 Liveware is the most factor that affect flight dispatcher
- 1.3.2 Hardware is the fewer factors that affect flight dispatcher

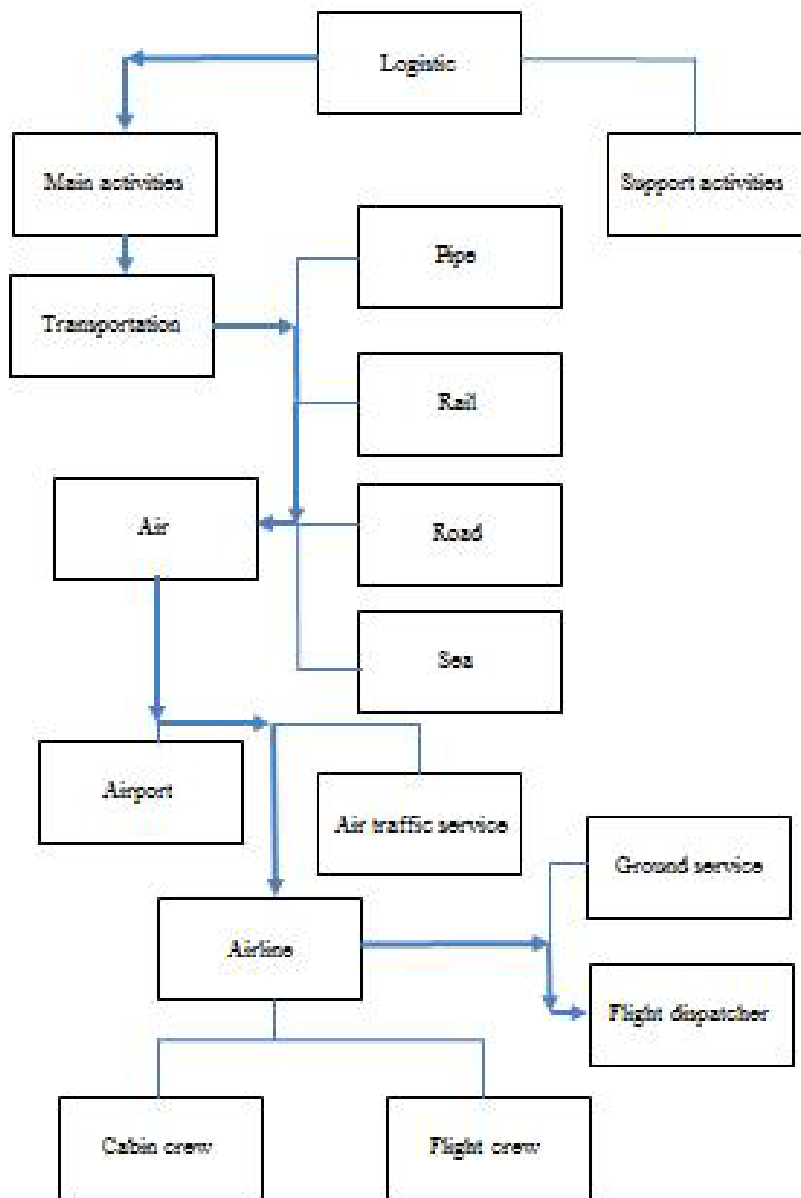
### *1.3 Expected Benefit*

- 1.4.1 To prevent error from flight dispatcher
- 1.4.2 To improving awareness in flight dispatcher

### *1.4 Research Scope*

- 1.5.1 Time, because of we have limit time so we select population by Purposive sampling which is XYZ Company
- 1.5.2 Population, XYZ Company’s, 10 flight dispatchers, who operate at day shift (05.00 am until 17.00 pm)
- 1.5.3 Content, main contents are Risk management and SHELL model

### 1.5 Conceptual framework



**Figure 1** Research Framework

## **2. Research Methodology**

This research is the qualitative research, primary data was collected by Semi structure interview with 10 flight dispatchers from XYZ Company's, who operate at day shift (05.00 am until 17.00 pm) and literatures review were from offline and online database.

### *2.1 Population*

10 populations of flight dispatchers who work in day shift

### *2.2 Research tools*

A research tool was semi-structure interview which was built. Tools were divided into three parts. First is information about interviewees: gender, age, and working experience. Second is question in risk factor (first and second objective) and finally risk assessment (third objective).

### *2.3 Verification of tools*

Semi-structure interview was built by SHELL model and risk assessment matrix which came from offline and online database. After Semi-structure interview was built, researchers give it to 3 experts in aviation field to validate its

### *2.4 Data collection*

Researchers called to appoint all interviewees and went to XYZ Company to interview all flight dispatchers after finished interview, researchers analyzed result with SHELL mode and risk assessment matrix to answer both research's objectives

## **3. Data analysis**

Part one of interview found that 10 interviewees had 5 male and 5 female, 7 interviewees age between 25-30 years old, 2 interviewees age between 31-35 year old, and 1 interviewee age between 36-40 years old. 6 interviewees had working experience between 0-5 years, 3 interviewees had working experience between 6-10 years, and 1 interviewee had working experience between 16-20 years

Part two Risk factors (First and second objective)



**Table 1** Risk factors in flight dispatcher (First objective)

Interviewee	Software	Hardware	Environment	Liveware
1 <sup>st</sup>	-	Uncluttered Electric wire	Lighting from monitor	Less of sleep and problem with health
2 <sup>nd</sup>	Rule violation	-	Noise disturb	fatigued
3 <sup>rd</sup>	System failed	Deterioration of computer	-	problem with health
4 <sup>th</sup>	-	Deterioration of intercom	Air condition (too cool/too hot)	Personal problem
5 <sup>th</sup>	-	Uncluttered equipment	Noise disturb	fatigued
6 <sup>th</sup>	-	-	Lighting from monitor	Workmate are not give information

Interviewee	Software	Hardware	Environment	Liveware
7 <sup>th</sup>	-	Uncluttered Electric wire	Noise disturb	Less of sleep
8 <sup>th</sup>	-	Deterioration of intercom	Noise disturb	Stressed
9 <sup>th</sup>	-	Deterioration of computer	Noise disturb	fatigued
10 <sup>th</sup>	-	Slow computer	-	Less of sleep

*Conclusion of Table 1:* the most three risk factors in flight dispatcher is in Liveware (less of sleep and fatigued), next is Hardware (computer) and environment (noise disturb), last is software respectively

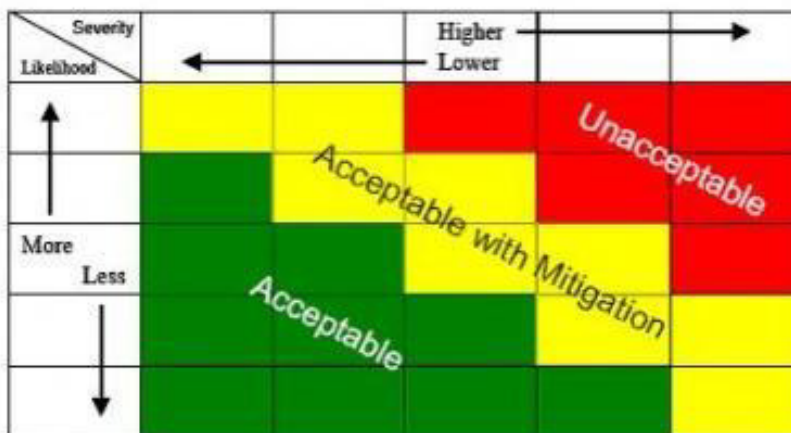
**Table 2** Risk factors that affect flight dispatcher (Second objective)

Interviewee	Software	Hardware	Environment	Liveware
1 <sup>st</sup>		Electrical shock	Blurry	Stress
2 <sup>nd</sup>	Doing flight plan	-	Can't concentrate/Error	Working slowly
3 <sup>rd</sup>	Working is interrupted	Filled data slowly	-	Sick
4 <sup>th</sup>	-	Communication error/ flight delay	Affect in health	Uncomfortable in working
5 <sup>th</sup>	-	Injury	Communication error	Working slowly
6 <sup>th</sup>	-	-	Blurry	Got incomplete information
7 <sup>th</sup>	-	Electrical shock	Can't concentrate	Working slowly
8 <sup>th</sup>	-	Communication error/ Got incomplete information	Can't concentrate	Working with pressured
9 <sup>th</sup>	-	Filled data slowly	Can't concentrate	Working slowly
10 <sup>th</sup>	-	Filled data slowly		Need a rest

*Conclusion of table B:* the most three risk factors that affect flight dispatcher is work slowly (Liveware), can't concentrate (Environment), and communication error (Hardware) respectively

Part three Risk assessment (Third objective): researchers select the most three factors to assess (working slowly, can't concentrate, and communication error) and ask interviewees to assess risk by ask for severity of result if incident occurred (Lower (1) to Higher (5)) moreover ask for likelihood how much incident can occur (Less (1) to more (5)). If result in "Acceptable" is means it may be accepted without any action but should continue assess because it will have more severity or likelihood in the future. Result in "Acceptable with mitigation" is means the risk may be accepted under defined conditions of mitigation such as reduce severity or likelihood. If result in "Unacceptable" is means further work would be required to design an intervention to eliminate that associated hazard or to control the factors that lead to higher risk likelihood or severity. (ICAO Doc 9859)

**Table 3** Risk assessment matrix ([https://www.skybrary.aero/index.php/Risk\\_Assessment\\_Matrix\\_-\\_Samples](https://www.skybrary.aero/index.php/Risk_Assessment_Matrix_-_Samples))



**Table 4** Risk assessment in “working lowly” (Liveware)

Interviewee	Severity	Likelihood	Result
2 <sup>nd</sup>	3	3	Acceptable with mitigation
5 <sup>th</sup>	3	3	Acceptable with mitigation
7 <sup>th</sup>	2	3	Acceptable
9 <sup>th</sup>	1	3	Acceptable

*Conclusion of Table 4* table shows two interviewees assess risk in Acceptable with mitigation and other two interviewees assess risk in Acceptable

**Table 5** Risk assessment in “Can’t concentrate” (Environment)

Interviewee	Severity	Likelihood	Result
2 <sup>nd</sup>	5	4	Unacceptable
7 <sup>th</sup>	2	3	Acceptable
8 <sup>th</sup>	1	2	Acceptable
9 <sup>th</sup>	1	3	Acceptable

Conclusion of Table 5 table shows three interviewees assess risk in Acceptable and the other one interviewees assess risk in Unacceptable.

**Table 6** Risk assessment in “Communication error” (Environment and Hardware)

Interviewee	Severity	Likelihood	Result
4 <sup>th</sup>	5	3	Unacceptable
5 <sup>th</sup>	4	3	Acceptable with mitigation
8 <sup>th</sup>	4	2	Acceptable with mitigation

Conclusion of Table 6 table shows two interviewees assess risk in Unacceptable and the other one interviewees assess risk in Acceptable with mitigation.

#### 4. Conclusion and Discussion

From of the first objective to study risk factor in flight dispatcher we found that factors are Noise disturb, Fatigued, Deterioration of intercom which consistent to Crew resource management and human factor. Second objective to study risk factors that affect flight dispatcher we found that factors are “Working slowly” (Liveware), “Can’t concentrate” (Environment), and “Communication error” (Environment and Hardware) which consistent to research topic Risk factors and risk assessment for aviation operations of pilot Squadron 411 Squadron 41 (Krikkrket Suwanno, 2012) that the most risk factor is Pilot (Liveware). Third objective to assess risk that affect flight dispatcher we found that “Working slowly” (Table D) was assessed to Acceptable with mitigation and Acceptable that may 2<sup>nd</sup> and 5<sup>th</sup> interviewees thought that working slowly would affect in flight delay and it would cause to passenger moody. “Can’t concentrate” (Table E) was assessed to Acceptable and Unacceptable that may 2<sup>nd</sup> interviewee thought that can’t concentrate during working may lead to error in operation and it would cause to serious accident. “Communication error” (Table F) was assessed to Acceptable with mitigation and Unacceptable that 4<sup>th</sup> interviewee thought that communication error may lead to misunderstand and lack of important information between flight dispatchers and the others and it would cause to serious accident. Moreover we can answer research question from Table A, Liveware is the most factor that affect flight dispatcher because all interviewees but Hardware is not the fewer factor that affect flight dispatcher. It is Software that fewer factor affects flight dispatcher.

#### 5. Suggestion

**Table 7** Suggestion for risk management

Events	Suggestion
“Working slowly”	Change work shift from (12 hours) to pm (8 hours) such as 05.00 am – 17.00 pm and 17.00 pm – 05.00 am to 05.00 am – 13.00, 13.00 am – 21.00 pm, and 21.00 pm – 05.00 am
“Can’t concentrate”	Company should provide soundproofing room for flight dispatcher
“Communication error”	Company should provide new intercom and recheck every week

**Table 8** Suggestion for next research

<b>Related in Airline</b>	<b>Non related in Airline</b>
Assess risk in Crew operation	Assess risk in air traffic service
Assess risk in Ground operation	Assess risk in airport operation

## 6. Acknowledgments

This research was successful because lecture from Institute of Aviation Technology, Rajamangala University of Technology Tawan-Ok who provide me with knowledge, guideline, and review research and I would like to thank to experts in aviation field who validated my semi-structure interview. In addition I would like to thank you to authors of researches document and finally Sripatum University to give me a chance to publish my research.

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**The Study of Aviation Information System for Airlines  
Registering in Stock Exchange of Thailand**

**RCGR<sup>2nd</sup>  
2018**

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# **The Study of Aviation Information System for Airlines Registering in Stock Exchange of Thailand**

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### **Abstract**

This research topic The Study of Aviation Information System for Airlines Which Registered in Stock Exchange of Thailand has objective aim to study aviation information system of each airline and to compare aviation information system between airlines. This research is the document research; data were downloaded each airline's annual report from Stock Exchange of Thailand (www.set.co.th.), year 2014-2015 (In year 2014 all airlines have been registered) and analyze categories of aviation information system (Service, Operation, Support, Other system). Result found that THAI and BA had the most aviation information system in Service while AAV and NOK had the most aviation information system in Operation (first objective). Amadeus, Human resource management system, In-flight Entertainment system, and Mobile service were used in THAI and BA (second objective).

**Keywords:** Information System, Airline, Stock Exchange

### **1. Introduction**

Thailand 4.0 is to focus on management and technology, in order to achieve its, it is necessary to develop the science, creativity, innovation, especially technology which aim to develop innovative industrial, culture, and high value of service such as lifestyle technology, travel technology, service technology and automation. From pervious details researchers interested in technology enhance service and automation. Moreover we need to study information system service in aviation industry which important for airline. If talk about ASEAN Economics Community (AEC), Thailand is the center of aviation and tourism that need service technology which important role in aviation industry. If airlines have technology and equipment connected online, it means that airline has leadership and professional in aviation and service industry (Ministry of Digital Economic and Society).

The development capacities in aviation industry is supporting in policy of aviation industry development and implementation for example the development of information technology to facilitate airline which consistent in technology development in “Thailand 4.0” in e-Service. Nowadays, these business increased significantly both domestic and foreign investors so researchers interested to study of aviation information system for airlines which registered in Stock Exchange of Thailand. Objective aim to study aviation information system of airlines and aim to compare aviation information system between airlines.

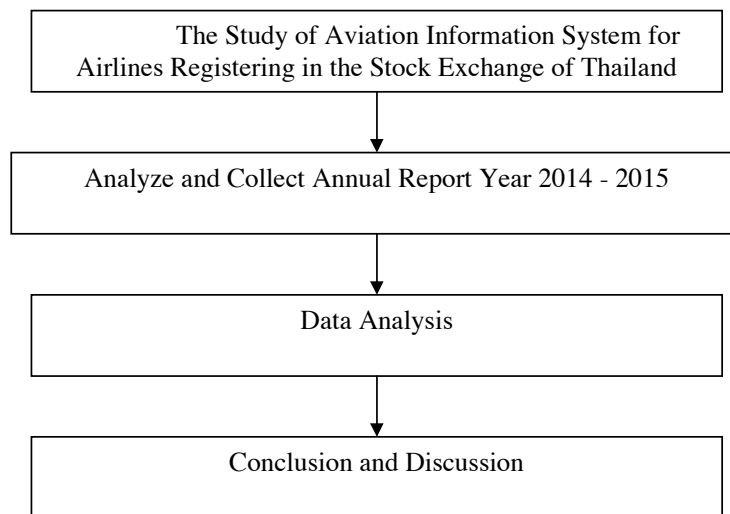
### *1.2 Objective*

- 1.2.1 To study aviation information system of each airline.
- 1.2.2 To compare aviation information system between airlines.

### *1.3 Research scope*

- 1.3.1 Time, Annual report year 2014- 2015
- 1.3.2 Population, Thai airways International Public Company Limited, Bangkok Airways Public Company Limited, Asia Aviation Public Company Limited, and Nok Airlines Public Company Limited.
- 1.3.3 Content, Airlines which registered in Stock Exchange of Thailand.

### *1.4 Conceptual framework*



**Figure 1** Research framework



## 2. Research Methodology

This research is the document research. Data were collected from Airlines which registered in Stock Exchange of Thailand (SET) and literatures review were from offline and online database.

### 2.1 Population

4 airlines which registered in Stock Exchange of Thailand (SET), namely, Thai airways International Public Company Limited (THAI), Bangkok Airways Public Company Limited (BA), Asia Aviation Public Company Limited (AAV), and Nok Airlines Public Company Limited (NOK).

### 2.2 Data collection

Researchers downloaded each airline's annual report from Stock Exchange of Thailand ([www.set.co.th](http://www.set.co.th)), year 2014-2015 (In year 2014 all airlines have been registered) and analyze categories of aviation information system (Service, Operation, Support, Other system). After that researcher filled data collected to the table.

## 3. Data Analysis

Part one from first objective study aviation information system of each airline result found on the table A, B, C, and D.

**Table 1** Summary of THAI's aviation information system year 2014-2015

Detail	Service	Operation	Support	Other's system
Amadeus		<input type="checkbox"/> ■		
Business impact notification system	<input type="checkbox"/>			
Call center system	<input type="checkbox"/>			
Chorus system (warehouse automation)	<input type="checkbox"/> ■			
Claim management system	■			
Compliance management system	■			
Distribution and passenger service system	<input type="checkbox"/> ■			
Electronic service	<input type="checkbox"/> ■			
Enterprise resource planning		■		
Government Fiscal Management Information System	<input type="checkbox"/>			
Human resource management system	<input type="checkbox"/>			
Information system		<input type="checkbox"/>		
Information Technology for Commercial Management			■	
In-flight Entertainment system	<input type="checkbox"/> ■			
In-flight communication	<input type="checkbox"/> ■			
Management information system			<input type="checkbox"/>	
Mobile service	<input type="checkbox"/> ■			
On demand music and movie			■	
Passenger service system	<input type="checkbox"/>			

System application program			□	
Ticket management system	■			

Detail (cont.)	Service	Operation	Support	Other's system
Track and Trace Data			□■	
Warehouse system	□			
Warning system	□			

□ = Available in 2014

■ = Available in 2015

*Conclusion of Table 1:* the most aviation information system is Service, Support, and Operation respectively.

**Table 2** Summary of BA's aviation information system year 2014-2015

Detail	Service	Operation	Support	Other's system
Air communication addressing and reporting system		□■		
Air-to-Ground data link communications		□■		
AirVision Revenue Manager		□■		
Amadeus	□■			
Credit Card Fraud Protection			□	
Distribution and interline relations	□			
Human resource management system			■	
In-flight Entertainment system	□■			
Mobile service	□■			

□ = Available in 2014

■ = Available in 2015

*Conclusion of Table 2:* the most aviation information system is Service, Operation, and Support respectively.

**Table 3** Summary of AAV's aviation information system year 2014-2015

Detail	Service	Operation	Support	Other's system
AMOS operating system		□■		
Axapta financial management			□■	
Enhanced ground proximity warning system		□■		
Flight planning system		□■		
Instrument landing systems		□■		
Inventory and sale management system			□■	
Merlot		□		
Online booking system	□■			
The Geneva Optimum Airline Performance			■	
Traffic alert and collision avoidance system		□■		

□ = Available in 2014

■ = Available in 2015

*Conclusion of Table 3:* the most aviation information system is Operation, Support, and Service respectively.

**Table 4** Summary of NOK’s aviation information system year 2014-2015

Detail	Service	Operation	Support	Other’s system
Active noise and vibration suppression		■		
Aircraft maintenance system		□■		
Aircraft rental system	□■			
Air navigation system		□		
Reservation system	□			
Short message service			■	
System prevent intervention			■	

□ = Available in 2014

■ = Available in 2015

*Conclusion of Table 4:* the most aviation information system is Operation, Service, and Support respectively.

Part two from second objective to compare aviation information system between airlines found on the table E.

**Table 5** Comparing aviation information system between airlines

Aviation information system	THAI	BA	AAV	NOK
Active noise and vibration suppression				□
Air-to-Ground data link communications		□		
AirVision Revenue Manager		□		
Aircraft maintenance system				□
Aircraft rental system				□
Air navigation system				□
Air communication addressing and reporting system				
Amadeus	□	□		
AMOS operating system			□	
Axapta financial management			□	
Business impact notification system	□			
Call center system	□			
Chorus system (warehouse automation)	□			
Claim management system	□			
Compliance management system	□			
Credit Card Fraud Protection	□			
Distribution and interline relations		□		
Distribution and passenger service system	□			
Electronic service				
Enhanced ground proximity warning system			□	
Enterprise resource planning	□			
Flight planning system			□	

<b>Aviation information system (cont.')</b>	<b>THAI</b>	<b>BA</b>	<b>AAV</b>	<b>NOK</b>
Government Fiscal Management Information System	<input type="checkbox"/>			
Human resource management system	<input type="checkbox"/>	<input type="checkbox"/>		
In-flight Entertainment system	<input type="checkbox"/>	<input type="checkbox"/>		
In- flight communication	<input type="checkbox"/>			
Information system	<input type="checkbox"/>			
Information Technology for Commercial Management	<input type="checkbox"/>			
Instrument landing systems			<input type="checkbox"/>	
Inventory and sale management system			<input type="checkbox"/>	
Management information system	<input type="checkbox"/>			
Merlot			<input type="checkbox"/>	
Mobile service	<input type="checkbox"/>	<input type="checkbox"/>		
Online booking system			<input type="checkbox"/>	
On demand music and movie	<input type="checkbox"/>			
Passenger service system	<input type="checkbox"/>			
Reservation system				<input type="checkbox"/>
Short message service				<input type="checkbox"/>
System application program	<input type="checkbox"/>			
System prevent intervention				<input type="checkbox"/>
The Geneva Optimum Airline Performance			<input type="checkbox"/>	
Ticket management system	<input type="checkbox"/>			
Track and Trace Data	<input type="checkbox"/>			
Traffic alert and collision avoidance system			<input type="checkbox"/>	
Warehouse system	<input type="checkbox"/>			
Warning system	<input type="checkbox"/>			

*Conclusion of Table 5:* The most airlines which use aviation information system is THAI (24 systems), AAV (10 systems), and BA, NOK (7 systems), respectively. Moreover we found that Amadeus, Human resource management system, In-flight Entertainment system, and Mobile service were used in THAI and BA.

#### **4. Conclusion and Discussion**

From first objective, to study aviation information system of each airline we found that THAI and BA possessed the most aviation information technology in Service which consistent to nature of airline full service carrier because they must provide a variety in services to passengers, on the other hand, AAV and NOK possessed the most aviation information technology in Operation which consistent to nature of airline low cost carrier because they must emphasize in operation instead of service. Second objective, to compare aviation information system between airlines we found that THAI and BA used same aviation information system in Amadeus, Human resource management system, In-flight Entertainment system, and Mobile service that because both airlines are full service carrier that must be standardized.

#### **5. Suggestions**

This research will be a standard for development of airline both airline full service and low cost carrier and next research would be study on airline's financial.

## 6. Acknowledgments

This research was successful because lecture from Institute of Aviation Technology, Rajamangala University of Technology Tawan-Ok who provide me with knowledge, guideline, and review research. In addition I would like to thank you to authors of researches document and finally Sripatum University to give me a chance to publish my research.

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**E-Logistics, The Important Key to Economic  
Development and Efficiency in Global Competition**

**RCGR<sup>2nd</sup>  
2018**

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# **E-Logistics, The Important Key to Economic Development and Efficiency in Global Competition**

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## **Abstract**

Logistics management is another important strategy to reduce administration management costs and to gain advantages of business competition. Logistics business is growing continually because of the E-commerce growth as well as increasingly improves technology management until nowadays. The logistics management has been improving to E-logistics system by applying technology come to support working performance to be more efficiency. This is a good thing for the country's economic development and global competitiveness. The development of the logistic system can reduce costs, to be faster and to respond accuracy to customers which is good for global business competition and development. In addition, the development logistics sector which grows fast will affect economic growth. Even though, the manufacturers still have to rely on the improvement of business logistics, yet the challenges and opportunities are ready to be met and overcome. To be catching up with the changing digital world, global trade liberalization and investment is another factor that Entrepreneur needs to place importance because the global competition is intense all the time.

**Keywords:** E-logistic, E-commerce

## **1. Introduction**

Logistics management is another important strategy to reduce administration management costs and to gains advantages of business competition. For the reason that the logistics system is an activity with costs included, and it affects overall administration costs. Therefore; the logistics strategy increasingly takes on important role to the business development and competition during the past years. The logistics system is not only improving efficiency and reducing overall costs but it is also standardized business competencies. E-logistics is a key for enhancing competitive potentials and also empowering economic security of organizations or domestic economy systems. E-logistics is the logistical process that governs everything related to the online marketplace which begins with raw materials purchasing, manufacturing, and transportation and warehousing-storage management

in order to deliver goods to customers safely and in time. If costs reduction can be managed and the goods remain in high quality then the business will gain more profitable, meanwhile the highest level of customers' satisfaction will have been reached. Reducing costs of logistics in organizations is the important keys to reduce logistics costs at the domestic level as well as it will later on gain more advantages of business competition at the national level. Nowadays, there are several technologies have been evolved to support the performance of logistics system. So, it transforms the traditional logistics to E-LOGISTICS, the logistic that evolves technology to support the logistics system to be REALTIME or to track the status of goods at all times and all processes, which is meet the requirements of current customers who always like to get the goods fast and verifiable. In addition to using technologies, entrepreneurs should bring out their creativity to expand and improve their supply chains by the effective collaboration of related people or by building relationship among the supply chains, sharing ideas, making the most of limited resources, continuing personnel development, supporting ideas exchanging or knowledge sharing to one another.

## **2. Literature Review**

### *Meaning of logistics system and E-LOGISTICS*

The meaning of logistics according to the USA Council of Logistics Management: CLM is a process of planning, operating and controlling effectively in terms of moving and storing goods, services and associated information from the production point to consumption point in order to fulfill the customers' needs and expectations. In Thailand, the Electronic Transactions Development Agency (Public Organization) has given the definition of logistics management or Logistics "is a process of working associated with planning, operating, and controlling unlawful organizational behavior, including information and associated financial transactions management which leading to goods moving, storing, collecting, distributing goods, raw material, components and services to make it the most effectiveness to prioritizing customers' needs and satisfaction". Since, the logistics is a process of goods management and services all over the supply chains, so the concise definition of E-logistics is to bring information and communication technology for helping in overall logistics process such as exchanging information between organizations or to tracking the status of goods during transportation, also to confirm goods receipt at the destination etc.

### *Roles of Logistic Service Provider*

Logistics service providers are an important factor in the business success of companies engaged in trade activities at national and international level. They play an important role in achieving competitive advantages of business entities directly involved in the international trade. The logistics service providers, are firm facilitate the operation of companies that deal with the buying and selling at international level in distribution shipment and delivery of goods to customers. As the business processes and business entities in international trade are becoming more complex, it Logistics will intermediaries to manage certain activity of business operations. The same of Logistics goal is into provide help to companies in the transportation, storage, shipment and the distribution of goods from the seller to the buyer or the final. It will be seen the logistics service provider has role logistics processes in international trade are an important link in each and every supply chain.

For the role of logistic with economies and Competitiveness in the world. With economic globalization and the change of social. The logistics system has improved about management technology showed more and more in now. Logistics is one of the tools that play an important role in the change and improvement of economic indicators. Logistics industry provides significant

macro contributions to national economy by creating employment, and creating national income and foreign investment influx. On the micro scale and middle scale. Logistics industry is a key industry in increasing the competitive power of corporations. Furthermore, the logistics industry has an important mission in revitalizing and improvement of the competitiveness of other industries and increase in per capita income of countries. Logistics plays a huge role within today's economy. Not only is logistics vitally important to the distribution industry, it has made distribution prompt and efficient. In this very competitive market, that companies no longer have to wait for what they need. Many companies rely on transport and logistics to keep their business strong. Today, the logistics companies have good infrastructure and which continues to improve through advancements in technology. The importance of logistics, in fact this rise has brought factors such as warehousing and other facilities closer to large towns and cities. Logistics is affecting businesses within towns and cities, bringing more jobs into these locations. The part of the economy that is benefiting from an increase in logistics is technology. A good logistics company will integrate all of the supply chain functions into a digital strategy. By will track orders, vehicles and pallets to gain greater visibility and improve digital methods. This better visibility helps companies to optimise their flow of goods, reduce wait times and manage their costs. Technology is an essential part of logistics and its use is benefiting today's economy.

### *The Improving logistic in Thailand*

For Thailand improving logistics system the country. The governments need to place importance on Logistic Service Providers by their types of services.

#### 1. Transportation Services

Providing goods transportation by truck, train, tube train, ship, air and by MTO (Multimodal Transport Operator). i.e. Terminal To Terminal or Door To Door services.

#### 2. Warehousing Services

- In-Transit Warehouse
- Free Zone Warehouse
- Bonded Warehouse
- Domestic Warehouse

#### 3. International Freight Forwarder

A person or company that organizes shipments for individuals or corporations to get goods from the manufacturer or producers to a market, customer or final point of distribution.

#### 4. Customs Brokerage Services

Importer/Exporter representative providing customs brokerage services for import and export customs clearance for all shipments into and out of the country.

#### 5. Courier and Postal Services

Providing postal services related to parcels consisting of pick-up, transport and delivery services of parcels and packages, whether for domestic or foreign destinations by door-to-door services.

### *The state of global logistics*

The world is changing rapidly, makes the business owner must catch up with technology development among environmental prioritization as well. The growth of e-commerce statistics and

modern logistics services are developing into door-to-door service and end-to-end supply chain, that is making Sea Freight Company widening itself into Global Integrator for container transportation by collecting transportation activities. i.e. by sea, road, or railway via China-Eurasia-Europe route and associated logistics services in order to transport goods from farmers to the customers' refrigerator. Apart from looking for business partner or gathering businesses with local entrepreneurs, developing Blockchain technology system into Global E-Logistics Platform is another strategy which the world leading transport companies had applied to achieve their information security. Moreover, the technology development called AI (Artificial Intelligence: AI) becomes increasingly clear in 2018 which leads to the reforming of logistics industries in the future. And it would be an opportunity for companies in logistic industries if the AI technology in supply chains can be deployed.

### *Overview of logistics business in Thailand*

Whereas, many business affected by the global economic slowdown and other factors in the country that are not supporting business growth. Nevertheless, the logistics business has found getting a high growing rate during the past years. Growth rate of logistics business is a result of the increased e-commerce market expansion, tourism and government investments. Even though, the growth rate of logistics business is good, but the competitions are still high from both inside and outside the country. The positive effects are customers get faster services; several types of services available and also the services can meet their requirements. The negative effect is small business cannot compete with the bigger business. In order to securing the business, many businesses are starting to work together to make the most of their limited resources. Regarding the digital technologies are now changing the world, making the logistics business evolved E-logistics for increasing working performance. And it is nowadays making the logistics business play more roles to the business. For the reason that logistics system has shown great progress, which is making the transportation process to the customers is faster and less time. Because of the E-commerce and supply chain development, the strong and stable organizations decide to bring in E-logistics system to be used continuously.

In 2017, the domestic's economic recovery has been achieved by exporting, tourism and online marketing business, making the average growth rate of logistics is 7% annually (Kasikorn Research Center., 2017) and it tends to increase in the year 2018, because businesses have been expanded by the public board of investments and also Thailand's exports are still competitive in global market. There are four groups of logistics business gaining positive effects which are land transportation business, warehousing services, international freight forwarder and courier and postal services

<b>Logistic Business</b>	<b>2560</b>		<b>2561</b>	
	Value (million baht)	Growth rate (%)	Value (million baht)	Growth rate (%)
Transportation Business	137,700	6.20	145,100-147,300	5.3-7.0
Warehousing Business	71,700	6.20	75,500-76,700	5.3-7.0
International Freight Forwarder Business	57,700	1.60	58,000-58,900	0.5-2.1
Courier and Postal Business	28,100	8.70	30,800-31,300	9.6-11.3

Source: KASIKORN RESEARCH CENTER

Note: measured as the log difference of the gross domestic product per capita (GDP).

In 2018 logistics business Thailand Freight & Logistics Market – Segmented by Function (Freight Transport, Freight Forwarding, Warehousing, Courier, Express, & Parcel, Values-added Logistics, and Others), Freight Mode (Air, Sea, Rail, and Road), End User (Construction, Oil & Gas and Quarrying, Agriculture, Fishing & Forestry, Manufacturing & Automotive, Distributive Trade, Telecommunications, and Others) - Growth, Trends, and Forecast (2018 - 2023) The Thailand freight & logistics market was valued at USD 20 billion in 2017 and is expected to reach a market value of USD 122 billion by 2023, registering a CAGR of 6.08% during the forecast period (2018 – 2023). The country has well-developed infrastructure and central location within the greater Mekong Sub-region (GMS), which comprises of Thailand, Cambodia, Laos, Myanmar, Vietnam, and the Chinese mainland provinces of Guangxi and Yunnan. It has become a key logistics hub for companies that are setting up production bases and sales networks in the Indochina region. The formation of ASEAN economic community (AEC) has led to an increase in trade and service liberalization, resulting in a more robust intra-regional trade, which has boosted the demand for more sophisticated and comprehensive logistics services.

### *Opportunities and challenges of future logistics*

The second largest economy of Southeast Asia, Thailand has one of the region's highest number of internet users. There are approximately 57 million internet users in the country that are well-versed in the use of digital technologies, mobile, and e-commerce. The growing internet user base makes Thailand an ideal growth environment for e-commerce businesses. At present, the Thai e-commerce market is valued at US\$3.5 billion and is expected to generate revenue growth rate of 13.2 percent annually, reaching US\$5.8 billion in 2022. The opportunities of Thailand business logistic are parts of the continuously growing E-commerce market. The online marketing of business sectors or private sectors from both inside and outside the country making the demands of transportation and warehousing services are increasing; which results to the business logistics growing and establishing variety of services both transportation and distribution. If we considered this perspective, it appears that there is a bright prospect for business logistics; meanwhile the challenge which needs to be realized is the E-trading will take more roles and will be a turning point of world trading. The joint agreement of world trade organization (WTO) members in the subject of TRADE FACIBILITY which may affects the trading process or creating a higher standardize to be used globally, and if any entrepreneur cannot achieve; it will immediately be the trade wall instead of the tax wall. Another challenge is the trade and economic growth rate of China, their influence of capital and readiness to all factors making small and medium size business logistics cannot compete with. The important thing that all logistics entrepreneurs need to improve and make the most of it is digital and technology developing, which is linking the business into the same platform and if there is any logistics entrepreneur stays out of the network they will be out of that platform as well. This is the challenges that entrepreneurs will be struggling in the near future and if they cannot get through they will be just another subcontractor.

### *Developmental Approach of Thailand's logistics*

The developmental approach of Thailand's logistic is to empower entrepreneurs to gain more competitive advantages and create opportunities for expanding their business at the moment by bringing the technology that help working effectively and change the general logistics to E-LOGISTICS as soon as possible, be creating network and get through the needs of customers and also respond quickly and accurately. There have to be human development continuously to catch up with digital globalization and improve all services to be simple, make it unlimited to all customers groups and expands scope of services to be the complete range of services. Moreover, making business partner and business integration is solution for Thailand's entrepreneurs to reduce the

pressure coming from foreign entrepreneurs and also to reduce the diverse needs of customers and to survive from the competition which will be higher according to Thailand maintain trade liberalization policy with another country.

### 3. Conclusion

E-commerce growth rate has given the positive results for business logistics, they are all growing continuously. However; the higher of growth rate reaching, the higher of competition will be. To survive in business logistics and competition, entrepreneurs need to bring in technology to support working performances, which makes the general logistics transform to E-LOGISTICS in a short time period. Because technologies can support costs reduction and meet the customers' needs more quickly, which considered being great for organizations and for country's development, which is making Thailand's entrepreneurs can compete globally because logistics opportunities come with challenges and high competition from both inside and outside the country. The rapid changed of world trading to E-TRADING system is another obstacle for entrepreneurs who cannot catch up with digital system. Trade liberalization would make small and medium business influenced by the bigger businesses that are in readiness for both capital stock and resources. For that reason, there are only the competitive and catching up entrepreneurs will survive their business in the long term period.

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**Management System on Reducing Fuel Consumption  
in Landfill Business: A Case Study of Chan Kaew Company**



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# **Management System on Reducing Fuel Consumption in Landfill Business: A Case Study of Chan Kaew Company**

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## **Abstract**

Fuel consumption is very important in logistic business as this business is involved with moving people and things from one place to another place, including by road, water and air. These transportation use fuel in vehicle moving for landfill business. This business is directly with logistic as the business transport soil for landfill business in many areas. Most landfill entrepreneurs estimate the fuel consumption of transportation, however, this method is not enough to analyze the cost of actual fuel. The fluctuate price and trend have more impact on the business. If the entrepreneurs do not adjust power management, they may face high risk and loss business opportunity. Chan Kaew Limited is a landfill company in Bangkok area and the company is lack of continue fuel management. To save power energy efficiently, the company would like to manage operation system to reduce fuel consumption by having energy management system, energy efficiency improvement system, developing knowledge of truck drivers and establishment of fuel used data base. These improvement plan used for transportation cost analysis and appropriate fuel consumption rate for the company in order to create better business opportunity for the company. Therefore, this research aims to study on management system for reducing fuel consumption and the rate of fuel consumption in landfill business of Chan Kaew company. It also presents management system for diminishing fuel consumption rate which is suitable for the Chan Kaew company.

**Keywords:** Fuel Consumptions, Landfill Business

## **1. Introduction**

Fuel is very important in logistic business as this business is involved with moving people and things from one place to another place, including by road, water and air. These transportation use fuel in vehicle moving for landfill business. This business is directly with logistic as the business transport soil for landfill business in many areas.

Chan Kaew Limited company is a landfill business in Bangkok area, Thailand. The company has fuel management problem as they are not able to calculate effective energy efficiency. Therefore, the production cost is very high. The traditional method of analyzing fuel cost is no longer enough for the current demand and trend. The fluctuate price and trend have more impact on the business. If the entrepreneurs do not adjust power management, they may face high risk and loss business opportunity. This research will focus on operation system management, energy efficiency improvement system, development knowledge of truck drivers and building fuel consumption data

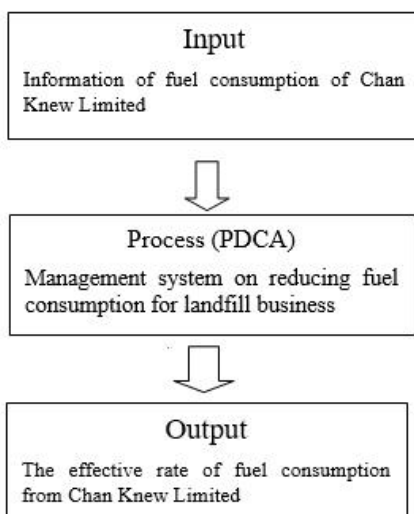
base. These factors can be used for transportation cost analysis and set appropriate fuel consumption rate for the company in order to create better business opportunity for the company.

### 1.1 The Purpose of Research

It mainly aims at studying management system on reducing fuel consumption in landfill business in the case of Chan Kaew Limited. The main purposes are as follows

- 1) to study management system of fuel consumption in landfill business
- 2) to study fuel consumption rate in landfill business and
- 3) to propose guideline for the management system to reduce the rate of fuel consumption in landfill business.

### 1.2 Conceptual Framework



**Figure 1.1** Conceptual Framework

### 1.3 Research Scope

The research on management system to reduce fuel consumption in soil compaction business: a case study of Chan Kaew Limited set the research scope as follows:

#### 1) Content

This research studied the fuel consumption of soil compaction business in the case study of Chan Knew Limited company for the past 6 months, and a guideline for management system to reduce fuel consumption in landfill contractor business.

#### 2) Area

Researcher set research scope at Chan Knew Limited, studied on fuel consumption of trucks within the company. The researcher also selects 5 trucks which are 1) Isuzu brand car registration 82-7277, 2) Isuzu brand car registration 82-7888, 3) Isuzu brand car registration 50-6888, 4) Hino brand car registration 99-6776 and 5) Hino brand car registration 86-9553.

- 3) Populations and samplings  
3.3.1 Population: The business owner and employees of Chan Knew Limited company.  
3.3.3 Sampling: The business owner and employees of Chan Knew Limited company in total 5 people

#### *1.4 The Expected Result*

- 1) to investigate the fuel consumption of Chan Knew Limited for reducing the fuel consumption rate improvement
- 2) to provide guideline for the management system to reduce the rate of fuel consumption in landfill business.

## **2. Literature Review**

### *2.1 Theories and Related Research*

#### *Meaning of transport*

Transportation means moving goods from one location to another. In the sense of logistics, transportation means planning and managing to transport goods from one place to another. Transportation is very important in the market and results in rapid growth and widespread development. (Krungsri Ngam Sirichit, 2009)

#### *Transportation cost concept*

Chaiyosot Chaiyudh and Muypak Chaimankong (2009) described the cost of transport operations, time costs, distance costs, and related economic costs;

##### Time Costs

Time which spent on transportation consists of moving products into vehicles and moving products out of vehicles and delays. To make profit, the operator must use vehicle to stop at the minimum of time cost.

##### Distance Costs

Transport vehicles must travel from the point of origin to the destination, which will take time and cost differently.

In addition, the Department of land transport (2008) described economically that costs are cash or cash equivalents paid to acquire goods or services and bring benefits to business. The cost of transport operations can be summarized as follows;

1) Fixed costs are fixed costs or costs that are not subject to any change in production or services, whether or not a service is being performed. The same rate can be divided into fixed cost per vehicle and constant cost per vehicle

2) Variable Cost is the cost or expense that varies with numbers of services. If the transportation service is very expensive, the cost will be too much. If the service is very low, the cost will be less. There is no cost if there is no service. Running cost is the cost of running a car which is

divided into variable costs per mile and variable costs per run. This variable cost also depends on other factors.

### *Truck transportation concepts*

The advantages and disadvantages of truck transportation from Mr. Totsaporn Napaswadee (2013)

- 1) Advantages: speed, door-to-door service, extensive road network, low damage, small carrying capacity and complete transportation
- 2) Disadvantages: High cost, low capacity and weather sensitive

### *Saving transport energy guidelines*

The institute of industrial energy (2012) introduced energy saving strategies as follows;  
Engineering and Technology: analyze the cars to find ways to improve fuel efficiency, either by modifying or adding equipment to the vehicle or maintenance such as GPS systems and the use of energy-saving tires.

Management: the management of customers need data with transportation capacity to operate and manage transportation for customers with maximum efficiency and reducing waste such as reducing backhaul.

Driving process: improving and developing driver's behavior in many ways such as speed control, accelerating braking, encouraging the driver readiness and vehicle availability. The drivers must pass training and know driving principles in order to driver properly and save energy. The overall development of driver should be prior knowledge of employees along with training and theoretical knowledge.

Task Force: fuel efficiency optimization requires the support team to carry out various activities by creating a task force to analyze the transportation system within the organization and use sustainable approaches to build team for saving energy.

## *2.2 Literature Survey*

Wipawan Pongsang (2011) researched the design and development of a transportation planning system to reduce the number of empty buses, to offer the optimal route plan and to reduce the number of empty trucks. This is a system that takes emptying truck into cost calculation and then come up with effective direction for using empty truck in the highest level by using coordinating with transportation team. In the experiment of matching between work and empty truck, found that it can reduce number of empty work around 25% and the maximum emptying truck capacity was 24.53%, reducing the maximum emptying truck cost by 13.99% and reducing the maximum carbon dioxide production by 12.53%. The evaluation of system performance found that the user ability to use the system was at high level. The efficiency and the error of the system are moderate. The level of user satisfaction is high and the evaluation of the users' opinions is at a high level. The transport sector, which cooperates in managing the cargo, can operate the system at the same level. Developed system can be used in transport operations to reduce the busloads as much as possible.

Samart Prayong (2012) C-Pro Logistics and Distribution Co., Ltd. is a provider of transportation and distribution services in all regions. Therefore, the transportation service of the company is not enough to meet the needs of customers, resulting in a lot of opportunity cost. The

company reduces cost and increase efficiency in the workplace as well as factors that cause costs. It is an analysis of the process of reducing costs and increasing the efficiency of the work as well as the factors that cause the Company to incur the cost of wasting opportunity from such problems. Invest in or recruit partners by taking customer sales to account for loss of opportunity to service accident reduction Reduce maintenance time to minimize service opportunities, such as 18-wheel truck, 6-wheel-drive or 4-wheel truck, by analyzing investment and increasing service. The purpose of this case study is to improve the efficiency of transport and distribution by calculating the cost of goods sold. The transportation and good distribution, based on customer service requirement and maintenance efficiency, have opportunity to reduce cost, opportunity costs, and analysis of transport data before and after adjustment. It was found that the opportunity cost of services from 95,178,112 baht was 40.55 % of the total revenue that the company can make.

Taksapol Supasawat (2556) studied the fuel consumption of five Mitsubishi Diesel 18-Wheel Loaders, which were used between 2007 and 2011. The study used 18-wheel drive vehicle in testing system to get direction data between Ban Kha tom (Surin province) to Huang Tham Thim (Srisaket province). The approximately distance was 190 kilometers, data collected from 7 flight/ car. The weight of the truck is estimated to increase by 1,000 kilograms. This will result in a 1.01% increase in truck fuel consumption in 2011 and a truck load of 2010 2009 2008 2007. The car's weight increased. 1,000 kg. Fuel consumption increased by 2.02%. Maintenance of the engine condition should be checked and repaired every 50,000 km and modifications of power equipment at 400,000 km.

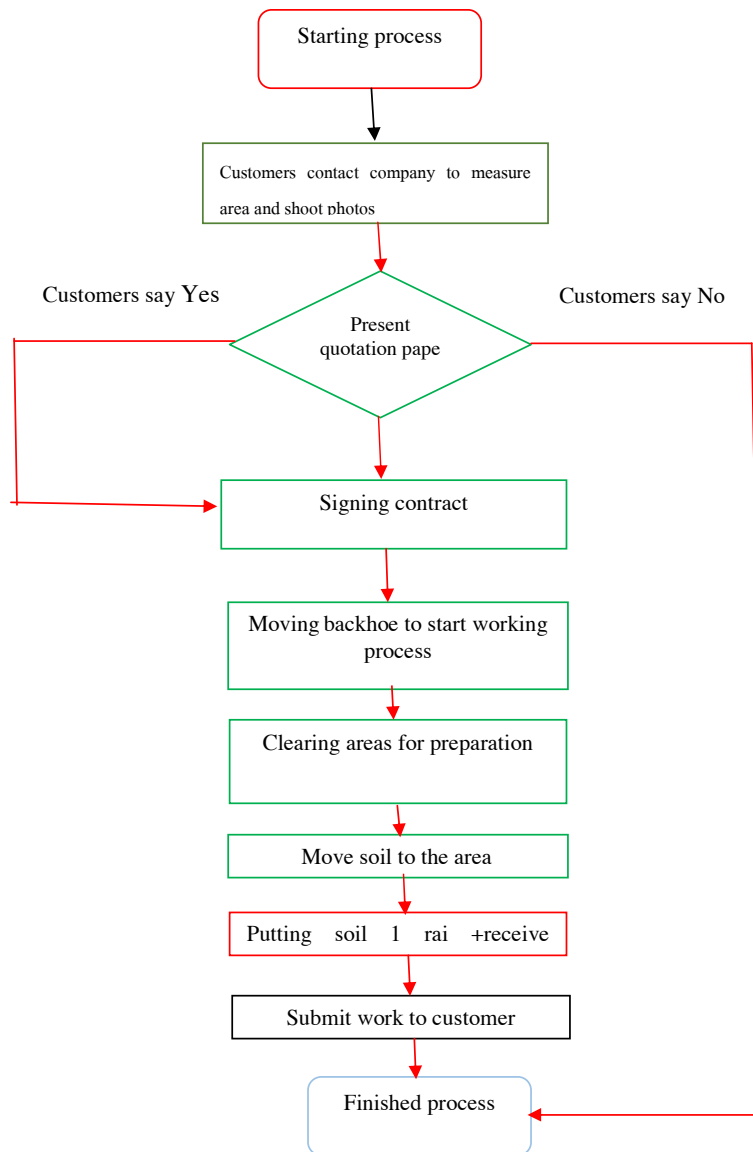
### **3. Research Methodology**

Observation form was an observation form for fuel and fuel consumption, produced by researchers. The researchers observed 5 trucks of Chan Knew Limited in the case of the miles of transportation, vehicle information and the amount of fuel consumption, fuel cost and maintenance costs.

Semi-structured interview was interviewed using the management system to reduce fuel consumption in the soil compaction business. The interviews were conducted by the company's owners and 5 employees.

- 1) Management commitment: energy policies & strategies and responsibility.
- 2) Energy conservation practices: energy management and energy measure implementation.
- 3) Investment consideration and procurement: investment for energy development and procurement of energy consumption.
- 4) Data and energy analysis: data record on energy consumption, analysis and setting energy goal
- 5) Corporate culture and communication in energy: personal development & training, and communication within organization.

## The study method on Logistic Process



**Figure 2** The Framework of Logistic Process from Landfill Business



#### 4. Data analysis

The researchers use field work data in data analysis and studying the fuel consumption problem, appropriate fuel consumption rate and management development. It aims to reduce the fuel consumption in soil compaction business in the case of Chan Knew Limited, by analyzing Energy performance indicator (EnPI) for measuring fuel efficiency of company's transportation. It is divided into 3 levels.

- 1) Data analysis and fuel used in transportation performance: fuel type and transportation routes.
- 2) Significant Energy Assessment based on high dosage, low performance and controlling opportunity.
- 3) Searching for saving energy method by focusing on significant and appropriate parts.

The calculation starts by setting the Energy Performance Indicator (EnPI) as Specific Energy Consumption (SEC) as follows.

$$\text{SEC} = \frac{\text{The amount of fuel (liter)}}{\text{Direction (Kilometer)}}$$

Management approach aims to reduce fuel consumption in the soil compaction business in the case of Chan Knew Limited. The technique are as follows; 1) Setting goals for energy conservation and evaluation, 2) Define measurement and operation plan for energy conservation in transportation process and 3) providing working guideline for worker improvement (Drivers and employee team), operational process and resource investment for energy operational development.

The company has to monitor its implementation by targeting targets based on energy performance indexes or decreasing quantities of energy consumption per year. It also sets out measures and plans for energy conservation in the transportation process to achieve its goals.

- Engineering and technology
- Management
- Effective driving to save energy
- Task Force

After the implementation process, the researcher will compare fuel consumption before and after the operation which can identify energy efficiency and prevent unnecessary energy consumption.

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**The Inventory Management of Automotive  
Parts for SMEs Sector in Nakhon Nayok**

**RCGR<sup>2nd</sup>  
2018**

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# **The Inventory Management of Automotive Parts for SMEs Sector in Nakhon Nayok**

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## **Abstract**

The purpose of this research is to analyze the current warehouse problem of SMEs businesses, to develop the current warehousing system of SMEs and to evaluate the performance of new warehouses. For example, 9 SMEs intrapreneurs from 5 companies in Nakhon Nayok province were interviewed in depth. Research tools are interview form, Lean Thinking and ABC Analysis Segmentation Technique. Data collection is divided into 2 phases: Phase 1; warehouse problems analysis and warehouse system development, and Phase 2; evaluates warehouse performance and data analysis using Lean Thinking and ABC Analysis Segmentation Techniques. The research found that the entire process in the warehouse prior the update took an average of 215 minutes. After updated, it took an average of 89 minutes for all 183 items. When using the ABC Analysis technique, the Goods were divided into 3 groups: Group A: Fast Moving Goods accounted for 66.97% of total Goods. Group B's Moderate Moving Goods accounted for 17.41% of total Goods, and Group C: Slow Moving Goods accounted for 15.62% of the total Goods, respectively.

**Keywords:** SMEs, Warehouse, Lean

## **1. Introduction**

Nowadays, the automotive industry is growing highly and rapidly. The estimation of the automotive industry by the Federation of Thai Industries (F.T.I.) showed that the Goodsion was 2,000,000 units, increased by 2.56 percent divided into production for domestic sales of 900,000 units, increased by 3.25 percent, and production for export about 1.1 million units (Economic Industry report in 2560 and outlook for 2561). However, the research project was in consistent with the National Research Policy and Strategy No. 9 (2017-2021). The 4<sup>th</sup> research strategy aim to apply methods and activities in bringing research process, research results, knowledges, innovations and technology from researches into reality with cooperation from various sectors.

Warehouse management is an important part of the logistics process. If warehouse management is effective, it reduces costs for the company. Warehouse activities include receiving, data, storage, order picking and dispatching. It was found that, Goods picking activities had a high cost. Effective Goods picking requires a systematic storage location. Researchers had recognized the importance of auto parts SMEs and had selected 1 company as a prototype model with 183 items. It was found that, the company still used manual system, had no good system for storing goods, wrong goods segmentation, lack systematic analysis of grouping the goods. As a result, potential turnover was decreased, and it might have an impact on customer service.

From such problematic conditions, researchers focused on warehouse management in order to make the operation effective. Researchers must determine appropriate Goods placement using Lean Concepts and ABC Analysis Segmentation Techniques to apply to the business. It was important to the business to reduce the time, errors and operating costs in warehouses in order to make the operation faster and more convenient.

### *1.1 Research Objectives*

- 2.1 To analyze the current storage problems of SMEs in Nakhon Nayok area.
- 2.2 To develop warehouse systems of SMEs business in Nakhon Nayok area.
- 2.3 To evaluate performance of the new warehouse system in Nakhon Nayok area.

### *1.2 Benefits of the Research*

3.1 Benefit SMEs intrapreneurs in the province by using the information obtained from the study as a guideline for warehouse development to support business growth in the future.

3.2 Persuade entrepreneurs to aware of the importance of inventory management even more as the research should make community enterprises aware of the efficiency of warehouse management that affects the business operation leading to better business operation.

3.3 Entrepreneurs may use the warehouse management system as a guideline for SMEs business development.

### *1.3 Scope of Research*

4.1 Research information providers; separated by selection method and divided into the following 2 groups:

4.1.1 Managers and business owners 9 people in total.

4.1.2 Operation staff in the warehouse 7 people in total.

4.2 Scope of content; This study investigates problems in warehouse management of the automotive parts of SMEs by studying the process of receiving, Goods counting, Goods checking, receipts writing and Goods placing applying Lean Concepts and ABC Analysis Techniques.

4.3 Scope of the period: this research had the period of 7 months (March - September 2018).

4.4 The scope of the area; studied the SMEs business in Nakhon Nayok area.

### *1.4 The research Concepts*

Independent variable is the problematic condition of the automobile parts warehouse in Nakhon Nayok area.

Dependent variable is the guidelines and the possibility of warehouse management in Nakhon Nayok.

### *1.5 Research Questions*

- 6.1 What are the problems of managing spare parts warehouses?
- 6.2 How should the current inventory system be?
- 6.3 Which form should the new warehouse operations be?

## 2. Research Methodology

The key informants in the research were 9 entrepreneurs of Nakhon Nayok automobile spare parts; 8 operation levels staffs consisted of 1 person from transfer planning department, 2 warehouse staffs, 1 administration department personnel, 2 pre-transferring inspectors, and 2 drivers using purposive selection method.

### 2.1 Tools used in Research

Interview form, Lean Thinking and ABC Analysis Segmentation Technique

### 2.2 Data Collection

Data collection is divided into 2 phases: Phase 1; warehouse problems analysis and warehouse system development, and Phase 2; evaluates warehouse performance and data analysis using Lean Thinking and ABC Analysis Segmentation Techniques interviewing the management and operation level totaling 17 people around Ongkarak district, Nakhon Nayok. The questions were related to management consists of effective working and performance plans, and practical questions about the problems encountered in each stage of the operational process.

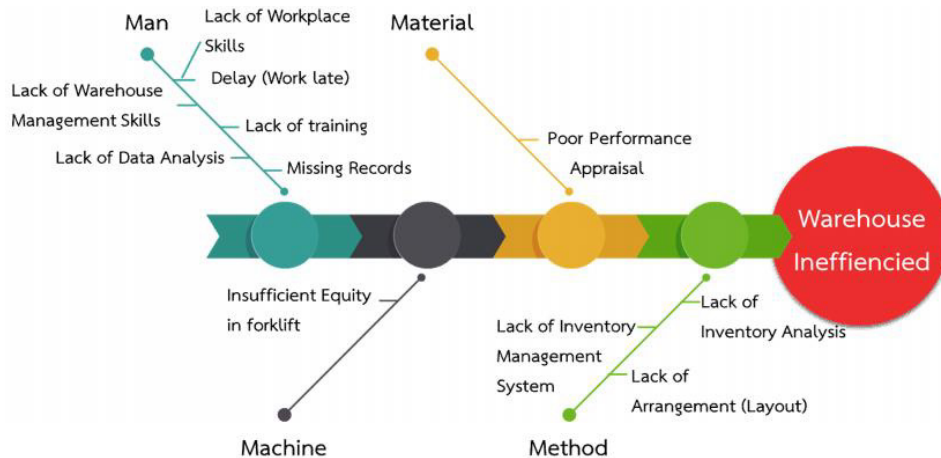
### 2.3 Data Analysis

The data were obtained from in-depth interviews and data collection. The researcher interviewed and collected the data from operation participant of the automobile spare parts warehouse and brought the date to analyzed with related, concepts, theories and researches then analyzed the data for comparison between before and after the adjustment.

## 3. Results



**Figure 1** supply chain of the spare parts company



**Figure 2** Cause and effect diagram of the company in the case study

### 3.1 Observation

Human resources management, System management Operation system and management were observed as follows:

1. In personnel recruitment, there was no aptitude or basic knowledge test in each field. Therefore, the personnel recruited for the company does not meet the requirements.
2. In management system, management were still used traditional system, namely, it was operated manually by personnel without using any new technology to help managing. Problem solving system brings only temporary solution.
3. Error chance in receiving and stock checking was high. Counting Goods might not be thorough due to overlapping of the Goods. There should be Goods counting while taking out of the freight car and make a record.
4. Goods storing. Goods were stored by leaving the staff who took it decided where to put it. It was not appropriate because it was the temporary way without warehouse management planning. Space management was ineffective and removal occurred causing damage to Goods during transportation as well.
5. Pallet storage. The placement was done without distinguishing product character or condition causing damage to the Goods including unnecessary movement of the Goods.
6. Broken Case Picking Systems. Goods counting were recorded in the report which might be errored, repeated and rather delayed. Furthermore, some employees unwrapped items in the same package into pieces making the number of the Goods missing, etc.
7. Damaged Goods record. Problems in the operation were found within the current warehouse management.



### 3.2 Inventory data analysis using ABC Classification Theory as reference

Inventory in Group A contains approximately 5-10 percent inventory of all inventory items. But, its value is around 75-80 percent. In other word, it has the lowest amount in inventory but has the highest sales revenue.

Inventory in Group B contains approximately 20-30 percent of all inventory items. It accounts for about 15 percent of total inventory value. It took moderate amount of inventory, and generates moderate sales revenue compared between inventory Group A and Group B.

Inventory in Group C is the majority of the inventory left. It took about 40-50 percent of the total inventory, but its value is around 5-10 percent of the entire inventory value. In other word, it was the product group taking most inventory space but generate the lowest sales value.

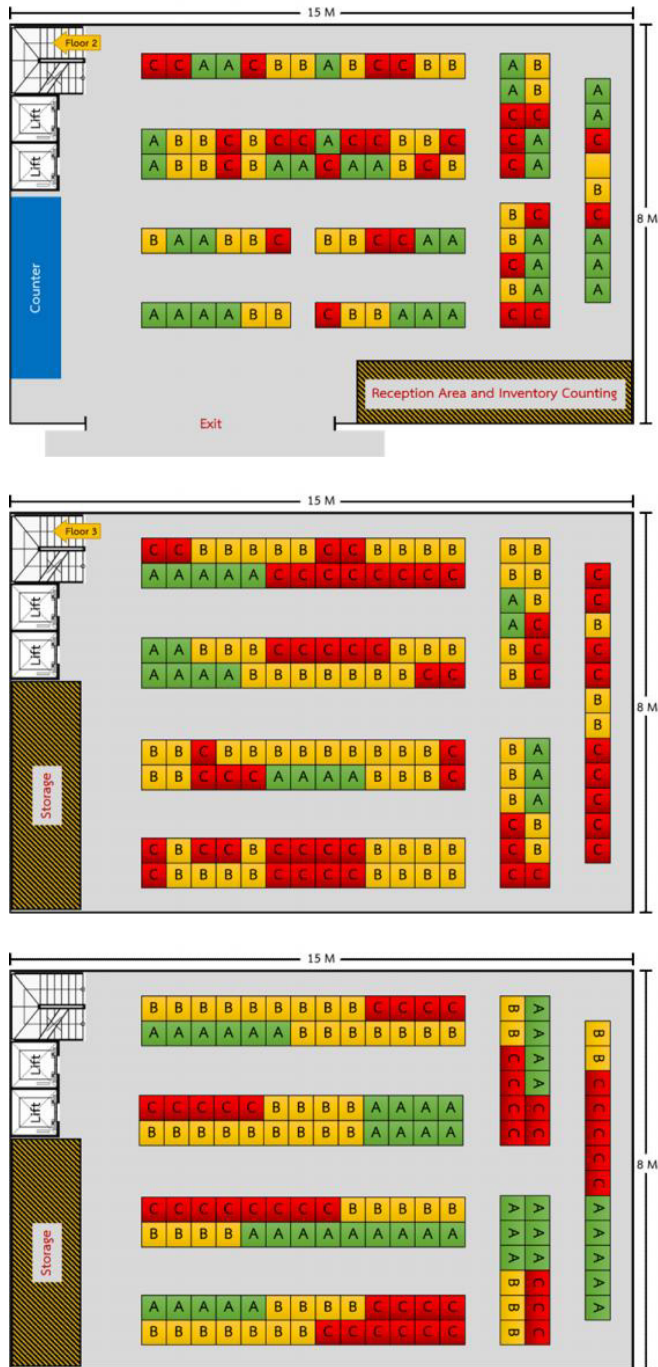
There are 183 types of car parts that are present in the company. The product Segmentation was not sorted orderly or mixed together as shown in Figure 3.



**Figure 3** product Segmentation without sorting according to the product movement

Based on this problem, the researcher has developed a model for displaying the current product group by the following color bands:

- A means the fast-moving products
- B means the moderate-moving products
- C means the slow-moving products



**Figure 4** current product segmentation model

The results of segmentation using ABC Analysis. There are 183 products in total. Group A, B and C contain 26, 32 and 70 respectively as shown in Table 1.

**Table 1** Products Segmentation

Group,	Number of products	% of inventory	Total Value generated in the past 7 months (THB)	% of the value generated of each group	Movement Type
A	26	20	11,912,000	66.97	Fast
B	32	25	3,096,320	17.41	Moderate
C	70	55	2,778,321	15.62	Slow
<b>Total</b>	<b>128</b>	<b>100</b>	<b>17,786,641</b>	<b>100</b>	<b>Total</b>

The researcher performed segmentation based on the type of movement of products and to bring such information to create the placement of its new model to reduce time and improve operation performance.





**Figure 5** The new product segmentation model

Figure 5 shows the results of segmentation using ABC Analysis to determine where to place each product. Fast moving items are placed near the exit door to make the warehouse operation more efficient. Researchers have now taken the Lean Concept to apply by writing a diagram of the Value Stream Mapping, VSM: Current State as shown in Table 2.



(A) Before improvement

No.	Process Flow Chart (After)	Sheet	Operator	Operator	Number of Operator	Product	Conclude	Up-to-Date	After	Difference
	Number Chart						Activity	Date		
	Products/Material/Staff						Action	4	4	0
							Check	2	1	1
	Activities: goods stored in a warehouse						Move	1	1	0
							Wait	1	0	1
							Put away	1	1	0
	Explanation of Activities	Times (minute)	Operator	Operator	Number of Operator	Condition	Move	Wait	Put away	Remark
1	Operator send receiving document	5	Documentation department		1					
2	Lift the goods down from the trailer	11	Trailer Driver		2					
3	Counting the goods	23	Receiving		1					
4	Checking	5	Receiving		1					
5	Write receiving bill	25	Receiving		1					
6	Increase stock number	13	Driver		2					
7	Move the goods into the storage	7								
	Total	89								

## (B) After Update

From Table 2, By analyzing reduced process for receiving the product into the warehouse between before and after the adjustment, it has been found that after reducing the operation from 9 steps to 7 steps decreased the time taken by 126 minutes or 59%.

**Table 3** The activities before and after the improvement.

Moving product into storage	Steps	Step no.	Total
<b>Before improvement</b>	Value-added activities (VA)	1,2,5,6	4
	Necessary Non-Value-added activities (NNVA)	3,4	2
	Non-Value-added activities (NVA)	7,8,9	3
<b>After improvement</b>	Value-added activities (VA)	1,2,4,5	4
	Necessary Non-Value-added activities (NNVA)	3	1
	Non-Value-added activities (NVA)	6,7	2

$$\begin{aligned} \text{Performance Operation before improvement} &= (15 + 35 + 5 + 32) / 215 * 100 = 40.46\% \\ \text{Performance Operation after improvement} &= (5 + 11 + 5 + 25) / 89 * 100 = 51.69\% \end{aligned}$$

## 4. Summary of Research Findings and Discussion

### 4.1 Summary of research findings

4.1.1 The problem of the automobile parts warehouse business in the case study of the Nakhon Nayok area is having no system, lack of volume analysis ineffective layout arrangement and lack of a good storage system. Storage must take into account the First-in First-out(FIFO) concept to reduce problem in the warehouse and the operating time.

4.1.2 Develop product segmentation storage system by using ABC Analysis to analyze the type of movement of goods. There are 128 types of goods divided into 3 groups: Group A: Fast Moving Goods; 26 items, group B Group B: Moderate Moving Goods; 32 items and Group C Slow Moving goods; 70 items. Furthermore, analyzing Value Stream Mapping (VSM: Current State) was done before bringing the Goods into storage. It was found that 215 minutes of a total of 9 activities before improvement decreased to duration of 89 minutes of 7 activities thus were able to reduce operation time and step.

4.1.3 The evaluation of the performance of the new warehouse system found that the efficiency of pre-improvement performance was 40.46% and the efficiency of post-improvement performance was 51.69%, an increase of 11.23%.

### 4.2 Discussion of the findings

4.2.1 The problem of current warehouse is not segmented by movement resulting in unorganized storage system. After considering the criteria used by ABC Analysis in accordance with the ideas of James and Jerry (1998) mentioned in The Warehouse Management Handbook: the second edition in the Stock Location Assignment that, ABC analysis is widely used in the goods segmentation. They are grouped according to the movement of goods by based on the above criteria. It is found that only 20% of the products will have the movement of goods up to 80% of the total product.

4.2.2 The current development of the warehouse system must have appropriate guidelines. Bartholdi, III and Hackman (2014) discusses the layout of a loading point saying it should be the only point using to manage in the time of product management, meaning using only a single goods transfer tool called Pallet.

4.2.3 Evaluating employees' performance is difficult to measure out exact values. Therefore, it is necessary to measure indirectly. It is important to note that, the results of employee performance are indicator of employee efficiency. (Surapong Piyayopab, 2003).

## 5. Suggestions

5.1 There should be further exploration in terms of techniques or IT systems that can help developing warehouse system to maximize the benefit in developing and improving warehouse system.

5.2 There should be further study on other variables that may have direct effect or indirect effect on warehouse development.

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**Internet of Things and Supply Chain Management**



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# Internet of Things and Supply Chain Management

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## Abstract

The Internet of Things (IoT) is an embedded internet connection that connects the internet in a digital environment to seamlessly link supply chain and logistics processes. Incorporating new IoT into today's ICT systems may be unique due to its ingenuity and widespread use. However, research on the IETT adoption in the supply chain domain is minimal, and IoT adoption in specific retailing services has been overstated. This study is based on the empirical model of the impact of IoT on the multidimensional dimension of supply chain integration and improves supply chain efficiency and organizational performance. The results demonstrate that IoT's capabilities have a positive and significant impact on the internal processes associated with customers and suppliers that affect the supply chain performance and organizational performance. It explores that the impact of IoT on SCM and develops a conceptual framework that links the four aspects of the supply chain (IOT). More information about the settings for this configuration is the data collection information for the collected data network and the data management information for the system files that are managed for use by end users. In addition, this framework explores the possible supply chains for the product and demonstrates the supply chain that best fits the needs of customers. Increased production capacity allows for acceptance with suppliers. In theory, this study is part of the knowledge that combines information systems research by creating empirical evidence on how IoT integration processes can be optimized at the supply chain and enterprise level. In practice, the results inform the manager of the IoT investment trend that can lead to the performance of the chain.

**Keywords:** Internet of Things (IoT), Supply Chain Management

## 1. Introduction

Since the globalization of modern industry, the internet platform has been simply created to communicate human through computer. Due to the continuous development on this platform, now it's able human to communicating their message to computer or machine. As conceptual framework, the Internet has changed from being based on "machines" to "systems", which the devices are all connected to the Internet were called IoT. Along to the supply chain management (SCM), that has been defined as "the integration of the key business process from end user through original suppliers that provides products, services and information that add value for customers and other stakeholders" (Stock & Lambert, 2001). The primary objective of SCM is to integrate and manage in control of materials, flow, and sourcing by using all system. IoT can help the supply chain management to be revolutionized with both efficiencies on operational and created revenue opportunities. Because supply chain nowadays is focusing on the ways to created competitive advantages, not just only keep track on your own product. IoT increases productivity with data analysis. In case of equipment

damaged that can bring enormous expenses to the organization. However, if real-time device information is reported, Businesses can know the source of the problem. Before the disaster was over with the IoT, companies could compare each plant, and to measure it appropriately to ensure that every facility and the production line is running smoothly. With the growth of using IoT in SCM, supply chain tend to be improving on customer service, cost control, Planning management, risk management, supplier management, relationship management, and talent.

## 2. Literature Review

In this section, several relevant literatures are mentioned as a base knowledge about Internet of things and supply chain management will be briefly presented:

### *Internet of things (IoT)*

Ganeshan and Harrison (1995): Defined SCM as a network of facilities and distribution options that performs he functions of procurement of materials, transformation of these materials into intermediate and finished products, and the distribution of these finished products to customers.

Souders (2015): The advancement of Internet-enabled network of infrastructure from RFID readers to 4G high-speed wireless communication acts as catalyst behind the growth of these disruptive technologies designed with low-power, low-transmission, machine-to-machine level communication to send and receive data.

Rai et al. (2006) Yu (2015): ICT, as digital enabler for supply chain integration, promotes effective information flow

Ben-Daya et al., 2017; Tu, (2018): The additional capabilities generated by IoT technologies are argued to potentially facilitate the information capture and sharing among the partners.

### *Supply Chain Management*

Erich Gampenrieder, Global Head of Operations Advisory, KPMG Germany (2018): “The leading retailers will be able to effectively analyze and interpret big data to stand out from their peers by winning customer experience.

Anthony Coops, Asia Pacific Data & Analytics Leader, KPMG Australia (2018): “Big data is certainly enabling better decisions and actions, and facilitating a move away from gut feel decision making. But as more reliance is placed on algorithms, data and analytics, the question of trust is emerging as an important consideration. Another important consideration is working with external parties to bring together far more meaningful insights and actions. This again emphasizes the need to really trust in the analytics to be confident in decision making.”

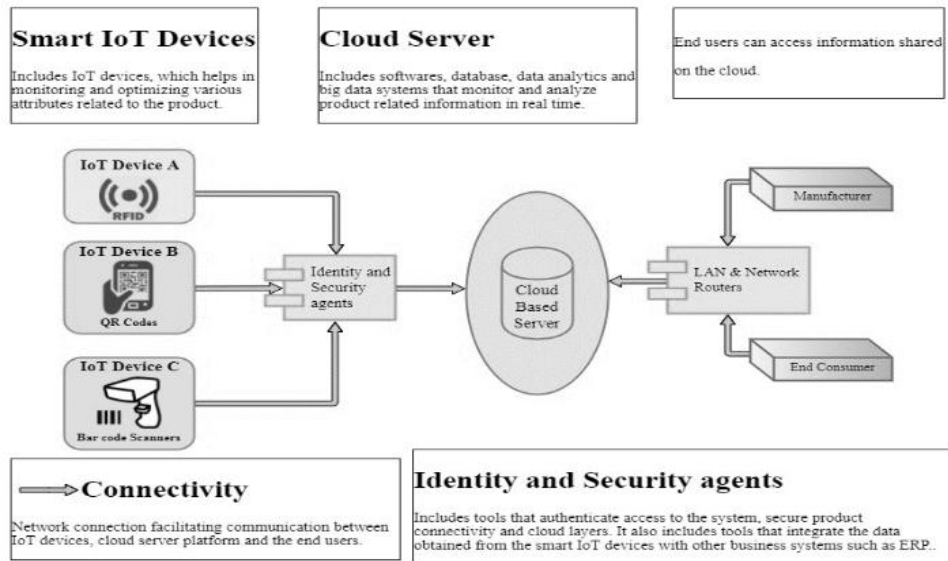
Atzori (2010): The IoT is converged with three key visions: things-oriented, Internet-oriented and semantic-oriented. Thus, IoT architecture encompasses the objects that captures data, communicates with the real world and actuates; the Internet global platform including cloud that facilitates transmission; and hosting and processing of data as well as its information synthesis and processing ability.

### 3. Proposed Internet of Things in Supply Chain Management

In supply chain management, several activities will be efficiency managed on productivity. The essence of SCM is to integrate all the processes to be compatible and effective, because it's directly affect to cost of productivity, and most importantly, the satisfaction of the consumer (customer).

The characteristic of IoT in SCM can be concluded as follows:

1. Improve business growth. IoT help to improve business growth. It's provide vision for departments to see the overview of business. IoT can make every sector to see in every work processes in organization, and make the operations help to increase business value and differences in competitive, which IoT is the key thread to connect these functions together.
  - a. Proposed framework
    - o This section presents an overview of the framework proposal. To understand it, you need to set up an IoT structure to understand how it can work properly in the supply chain.
  - b. How the platforms works
    - o The device stores information stored in the storage device that collects data in an environment and sends it to the cloud in a system file. Information may include product temperature, product quality, and product safety in many other ways related to the condition of the goods, information collected by the equipment under the supplier, and supply chain returns. Data is shared over the network, represented as a connection, which can be used to access Wi-Fi, mobile, Internet or WAN, depending on the bandwidth and application requirements of the IoT application. This is in the processing. Data validation will be authenticated. For example, if the temperature data sent by the IoT device is not at the appropriate level for lifting and alarm equipment. This information makes it easy for end users to access through the user interface. Data is processed in real time so that manufacturers can position their goods by supply chain, in addition to the suppliers they have immediate relationships with. This information can also be shared with the destination user, as shown in Figure 1.



**Figure 1** Specific Proposed Framework Model

**Table 1** IoT improve in Business Growth

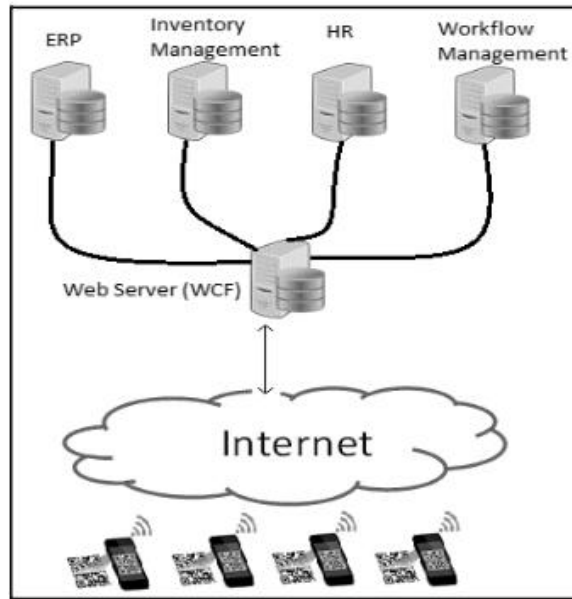
<b>Cost Reduction</b>	<b>Revenue Enhancement</b>
Reduce costs	Better satisfy customers
Streamline operations	Improve brand image/ loyalty
Improve efficiency	Sell more of existing products
Better service levels for same cost	Sell new products/ services
Shorten cycle times	Increase 'stickiness'
Improve safety	Reduce churn – Increase life time value
Shorten Supply chain	Reach new markets
Reduce inventory costs	Be more competitive
Eliminate wasted time, resources	Create new business models
Reduce labor costs	Incent referrals
Remove 'friction'	Price differently
Reengineer operations	Increase margins
Reduce customer acquisition costs(CAC)	Find new revenue streams

2. IoT increases productivity with data analysis (Data Analytics). Damage of equipment can bring enormous expenses to the organization. However, if real-time device information is reported, Businesses can know the source of the problem. Before the disaster was over with the IoT, companies could compare each plant. And to measure it appropriately to ensure that every facility and the production line is running smoothly.
  - a. Forecasting and Inventory: Another bonus: IoT sensors can provide far more than man-made inventory. For example, Amazon uses a WiFi robot to scan QR codes on products to track and verify orders. Imagine being able to keep track of your inventory and equipment you have in stock for future production with the click of a button. You will never miss again. And again, all the information that can be used to find the trend to make the production schedule more effective.
  - b. Scheduled Maintenance: IoT can also use intelligent sensors on the production floor to manage planned and predictable maintenance and prevent reduced downtime, which can be costly.
  - c. IoT in improving SCM operational efficiency. The advanced connectivity between supply chain members and devices at IoT provides easy data sharing across supply chains as supply chains become more complex. Increasing product visibility along the supply chain reduces Operational pressure and cost reduction in logistics. Although IoT has the potential to connect different products and subscribers to supply chain management, such as suppliers, customers, manufacturers, and logistics, most companies do not benefit from competitive advantages in wide spread.
  - d. IoT in promoting information sharing. With advanced IoT technology replacing paper-based communications, companies value the value of information to gain competitive advantage in the marketplace.
  - e. IoT in improving inventory management. In addition to the efficient inventory management practices implemented by IoT, there are additional advantages to keeping costs down and control operations. IoT helps companies improve their inventories in real time. Complete order fulfillment to promote effective inventory management.
  
3. IoT will improve transport efficiency, by measuring the wear and tear of a real-time vehicle (Fleet Monitoring). Companies can get real-time insights into how their vehicles work in real time. The connection of vehicles and goods with IoT will allow the company to maintain its tools and equipment at all times. It also adds a good customer experience by anticipating the time it takes to reach the customer faster (ETA). IoT can also help companies track their driving habits. And use data analysis. To predict maintenance, they can make decisions and take advantage of the predictive genius that will increase the value and benefits of the supply chain.
  - a. Connected Fleets: Since the supply chain is growing and going out - it's even more important to ensure that all of your carriers, whether shipping containers, suppliers or your van out for delivery—are connected. Again, the data is the prize. Just as cities are using this information for emergencies, quicker or more clearly, traffic problems are being used by manufacturers to get better products to their customers faster.
  
4. IoT provides real-time insights from the connectivity of various devices. Real-time tracking on any device Helps businesses understand where and how they work. When there is information that the device. Need for preventive maintenance. There will be automatic alerts to technical service personnel to assess the situation. Companies can reduce unnecessary expenses from degrading or even knowing that the device is moving. To prevent potential

burglary with the ability to monitor the environment of the device. Whether it is temperature, humidity and location tracking.

- a. Tracking products along supply chain. In SCM, IoT can be used together to monitor and control the movement of products according to the supply chain and analysis data. So the sensor can be used to monitor and control the goods to reduce theft, check for appropriate conditions, such as in the warehouse temperature when the product is under storage and rotten. In addition, once the navigation equipment is installed, information about the location of the goods will be made available to make logistics more efficient. They also provide information on the condition of the product, such as temperature and humidity, of making effective and sensible decisions in terms of product storage and other logistics requirements. By sharing information, data collected by IoT devices can be shared among different members of the supply chain in real time for decision making. It is therefore possible to monitor and forecast specific product requirements and optimize delivery times, which will improve customer service. One of SCM's current major challenges is the efficient use of resources. So for supply chain members to cope with the current challenges of inefficient use, it is imperative for companies to share their scarce resources. This has the advantage of achieving higher performance, especially for non-natural resources such as technology, equipment and transportation. In addition, sharing information between companies that are members of the supply chain will create a more efficient supply chain. These are some of the factors that influence the frame proposal. It is based on the sharing of information and resources for the efficiency of SCM, using the power of modern IoT.
- b. Tracking Assets: Track numbers and barcodes are used as a standard way to manage goods throughout the supply chain. But with IoT, these methods are not as useful as most. New RFID and GPS tracking systems can track products from ground to store. Have At any one time, manufacturers can use these sensors to get detailed information such as storage temperatures, how long to carry goods, and even time to fly off the shelf. The IoT data types can help companies get quality control, on-time delivery, and product forecasts, as shown in Figure 2.





**Figure 2** Illustration of the QR codes usage SCM process

Barcode is used with optical technology to retrieve the data stored in the barcode tag, so it works well with smart devices such as smart phone applications. Barcodes have the advantage of being effective in a limited environment where RFID is not available, such as the retail environment. In addition, they are also relatively cheap. However, it is also a disadvantage that the bar code reader must be in the eye with a bar code reader, so it requires the user to have the bar read the audio codec. Second, bar code tags are risky in a data transfer environment and may not work. Therefore, misleading information is present when it is damaged and reprinted in such cases. The information processed by the bar code may include the name, format, quantity and quality of the product, as well as manufacturer details. The technical capabilities of these devices are the result of progress in the micro-mechanical system, which has advanced communication capabilities to visualize data.

5. IoT helps to track employee behavior to reduce risk. The IoT system allows employees to see the workplace environment better. In a risky situation for the safety of employees. Companies can monitor the health, location and compliance of each employee. Businesses can improve their policies. Strictly follow the rules and prevent accidents. IoT automates the operation. It also includes tracking, which improves productivity and reduces errors that may result in higher costs.

## 7. Conclusion and Recommendation

One of the most potential areas to benefit from Internet innovation is supply chain management (SCM) through new technologies such as sensor devices, data storage, intelligent analysis, and decision-making tools. These tools have the potential to create powerful resource systems that enable users to share information in the supply chain. This document therefore develops a research framework that builds on four supply chain systems, including suppliers, suppliers, logistics, and customers who can track the movement of products by supply chain. The framework demonstrates how IoT can increase SCM, which allows members of the supply chain to improve their organization's performance by better sharing of information, efficient use of resources, and reduced loop losses in supply chain. In addition, there is also a barrier to innovation due to the lack of standardized systems, enabling developers to offer innovative applications and solutions to improve SCM practices. IoT automates the operation. It also includes tracking, which improves productivity and reduces errors that may result in higher costs.

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**Logistics and Supply Chain for Mice Business**



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# Logistics and Supply Chain for Mice Business

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## Abstract

This article aims to study the logistics process and supply chain in MICE business. Exhibitions and Events Organizer Process are vital. The Role and Importance of Logistics and Supply for the Event Including the provision of staff in the exhibition. To give new beginners interested in exhibitions, to know the process of work and to apply the knowledge gained in this article to use in the work to promote and develop the organization to be successful and sustainable in the future.

**Keywords:** Logistics, Mice, Event, Exhibition, Organizer

## 1. Introduction

MICE is another branch of the tourism industry that can generate a lot of revenue for the country due to the MICE business. The tourism business is focused on quality and pay back. The agency responsible for each trip is quite higher than other types of tourism. For this reason, in each of the MICE countries, MICE is very important to focus on the MICE industry in order to upgrade its own standards.

At present, MICE business is gaining international attention. Especially the countries that have income from tourism. Because of Thailand, we have many interesting attractions and interesting features. And get the impression of foreigners. Many such. The charm of the country's culture and traditions. Thai food with passionate taste. Meeting facilities, standardized meeting facilities.

Especially in the trade show. And exhibitions play an important role in driving the economy. Politics and Society. This is a marketing activity that has specific schedules. Interesting. It can attract many exhibitors and exhibitors (Good, 1973). It represents a broader human interaction in line with Kennett's definition. Specialists in trade shows. By trade show it's not just about bringing a product or object together. At any given time, exhibits are comparable to interactions. Human activities in various activities. For the desired results. Both exhibitors, exhibitors, and visitors have Communicate

continuously (Kenneth W. Luckhurst, 1951). Including the business linked to. Various industries both the service sector and the manufacturing sector generate direct and indirect revenue for the country and city where the event is held. It is an important economic mechanism to support the economy of many countries. During the global economic downturn. (Thailand Convention & Exhibition Bureau, 2557). Both place management. Other Related Businesses As well as being one of the most effective promotional marketing tools in the modern age (Bongkosh Rittichainuwat and Judith Mair, 2012). There are 4 types of exhibitions in Thailand. It is divided into business-to-business. Mixed and International Jobs Development of product and service quality and systems. Management is one of the key ways to adapt. Implementing Quality Management (Philip B. Crosby, 1979) Used for the exhibition. Resulting in various processes. In the event of the exhibition, the quality and meet the needs of customers (Peter O'Neill, Amrik Sohal, Chih Wei Teng, 2016) from design to production and delivery of quality products to customers (LiJuan Chen and Hanbin Luo, 2014).

## 2. Literature Review

### *The role and importance of MICE business*

MICE is a group business in the tourism industry related to corporate meetings. Travel to be rewarded. Professional meeting and exhibitions and exhibitions. (Conference and Exhibition Bureau, 2557). Meetings are small gatherings that bring together people to exchange information. It is organized within the organization or agency. Meetings may be held at other venues outside the company. The meeting will come from the same office. Or maybe from many places, most companies or agencies will pay for the attendees. The purpose is related to Company benefits or benefits to the agency. The organization of the conference will be diverse and the difference in the number of people. Meeting topic or time. Incentive Travel is a travel arrangement for employees or individuals. In the company or organization to reward success. Work or the reward is a holiday to travel in the country or abroad. Most of them are traveling as a group. Travelers are not payers. The issuer is a company or unit that awards employees. This is a special program. Unlike tourism management to the general people to make the tourist satisfaction. With the award to encourage hard work.

Professional meeting (Conventions) is a large meeting. Attendees came from many countries. The number of people attending the conference is plentiful. Meeting objectives vary from employer to employer. International standard meeting facilities include state-of-the-art IT equipment and facilities, sometimes combined with conventions and exhibitions. Exhibitions generally, manufacturers or large companies bring their products to exhibit. The rent is paid based on the size of the venue, with significant elements being the organizers, exhibitors, and visitors. The important benefits of MICE business are the creation of jobs and the distribution of income to the relevant businesses. Due to MICE business, it must have elements or facilities. The meeting place. Hotel Direct benefit this includes distributing benefits to businesses linking both the manufacturing and services sectors and generating revenue for the state in the form of business taxes.

### *The role and importance of logistics for the event*

One of the important steps of the event is Transportation equipment and tools used for organizing events. Transportation both to and from the origin to the destination. The first thing to take into account. Product safety and punctuality. The challenge of organizing events is enhanced when each product is of different sizes and shapes. This means that each product has a different way

of handling and handling the documents. These factors are at the heart of event logistics. It requires skilled personnel and skilled. To provide smooth freight management services. And the important thing for the event to be accomplished is the planning of each step. Although, each type of product and procedure is complex and challenging. That is why the logistic services for the event are attractive and distinctive, unlike other types of product management.

Logistics providers that handle freight must be well-informed and able to handle each type of product accurately and find the most appropriate solution to meet the needs of the customer. It is a challenge. But that factor makes the logistics for events unique and different from other types of solutions.



**Figure 1** Event Logistics Service and Exhibition

### *Trade Exhibition/ Trade Show*

**Trade shows** are a form of work where most booths are manufacturers or direct sellers. The industry is represented by exhibitors and buyers, often with companies or organizations that buy or sell products or services from a large number of vendors to run their businesses. Most exhibitors will only be invited by the organizers. As well as the cost of registering and attending the fair will be able to attend trade shows, meaning that this type of work is usually not open to the public to attend the show. The duration of this type of event is open to exhibitors. It usually ranges from 1 day to 5 days and is held annually.

**Jobs for consumers** it is open to the public and people can attend. This is called Business to Consumer (Business to Consumer: B2C) because the sellers are selling products to. Exhibitors directly consumed Consumer jobs play an important role in helping producers get the chance. Get feedback on new products and services.

**Mixed work** this is a combination of trade shows and consumer events. This type of event is open to both registered companies and the general public. Buyers of goods and services will be both the organization and the company itself, as well as consumers in the industry directly and the general public.

**International** it is a powerful medium to help promote the export of the country's products to the target countries as well as export to all regions of the world. The organizers and attendees of this event are often similar to the trade show.



**Figure 2** Purpose of the Exhibition



**Figure 3** Techniques for choosing a trade show



### 3. Expected Results

A study of logistics management and supply chain management for the MICE business was conducted. The logistics system is used in the MICE business to improve the organization of the organization. For the people interested in using the exhibition, product sales can be studied in the show in this article. Those who want to open an event organizer can apply this knowledge as a guideline for their operation.

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## E-Supply Chain Solutions for Solving Problems in Thai SMEs Supply Chain

**RCGR<sup>2nd</sup>  
2018**

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## **Abstract**

Thai government established the target to drives Thailand from 3.0 to 4.0 because of the world changing to the digital economy and focus on innovative product and service. Hence Thailand government support Small and medium-sized enterprises (SMEs) owner to survive in the digital economy but Thai entrepreneur still ignores the changing of the world this cause affects Thai SMEs can't survive. This article purpose the problems in Thai SMEs and also purpose the solutions to prevent and improve Thai SMEs supply chain management for better performance and increase benefits in business. In this article also explained why ignorance on E-supply chain or supply chain management is the cause of problems that have an effect on business. The article describes and purposes the E-supply chain management model for SMEs scale so The SMEs able to use this article as a guide to applying with business to have a more great ability.

**Keywords:** Supply Chain Management, E-Supply Chain Management, Small and Medium-Sized Enterprises

## **1. Introduction**

Supply chain management is the management of the flow of raw materials or goods and flow of information from upstream with demand at the right product, right place, right time. Hence the SCM (Supply Chain Management) not only control the flow of goods but require controlling the flow of information to transfer necessary data and information for coordinating within the supply chain to decrease cost and increase the higher accuracy of forecasting demands to satisfy customers in the right time for more competitive advantages.

SCM has significant with business with Thai SMEs (Small and Medium Enterprises) in current day Thailand has SMEs found every year and becoming higher the future. And having more SMEs in Thailand it's good for Thailand economy because SMEs is a driving factor of Thailand economy because SMEs business generating revenue and development for countries and makes income distribution in countries and increase more jobs for Thai people. And having more SMEs in countries can generate more innovative products and services to market. But in the real world, Thai SMEs that can survive the first year have only half because of Thai SMEs still lack skill and knowledge about supply chain management.

To survive in the business world Thai SMEs should learn about supply chain management to increase more performances and competitive advantage to survive. To increase competitive

advantages Thai SMEs must adopt internet to increase more efficient in the supply chain. E-supply chain can provide business to earn increased profits at low cost and have quality at the same time, and E-supply chain can develop a forecasting process for more precise to apply information for decision making also better marketing. Plus in the supply chain must have good communication along the supply chain for coordinate and sharing valuable information to strategic planning.

The reasons to use E-supply chain in Thailand have been a very changeable and variations in demand and information very fast so using E-supply Chain is the solution for survival. While the labor costs getting expensive but the cost technology getting cheap. However many of Thai SMEs still use traditional supply chains are collects of loosely connected steps and business process are not connected to suppliers or customer. Because of this Thai SMEs must use E-supply chain for progress to Thailand 4.0 in the future.

## 2. Literature Review

Hafez Shurrub (2014) Determine that e-SCM is the integration of information flow that can increase efficiency to supply chain network and full functional connectivity that can enhance productivity also decrease cost.

Zora Arsovski, Milan Stamenkovic, Dragana Rejman Petrovic (2016) Introduced the model for developing a measurement system performance management in E-supply chain to create more efficiency system. And the model also involving a new key performance indicator by their relative values depending on the supply chain types.

Muriati Mukthar, Salha Abdullah, Norleyza Jailani, Yazrina Yahya (2009) Proposed a framework for analyzing E-supply chain for improving and executing the way to do business and demonstrated the framework for decision making and purposed an E-supply chain simulating to developing the business.

Professor Kim P. Bryceson & Dr. Asif Yaseen (2018) Explains that smart technology (mobile computing, social media, IOT, cloud computing, wireless sensor, intelligent packaging, and blockchain technology can support agrifood chain has better management and this articles also reveal the benefit of technology to collecting data for analyzing to generate essentials information to contributing the supply chain.

A. Gunnasekaran, E. W, T Ngaiba(2018), Studies how to achieving organizational competitiveness by applying information technology to provide marketing and SCM. Additionally, determine the framework for IT applications in SCM.

Tuanjai Somboonwiwat, Chatchalee Ruktanonchai, Duangpun Kritchanhai, Thananya Wasusri(2006), This study is an attempt to enhance the level of manufacturing competitiveness via logistics and supply chain perspective. While many have explained that logistics is a crucial part of any supply chain, it is also important to see logistics as a key improvement area within a firm. From these twelve case studies based in Thailand, it could be seen that many encountered supply chain problems simply because of the lack of logistics practice within the firm itself.

Nicole Pontius(2017) Cloud technology is transforming supply chain management and logistics operations. As 2017 draws to a close, reviewing the impact the cloud has had on supply chain trends provides valuable clues on changes that are yet to come.

There's no doubt that cloud technology has transformed supply chain management and logistics operations. While the cloud has played an integral role in supply chain efficiency for the past few years, it's unquestionably a mainstay. As the end of 2017 draws nearer, reviewing the impact the cloud has had on supply chain trends provides valuable clues on changes that are yet to come.

### 3. SCM Problems in Thai SMEs

Thai SMEs has an essential role to drive the Thai economy and increase the employment rate in the countries. But Thai SME’s need more understanding of integrating technology to control the supply chain for improved SCM to increase more productivity in the supply chain. This is the list of SCM and effect to Thai SMEs

**Table 1** Problems and effects in Thai SMEs SCM

<b>Problems</b>	<b>Effects</b>
1.Poor warehouse and inventory management.	Overstock, Product lost, the unknown amount of product, Can't plan production line.
2.None information management.	Loss data and information to forecasting customer behavior and analyzing the market.
3.Lack of coordinating and sharing information within the supply chain.	Cost increase, Unclear information, Inefficiency in the organization, Bullwhip effect.
4.Poor customer service.	Loss of sales, Waste time for a customer, Waste of the opportunity
5.Traditional administrative.	High paper cost, the High risk to lose the essential document, Waste business time.

1. Several of Thai SMEs still overlook to settings system to manage stock in the warehouse for checking a number of products for planning and for control and minimize holding costs for. These problems lead to overstock in a warehouse this problem makes the company have to spend huge holding cost. Product in stock could be expired because they could not sell a product on time. In part of production planning if the company doesn't monitor and forecast the materials in inventory for production planning to monitor materials to balance with demand and to minimize holding costs in inventory.

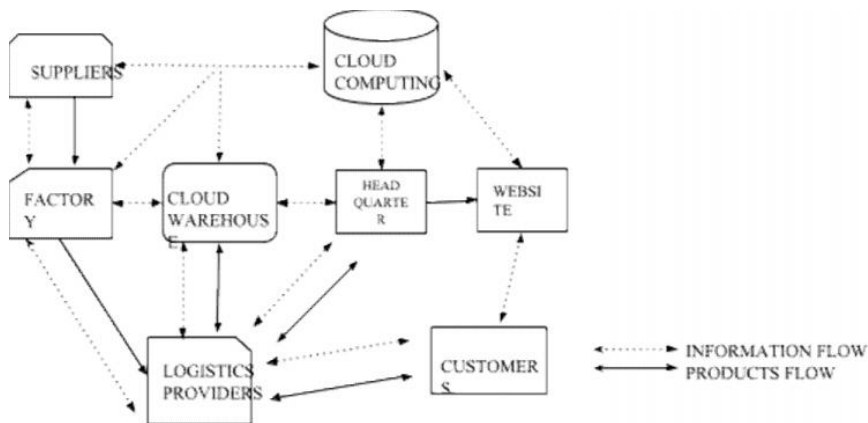
2. Nowadays behavior of Thai customer becoming extremely uncertainty in demand, customer switch decision to buy goods suddenly because of the internet, a customer can share new things on the internet that get the past information would be useless for prediction demand. Thai SMEs still disregard on collecting and tracking customer information. Information is the significant sources for analyzing the demand in the market. Thai SMEs only receive the money by don't record customer information that makes company loss opportunity to collect data for strengthening the advantage for surviving.

3. In the supply chain, the coordinating is necessary to improve efficiency from upstream to downstream in the supply chain. Thai SMEs facing the problems with bullwhip effect because Thai SMEs still require good coordinating to connect all members in the supply chain. The effect of poor coordinating makes a huge problem among the supply chain because the supply chain member has to perceive the same and the right information and the right time. The problem in poor coordinating in SCM such as the marketing department makes promotion to discount product by doesn't coordinate with production department it could affect the production line couldn't produce on time to fulfill stock to match with demand or produce over demand it will increase inventory cost also. And Thai SME's still using traditional procurement by don't use the internet to make negotiation or comparing materials cost from any supplier the company would miss a chance to reduce costs and for sale department also can lose a chance to sells a product in case of when customer request a real-time information but sale staff don't know the real-time information so it can waste customer time and this is making the opportunity to competitors for stealing customer.

4. If the company lets the customer wait too long they would be changing to buying other product from the competitors it calls loss sale. This because they don't need to wait too long. Thai SME's using Instagram or Facebook for selling the product but when the customer wants to ask a question or order product they have to wait for a long time because of the staff spend a time to do other things or answer the question from other customers. Hence the delay in customer responsiveness makes the company a loss of sales.

5. Thai SMEs still spend a money to purchase paper for the business administration. Using traditional administrative could make a high risk for losing document and waste a time for finding a physical document. And in part of administration process SMEs company still hardly use technology tools to form a document. To perform document sometime they have to wait for information from other staff or department to provide an administrative process to complete a document for providing the company business it could make a huge of time and sometimes this is the cause of waiting.

#### 4. Solving the Problems by Applying E-Supply Chain



**Figure 1** Example of E-Supply Chain Management Model for SMEs



1. To set up IT infrastructure in the warehouse the company have to spend capital and a lot of time to set up IT system in the warehouse and inventory such as WMS that managing Stock of Warehouse, which is included of Functionality such as Product Information and RFID and barcode system for tracking product. For installation, companies have to spend capital and time on training staff. But SMEs company don't have capital enough to invest. For this solution, SMEs can use cloud warehouse service for stock the goods. In Thailand have cloud warehouse(Cloud warehouse is a service that serves storage, pick-pack, add values, checking damage, shipping and serve backdoor system for customer know information of stock and customer ) providing SMEs company to reduce holding cost and can increase productivity by packing service and cloud warehouse service have a backdoor system for managing stock so the company can know the data for planning order or production planning and company could reduce the risk of lost or damaged goods by transfer responsibility to a cloud warehouse.

2. In the Supply Chain, Using Information to Analytics for solving problems is very important for the supply chain. Agile businesses rely on statistics and data analysis to make quick decisions and communication in the business process. Data is collected, stored in databases, analyzed and used to create efficiency in operations. Technical knowledge in management information systems, business analytics, supply chain, and operations provides support to the business of doing business. For SMEs business can use cloud computing for collecting information for decision making and its convenience for finding essentials information. Not only collecting information, but cloud computing also can share information with the supplier and another department in the supply chain for faster updating. Hence all part in the supply chain can automated update can save time and cost, therefore the company can control the change in demands quickly.

3. To improve efficiency and high-speed responsiveness, in the Supply Chain should have to share information among partners in the chain to increase efficiency and for satisfying customer and to minimize effects from bullwhip effects. The demand can fluctuation and disruptions so this situation can take the damage in the whole the Supply Chain it's can increase all relative cost and manufacturing could produce a lot of waste. So all departments in The Supply Chain and all partner must be connected together by sharing information through the internet. Thai SMEs can cloud computing for sharing information and coordinating to increase efficiency in upstream to perform effectively in downstream to satisfy demand and minimize the effect of bullwhip effect. The company can use the advantages of sharing information along the supply chain to improve the forecasting process to be more accuracy and more visibility and eliminate errors in the data and make real-time demand planning.

4. The high-speed response and visibility is a key to success in business. To obtain an immeasurable customer experiences company have to concentrate on strengthening customer service, give clients the information they need when they need it this is an important thing to engage customers. To better customer service and increase good experiences SMEs also should look at cloud computing, when customer ask a complicated questions staff can open a cloud computing to looking for information that customer needs this solution can save time for a customer. And another solution is using automatic customer answering service, which is the service that helps the company to answer customer question this solution very effective can satisfy the customer at the right time such as the time that store open or the price of a product. This kind of service can provide online application, Facebook, or Website. To prevent customer shift to a competitor SMEs must serious about customer service.

5. Today document doesn't need to write on paper or printing to save paper and ink cost SMEs company must be changing to use an online document such as Google Docs, Google Slide, Google Sheets to increase productivity on business process. In addition, an online document can connect staff who involve in a document can access for editing to update in real-time so it increases productivity and saves a time for administration process. And for ordering process, SMEs should have a web interface to receive an order to operate all 24 hours this include transaction process that can collect money all 24 hours from this solution customer don't need to wait for staff answer and confirm an order customer can pay money and receive an email for confirming an order.

### **3. Research Methodology**

This researcher will use observation method and qualitative method to obtain the information by selecting the small SMEs company that have a supply chain problems and never use e-supply chain for business. By this research will interview for exploring to understanding the supply chain problems in the company to determining the real factors that create the problems. And for the next step is an observation to looking for the supply chain process for determining the solutions and the effects of using google spreadsheet and google docs also google drive and one drive to operating as an e-supply chain for the SMEs company.

For assumptions, if the SME's company has a low performance of the internet signal this make the big problems along the supply chain because of the low-speed of the internet able to make a burden in the supply chain difficult to use for a real-time update. And another result is if the staff doesn't have IT skills and the knowledge about google docs and google spreadsheet and also don't know how to organize the cloud computing the SMEs company will have to spend the time for training the staff. And if the SMEs company have a very complicated supply chain this idea is difficult to apply because of the limitations of the google docs and google spreadsheet. But if the small SMEs company that has a simple supply chain use the google docs and google spreadsheet for e-supply chain the result can be positive because it's not complicated and has a few information to provide in the supply chain.

For the positive results that if the SMEs company can achieve to operate the e-supply chain for the small company.

1. SMEs company has higher speed and more performance in the supply chain systems by observation at the speed at ordering and the performance for fulfilling the stock.
2. Every member in the supply chain connected to each other use the same system to operating.
3. The cost for the supply chain operations becomes decrease.
4. Every partner in the supply chain has a deeper understanding of how to applying the IT systems and E-Supply Chain to strengthening for surviving.
5. SMEs company change from physical document to E-document by storage and sharing document by using cloud computing.

#### 4. Conclusion

This article reveals the solutions way to solve the problems of Thai SMEs by applying E-supply chain to solving. In additional E-supply chain helps the company to reduce costs and increase more advantages for SMEs company, such as quickly responsiveness with a customer, efficient collaboration among supply chain, accuracy forecasting, modern administration to improve high productivity operation. For recommendations, to prepare for Thailand 4.0 Thai SMEs must improve themselves by using E-supply to strengthen the supply chain to creating competitiveness. Thai SMEs can be applying E-supply chain to connect all partners in the supply chain and all department in the organization to better the collaboration process and develop sharing information process for making to benefits. If Thai SMEs company still ignore on E-supply chain or new technology the company would face a problem in Thailand 4.0 or loss opportunity to succeed. Therefore to survive into Thailand 4.0 Thai SMEs must begin to learn new things.

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**Transportation Economics**

**RCGR<sup>2nd</sup>  
2018**

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# Transportation Economics

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## Abstract

The monetary emergency began in the budgetary division and after that influenced universal exchange, generation, lastly business. Nations with high universal exchange volume were hit the most gravely. When it come examining the long-haul effects of the emergency on financial improvement and transport, exceptionally basic and very advanced methodologies have been exhibited also. In the idea of transportation financial aspects that are worldwide in context. By this imply an individual treatment of transport modes isn't the reason. Financial hypothesis is use explicitly to characterize, investigate, and tackle issues that emerge when such ideas are fitted to the modal market.

**Keywords:** Economics Crisis, Transportation, Technology innovation, GHG, Carbon E-mission, Environmentally Friendly

## 1. Introduction

Everything considered, associated microeconomics transportation monetary angles is an explicit zone inside the general request of money related issues, associated microeconomics. As it see out the past section, transportation applies to such different zones as made and cultivating age, trade, use, territory and government works out. In such way, transportation budgetary issues make use of another area of associated fiscal, for instance, age and contention speculation, overall trade theory, purchaser social monetary issues, cash sparing preferred standpoint examination, open back speculation, charge evaluation theory, and the money related issues of control. In short transportation money related angles uses a rich gathering of learning.

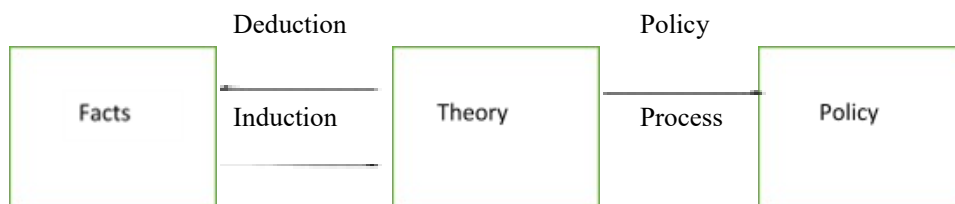
Transportation money related viewpoints incorporate basically what all market experts are proficient in doing: 1) gathering component; 2) developing theory of human lead; 3) proposing and evaluating approaches proposed to achieve an explicit goal. All of these centers will be viewed as accordingly.

This paper thusly creates solid money related condition for motivational prospect, which relies upon the assumption of explicit and direct change, "Scheumpeter Circumstance" in memory of Joseph A, who is creator of the transformative budgetary speculation. Crisis in his view gives the likelihood for creative intrusion of old structure in the economy and encourages development and also innovative change (Scheumpeter 1912).

## 2. Literature Review

The Hypothesis of Financial Improvement (Schumpeter 1912)— the focal point of the present issue—he plainly perceived the heuristic similarity to floating frameworks hidden that "unadulterated" hypothesis. He contended that, despite the fact that this is once in a while unequivocally expressed, "unadulterated" monetary hypothesis, which he likened to "static" (or near static) hypothesis, rejects any plausibility of advancement happening from inside the financial framework.

The linkage among financial matters and the development of worldwide exchange is well build up. Expanded exchange lead to development of worldwide riches. What is less acknowledge of transportation in this mind-boggling wonder? Proficient transportation is a key aggressiveness in remote exchange. The quality and refinement of a nation's transportation framework is one of the most grounded markers of its financial aspects.



Transportation is an activity that takes place all around us. Every physical good that may be purchased at a retail outlet required transportation in order to get there. Even if the goods were purchased it was produced, it is likely that transportation was required in order to get in input necessary to produce the product.

Economic performance from the smallest town to the largest country is a function of transportation activities. So too is the other aspect of one's quality life-leisure activity. From well-defined travel and tourism to simple things such as holiday drive; these ways to spend free time are a form of transportation.

Anyone or anything that has to move from one well-defined place to another is dependent upon transportation. This is the challenge to the economist. Transportation is a physical activity that an economist must analyze using theory.

## 2. Literature Survey

Flexibility of inferred interest for transportation, development of cargo or traveler to and from a commercial center make put utility. (G. Santos 2001) As such, transportation since it is worth more in one place than in another. Coal found in the mine is worth more than dock of a power plant. Society picks up when coal achieve the power plant with the goal for electric to be produced. This make the infer interest for the railroad to pull coal to the plant.

The infer interest for transportation is especially needy upon the degree and solidness of client request. The different methods of transportation confront an interest for their administration that is patterned in nature. The transportation business extends and contract with the cycle of the



general economy. The interest for transportation is the first to be badly influenced by an all-inclusive retreat, and the first to respond emphatically to a general financial development.

A critical angle, specifically for the created world, of setting segment GHG decrease focus of transportation and eco-friendliness principles is that they both animate development and empower the creation of lead showcase for low carbon transport innovation. Subsequently they add to keep up aggressive enterprises in these nations, which can be seen as an imperative co-advantage of transport-related atmosphere arrangement in the created world. In creating world, the circumstance varies. Transport estimates will essentially be committed to enhance availability and to diminish condition effects, for example, air contamination, commotion, or mishaps. Decrease of GHG transport will be fairly a co-advantage of such measure. Be that as it may, with the in presentation of NAMAs in the atmosphere banter, an instrument appropriate for creating nations rises. This ought to be utilized to coordinate established transport approach objective with atmosphere arrangement target to alleviate GHG of transport, notwithstanding the normal solid development of mechanized transport GHG in create nations request in three nations.

Relieve transport GHG in created districts and universal transport will required quarter segment decrease focus for transport. A request of greatness of 15%-25% until 2020 contrast with 2005 appears with be sensible. This will give an unmistakable flag to direct basic leadership, innovation advancement, and transport conduct toward low carbon transport. It ought to likewise be recognized toward the end that atmosphere arrangement and security of vitality supply are facing a high volatility oil prices in the next decades and will go hand in hand (G. Santos 2001)

### 3. Conceptual Framework

Business traveler or shipper is defying an inferred interest, readiness to pay I determined to measure up to the estimation of the expansion in profitability concerning the last advantage that accumulates to the business traveler or shipper from utilizing an additional unit of transportation benefit. The term that market analysts use for this definition is the estimation of the peripheral efficiency of the factor of creation.

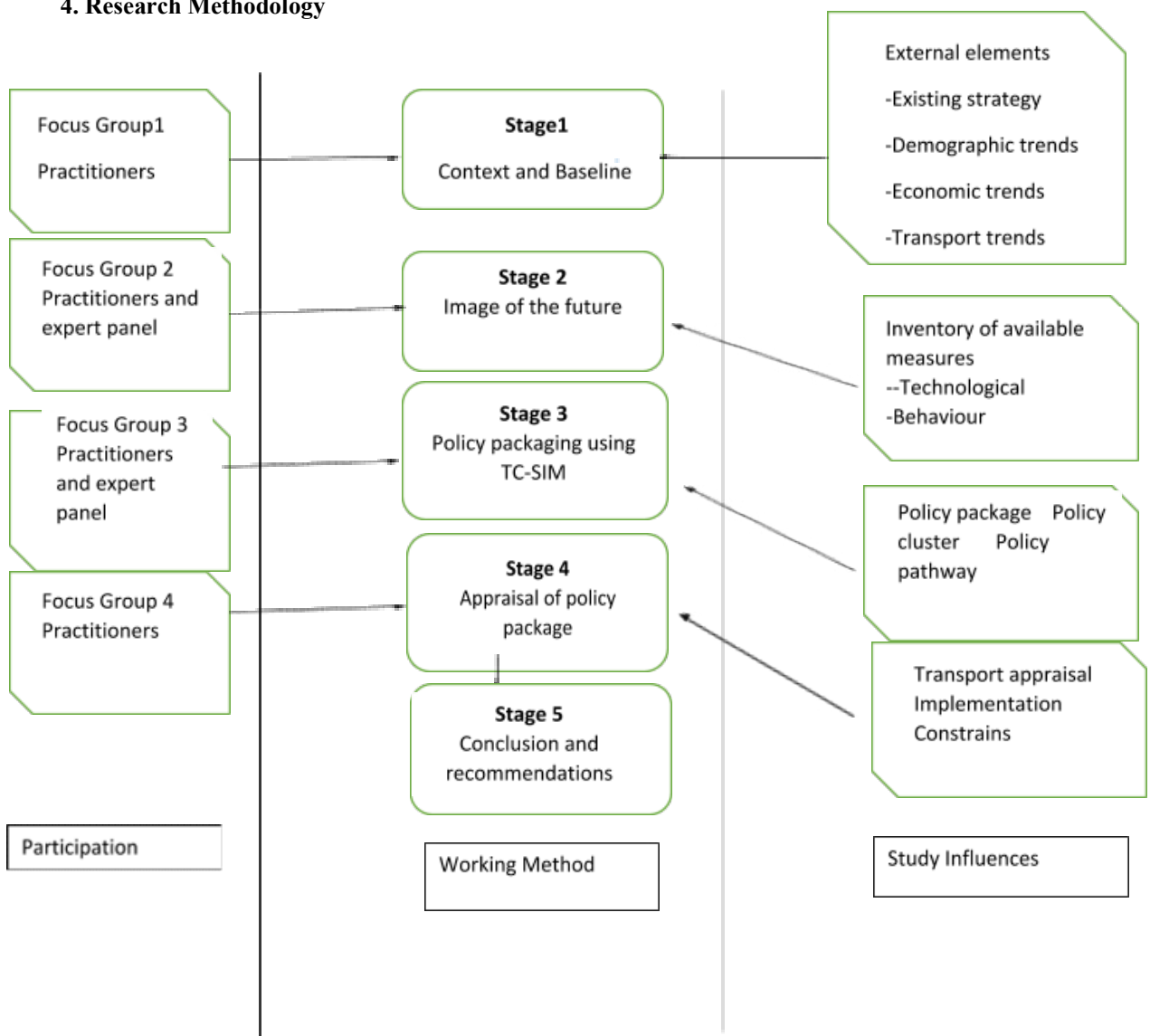
In feeling of transportation as a factor generation, the minor profitability of an additional unit of a specific transport mode is just the additional amount of cargo or specialist yield that can be purchased to the market amid an explicit timeframe increased by the cost at which this amount is sold.

Contrasts exist in the interest for transport of traveler and cargo shippers. Cargo transport dependably happen under a determined interest while traveler travel can happen for business and relaxation reason. From the perspective of the transporter, in any case, traveler can be, in some place requesting sense, considered "cargo that grumbles". Obviously, such a term puts the nature of administration into setting.

While it is exceptionally plausible that a serve financial matters emergency is trailed by a significant auxiliary change it is difficult to foresee that kind of changes and their power with some degree precision. In this way the accompanying thought incorporate theoretical components. They depend on two columns: First, the watched response of the economy to rising vitality costs and to expect environmental change alleviate arrangement, and besides, the possibility of futurologists with regards to the driver's long haul societal and monetary change.

While decade back the industrialists contended that condition arrangement would endanger financial development, today the natural items make a decent piece of the creation arrangement of enormous organizations. This business of exceptionally industrialized nations has found this is a market section, in which they have-and can protect – an innovation advantage. This clarify why part industry were particularly disillusioned about consequence of the Copenhagen Atmosphere Gathering (COP15) and are putting weight on the political side to come to universal assertions. Moreover, the last time of rising oil cost has demonstrated differentiation the assessment of neoclassical financial specialists that higher oil cost are not resolved to monetary development when industry expected this advancement. Vitality sparing innovation built up a prosperous business. ( SCImago Journal Rank (SJR): 0.730 2015), ( Normalized Impact per Paper (SNIP): 0.806 2015).

#### 4. Research Methodology



## The London Baseline

London means to wind up a model (Schumpeter 1912) - maintainability worldwide city that can join populace development with monetary flourishing to make a reasonable and dynamic culture, and in the meantime considerably diminish its carbon emanation. This political goal has made immense test, in particular how such a future can be determined. There is no deficiency of activity and focuses, as can be found in the table.

## 5. Anticipated Results

Mode	Fixed Cost	Variable Cost	Level of Competition	Many Nature of Supply Curve
Truck	5 80%	1 80%	1 Many	Long run and short run
Marine	4 40%	2 60%	2 Numerous	Long run and short run
Air	3 50%	3 50%	3 few	Reaction function
Rail	2 60%	4 40%	4 Few/region	Monopoly
Pipeline	1 80%	5 20%	5 none	Monopoly

1=highest/most 5=lowest/least

The multifaceted nature in the coordinations procedure highlights the likelihood that ideal parity may not be struck due to the educational or time restriction includes in physical development. The simply motivation behind financial matters of the coordinations to feature the job proficient transportation benefit in the utilization procedure of a cutting-edge economy. Customary microeconomic hypothesis pushes ideal arrangement, however true application required just finding tasteful arrangement. (Schumpeter 1912), (© 2018 Indeed - Cookies, Privacy and Terms).

On this area focus on cargo transport and treat change of shopper inclination just certainly. This accept the change universe of generation and exchange takes care of the demand of purchasers. In favor of creation and exchange the accompanying change are expected:

- The drift toward lower offers of mass payload versus unitized and containerized products will proceed.
- The incline toward developing offers of administration of Gross domestic product will proceed.
- The drift toward the littler and lighter items will proceed with an expanding offer of race and correspondence innovation.
- The industry will design the generation of part and subassemblies progressively under thought of coordinations necessity.
- Energy-effective items will be favored, specifically in the car innovation.

## 6. Conclusion

The monetary emergency has hit the industrialized nations gravely and had a major effect of cargo transport, which crumbled briefly in accordance with the exchange exercises. (Scheumpeter 1912). It very well may be normal that the economies will recuperation process surmises that financial matters and transport structure change. An emergency give a possibility for a basic change, which is never conceivable in period of thriving in light of the fact that routine just will change after the view of disappointment.

The vehicle activity are winding up more vitality productive with and natural well disposed. An amount recreation demonstrates that there is a high potential for making such a world in cargo transport territory, utilizing the choice better building, stacking, schedule, and modular split. Vehicle tasks on streets can be lessen significantly by such change. (Co-Editors-in-Chief: R.B. Noland, J.X. Cao 2016).

On the off chance that the financial and the vehicle division change to this direction it appears to be plausible that expansion advertise powers rise, which cultivate the mechanical change toward considerably greater supportability generation and transport (Co-Editors-in-Chief: R.B. Noland, J.X. Cao2016).

From this pursues the testing ecological objectives can be met in a universe of financial matters development, unassumingly proceeding with globalization and unobtrusive market acclimating mediations(Co-Editors-in-Chief: R.B. Noland, J.X. Cao 2016).

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**Blockchain Development Service for Supply Chain Industry**

**RCGR<sup>2nd</sup>  
2018**

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# Blockchain Development Service for Supply Chain Industry

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## Abstract

Managing today's supply chains is extraordinarily complex. Depending on the product, the supply chain can span over hundreds of stages, multiple geographical (international) locations, a multitude of invoices and payments have several individuals and entities involved, and extend over months of time. Due to the complexity and lack of transparency of our current supply chains, there is interest in how blockchains might transform the supply chain and logistics industry.

**Keywords:** Blockchain, Supply Chain, Logistics, SCM Industry, Supply Chain Broken, Innovation

## 1. Introduction

The modern supply chain continues to seek more cost savings and greater transparency and efficiency in all processes. While large, centralized systems have been created to manage the flow of goods and data, a single problem remains. This data can be changed from its original form, causing some to feel the supply chain is not being fully transparent with supplier, manufacturing and logistics processes. Supply Chain is an important process, from raw material search to manufacturing to shipping. One of the big problems that has existed for decades is that there is not enough technology to keep up with the product. In addition to the variety, complexity of products and processes. Geography is another reason. It is difficult to manage all the time.

After Blockchain's arrival, many people believe that Blockchain not only help the banking and finance industry but also often hears about solutions in the supply chain business. The main problem of Supply Chain. Firstly, supply chain is related to shipping. From raw materials to production processes and delivered to customers.

The goods must be sent to various places. It is difficult to trace and check if there has a damage. Both buyers and sellers do not have a validation process. The price of goods and services is really worthwhile or not because they don't have transparent process to check that. Then, blockchain can solve these problems.

As always, Distributed Ledger or Distributed Database, Blockchain is a type of database that makes transactions transparent and secure, so the information in the supply chain is identified. Location, product quality, and other information very useful to manage. This information will be revealed so that you can check the source of the goods or source material.

## 2. Literature Review

Kristoffer Francisco and David Swanson (2018); Blockchain technology, popularized by Bitcoin cryptocurrency, is characterized as an open-source, decentralized, distributed database for storing transaction information. Rather than relying on centralized intermediaries (e.g., banks) this technology allows two parties to transact directly using duplicate, linked ledgers called blockchains. This makes transactions considerably more transparent than those provided by centralized systems.

As a result, transactions are executed without relying on explicit trust [of a third party], but on the distributed trust based on the consensus of the network (i.e., other blockchain users). Applying this technology to improve supply chain transparency has many possibilities. Every product has a long and storied history. However, much of this history is presently obscured. Often, when negative practices are exposed, they quickly escalate to scandalous and financially crippling proportions.

There are many recent examples, such as the exposure of child labor upstream in the manufacturing process and the unethical use of rainforest resources. Blockchain may bring supply chain transparency to a new level, but presently academic and managerial adoption of blockchain technologies is limited by our understanding. To address this issue, this research uses the Unified Theory of Acceptance and Use of Technology (UTAUT) and the concept of technology innovation adoption as a foundational framework for supply chain traceability. A conceptual model is developed and the research culminates with supply chain implications of blockchain that are inspired by theory and literature review.

Hofmann & Rüsç (2014); suggests blockchain will help facilitate further supply chain integration. Nonetheless, for industries and firms already well integrated, they may not be willing to substantially invest in blockchain that does not provide significant benefits over present solutions. Much is still yet to be learned about this emerging technology.

Seebacher & Schürütz (2011); A blockchain is a distributed database, which is shared among and agreed upon a peer-to-peer network. It consists of a linked sequence of blocks (a storage unit of transaction), holding timestamped transactions that are secured by public-key cryptography (i.e., “hash”) and verified by the network community. Once an element is appended to the blockchain, it cannot be altered, turning a blockchain into an immutable record of past activity.

### **How Blockchain Can Support the Supply Chain Industry?**

As mention previously, the main key of supply chain industry is about transportation or delivery. For the old system, customer or consignee cannot examine where the goods are or what factory that raw material come from. Then, sometime we got a problem such as faked product or we got low quality product but for the price that we pay is too expensive which is not worthwhile.





"We are very concerned with how this data is presented to consumers, and not just end consumers but consumers along the chain, so it could be a retailer buying from a producer, for example. We are very focused on the accessibility of that information, and how it is presented, on product or in-store."

Provenance, which started in 2013, is not solely about blockchains; it also works with normal databases and open data, helping companies gather information from their supply chain, such as images with location and all sorts of certifications.





"We have three levels that we are thinking about," said Baker. "The first is the business level: so, who is this company? What do they do? Do they pay tax? Then the product level, which is around supply chain mapping. The blockchain component is more item level tracking, so is this particular item what it says it is? Is it really organic? Has it really been made by this company, in this place? So it's a bit of a hybrid," she said. (Source : <https://www.ibtimes.co.uk/provenance-has-big-year-ahead-delivering-supply-chain-transparency-bitcoin-ethereum-1537237>)

## BlockVerify





BlockVerify can help to solve counterfeit goods. Especially the pharmaceutical business. That driving with people life and nowadays we got a big problem like a faked medicine that effect with people life. Thus, BlockVerify technology can help us to be easily check the product via a QR code.

### Why Blockverify?





We believe in the potential of blockchain technology to improve anti-counterfeit measures in different industries and have a significant positive social impact

 <p><b>Identify Counterfeits</b></p> <p>Helps professionals with their many problems over identifying counterfeit goods</p>	 <p><b>Non Duplicatable</b></p> <p>Blockchain offers a transparent environment where it is impossible to duplicate products. No need to rely on trust.</p>	 <p><b>Companies Verify</b></p> <p>Companies can create their own register of products, and monitor the supply chains</p>	 <p><b>Global Solution</b></p> <p>Block Verify creates a truly global solution for connected world</p>
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### We Can Verify The Following


 <p><b>Counterfeit Products</b></p> <p>A product that is already in possession and is determined to be counterfeit</p>	 <p><b>Diverted Goods</b></p> <p>The system is able to identify if a product was diverted from its original destination</p>	 <p><b>Stolen Merchandise</b></p> <p>The system can easily trace and locate stolen merchandise</p>	 <p><b>Fraudulent Transactions</b></p> <p>Block Verify can track fraudulent transactions of any type throughout the system</p>
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## Use Cases

 <p><b>Pharmaceuticals</b></p> <p>Solution to track pharmaceuticals throughout the supply chain and to ensure the consumers receive an authentic product.</p>	 <p><b>Luxury Items</b></p> <p>We work directly with luxury manufacturers to build a system of verifying luxury goods. This will provide quality assurance for all parties.</p>	 <p><b>Diamonds</b></p> <p>We created a system that can enhance trust in diamonds certificates and prevent fraud.</p>	 <p><b>Electronics</b></p> <p>We work directly with manufacturers to make sure that customers are getting original equipment.</p>
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### How Blockverify Works

The process a product goes through to ensure authenticity

<p><b>Product Labelling</b> Each product is labelled with BlockVerify tag.</p> <p><b>Verified Supply</b> Each product is verified along the supply line. Supply chain becomes transparent to the extent we want it to be.</p> <p><b>Consumer Verified</b> When the consumer purchases a product, they are able to verify that the product is genuine and active in it.</p>		<p><b>Anti-counterfeit</b> We ensure that each product is validated and recorded, preventing even companies from counterfeiting their own goods.</p> <p><b>Retail Verification</b> Retail locations can use mobile devices for verification. They can be assured that the goods they receive are genuine.</p> <p><b>Block Verified</b> Each product has a recorded history permanently recorded in the blockchain. We can provide verified history for each product.</p>
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(Source : <http://www.blockverify.io>)

## Walmart

Walmart also use blockchain for run a pig business in China and for manage in recall product department. For a pig business in China, this business plan cooperates with Tsinghua University in Beijing and IBM for focus on developing systems that make the data on the supply chain accurate and more transparent.

Paul Chang, IBM representative for Global Supply Chain Solutions, said that this is not the only solution for China but it also helped Walmart succeed in the Chinese market where is one of the world's largest meat consumers market. According to the USDA report, is expected to be 54.6 million tons this year. However, the figure is down from the previous forecast due to higher pig prices. One of the reasons for higher market prices is due to food safety concerns in food quality. Thus, this is why Walmart jumped into this industry.

Walmart will launch the Walmart Food Safety Collaboration Center in Beijing, highlighting transparency in the food business and be able to monitor it by using Blockchain technology. Moreover, Walmart has a team of transportation experts, supply chain, food safety and also corporate with Tsinghua University to develop e-commerce technology.

With Blockchain technology, details and information are available to check from farms, batch numbers, factory data, expiration dates, storage temperatures, and the delivery details are more accurate when selling products to consumers. Each item can be verified and verified transparently from source to destination. While individual retailers can manage their shelves more efficiently.

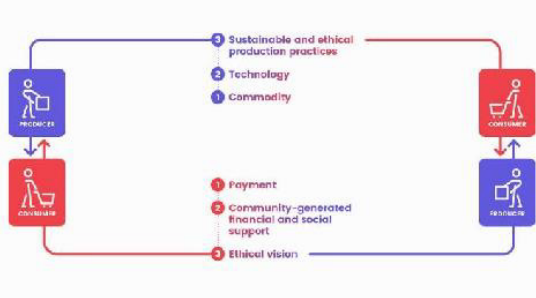
Initially, it will be tested with 3 nodes, including IBM, Walmart, and suppliers. In the future if the expansion of the project to 10 nodes will help businesses save more than \$ 1000 million ever. IBM also revealed that another Blockchain project to be used in this sector was tracking mangos from South America to the United States.

Referring to my previous argument, Walmart also use blockchain for identify and manage recalled product from the list. When customers send a complaint about Walmart products, the Walmart IT team will receive a notification in addition to applying for a complaint. The system analyzes data from different databases and servers. Both source Vendor delivery time and other important information related to the product. With a system that works on Blockchain, Walmart executives and customers can check the product details in real time and good for the overall system. In addition, the Blockchain to use Walmart to reduce concerns from the hackers as well.

Walmart has not disclosed much technical information but behind-the-scenes technology is IBM's system, which is a huge IT giant that is aggressive in delivering this solution directly. Bloomberg said that if Walmart decided to use IBM's commercial solutions, It is going to be the largest blockchain ever because it can track the shipment, origin, destination, status of food items, both imported and exported by Walmart. If any of these are restored, they will know the source from whichever source faster the package level refer from Walmart currently has 260 million customers buying products per week.

**ConsenSys**

ConsenSys is presenting a template for the Supply Circle in Supply Chain System on Blockchain that support consumers to be suppliers by sharing knowledge, resources, and products without having to go through an intermediary or third party.



ConsenSys is a venture production studio focused on building and scaling tools, disruptive startups, and enterprise software products powered by decentralized technology, specifically Ethereum. Their mission is to use these solutions to power the emerging economic, social, and political operating systems of the planet. These projects address every part of the Ethereum ecosystem, including: crucial infrastructure projects, developer tools, core integration components, services, B2C daps, enterprise solutions, and many more platforms and applications. We have a robust education arm training developers and educating the ecosystem, a Social Impact group accelerating humanitarian efforts, and a media platform publishing news and thought pieces about the ecosystem.

ConsenSys was formed in 2015 and has since grown to over 1100 employees distributed globally in every continent except Antarctica. Structurally, we are as flat, decentralized, and fluid as we can be, allowing individuals and groups to self-organize and adapt as needed. Despite our rapid

growth, we adhere to our flat structure as much as possible, believing that autonomy and agility are key to a project's and employee's success. (Source: <https://consensys.net/about/> )

### 3. Conclusion

There are many different benefits of blockchain technology, and its implications range from simple asset tracking and transparency to real-time feedback from customers. After Blockchain's arrival, many people believe that Blockchain not only help the banking and finance industry but also often hears about solutions in the supply chain business. The main problem of Supply Chain. Firstly, supply chain is related to shipping. From raw materials to production processes and delivered to customers.

The goods must be sent to various places. It is difficult to trace and check if there has a damage. Both buyers and sellers do not have a validation process. The price of goods and services is really worthwhile or not because they don't have transparent process to check that. Then, blockchain can solve these problems.

Blockchain Technology impact on the Supply Chain in many ways such as compliance and transparency, better tracking of orders and assets, reduction in errors in payment processing and auditing, identification of attempted fraud more easily, greater trust by consumers, real-time feedback from consumers, and better scalability.

In the future, it is highly probable that Blockchain will transform Supply Chain in the form of production, marketing, order and consumption. Increasing transparency can follow and security to the supply chain will make the economy more stable.

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Provenance Has a Big Year Ahead Delivering Supply Chain Transparency with Bitcoin and Ethereum.

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**Make a Difference and Create Environmental Protection with Reverse Logistics**

**RCGR<sup>2nd</sup>  
2018**

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# Make a Difference and Create Environmental Protection with Reverse Logistics

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## Abstract

Reversing Logistics has begun to play a significant role in the process of trade, transportation and delivery. And the world is paying attention to the carbon dioxide emissions from various forms of energy metabolism. In transportation is very much. The purpose of this review is to explain the concept of importance and the implementation of Reverse Logistics Management, Applied in the logistics business. Literary review and survey are presented as references and theories of this article are based on literature, theory and flow of Reverse logistics. And how does the Reverse Logistics work and be effective, by the focus is on the nature of the logistics business in the world market in accordance with various environmental policies, including with business advantage.

**Keywords:** Reverse Logistics, Reverse Logistics Management

## 1. Introduction

According to a report from the Pollution Control Department about waste, the amount of solid waste from communities throughout the country in 2003 was approximately 14.4 million tons or 39.240 tons per day. And even more, the volume of these garbage tends to the rise since 2538. However, the recycling of garbage is very low, only 23 percent, and there is also an increasing amount of waste. 4.69 percent each year. Nowadays, technologies are being used to recycle waste in various ways for reuse. But the technology development alone can not make the recycling process as efficient. So essential to restore it so that it can be reusable in various ways. They will need to require a good reverse logistics system. The value of logistics in The United States is estimated at \$ 58,000 million for 0.5% of GDP and is tending to increase. For example, car manufacturers manage the parts of the car had expired, Electronic merchandise containing dangerous, Lead or mercury they are thrown away every year. The top companies, For example, Apple, Sony, or Dell has started the project. The return rate will be 5% to 50%.

Current Reverse Logistics is linked to the subject. Of the environment, the story is linked directly to the story. Green Laws, which is the result of the current take into account the environment more and more countries in Europe. And Canada has enforced the law to reduce Impact on the environment seriously.

Reverses Logistics is Part of the supply chain that has been help to returned the products and this concept is more interested for the reason that the product is defective or incomplete, So it is need to returned from the consumer came to the beginning of the product or the manufacturer of the product and the raw material deliverers. There are many products that can not be sold. Defective

goods wrongly delivered the wrong type of goods selling in one area but not in another. Or maybe it's because of environmental reasons and Consumer safety as you can see from the example of the company. Dell asks consumers to return the battery that came with it. Some models will explode to harm the customer, The problem is battery not standardized it can be managed in the reverse logistics. Logistics gives customers convenience in using, this will help to maintain customer reliability with companies.

## **2. Literature Review**

### *2.1 Theory and Definition*

#### Reverse Logistic

Thierry (1995) has provided a definition of reverse logistics management (Reverse Logistics Management: RLM) that deal with and cover the use or disposal. All raw materials and components are under the responsibility of the manufacturer. The purpose is to recycle products, raw materials, and components back to their original uses. This is the most way to reduce the amount of waste (Lambert et al., 1998) focuses on the reverse supply chain, and effective management can be complicated by the boundary-spanning nature of this process within a firm and across the entire supply chain (Rogers et al., 2002). Effective management is important because returns can erode profitability for a firm and can impact relationships with customers and end-users, as well as impact a firm's reputation with stakeholders

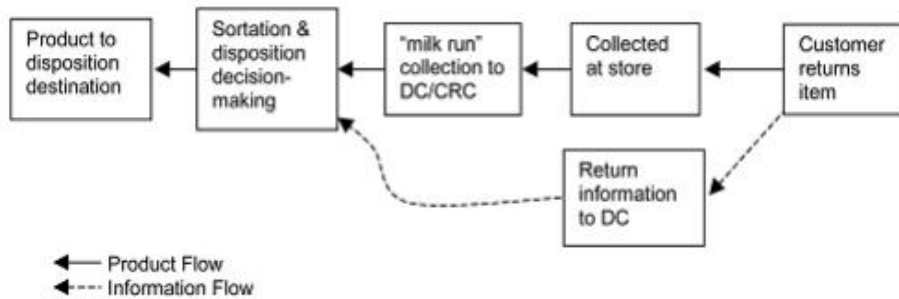
Rogers et al. (2002) definition of returns management as all activities related to returns: avoidance, gatekeeping, reverse logistics, and disposal.

Mollenkopf and Closs (2005) point out this value can only be created by understanding the multi-functional components of marketing, logistics, operations and finance/accounting functions which actively engage in managing return products.

### *2.2 Literature Survey*

It can be concluded that in the beginning Logistics will be related to the distribution of goods. Physical and Marketing Terms It involves the transportation and storage of goods. As well, the creation of a better marketing agreement and the concept of cost analysis due to the high cost of the air transport industry in those days. The concept of logistics is widely used to determine the cost involved. Reduce inventory cost Warehouse Management Costs. and Reverse logistics management is a part of logistics and is a process that involves planning, implementing Raw Material and Process Control, finished Good and related information from the point of consumption to the point of beginning, for created effective economic value with different methods.

## 2.3 Conceptual Framework



**Figure 1** Reverse Logistic Flow

The process of planning adapts controlling the flow of raw materials, inventory, and finished goods. And related information From Point of Consumption to Point of Origin for Effective Disposal or Value Creation Reverse Logistics Management It involves 3 main components:

(1) Return Policy and Procedure: Is the most important of logistics management.

Reverse Logistics (RLM). If any organization does not have this element. Reverse logistics will not occur in such organizations. Because in the beginning management system. Operators will need to plan the return process and have a policy clearly to encourage and engage with consumers. The Guidelines for the Return of Consumers as Final Consumers It is a wholesaler or retailer. Determine the type return of product or package, including the design and planning of the back-loading, as well as the procedures for returning the goods from the point of return of goods.

This process is started with the removal of the returned goods. To conduct inspection on sorting equipment and components that have value, it can be simply done through the process of clean and reuse of parts. To start the process, there needs to a recycle before going into production or assembling products in various stages of production. For non-valuable components and accessories, they cannot be used in the process. Remanufacturing or Refurbishment will be separated and sent to the waste management process.

(2) Waste Disposal

Is the final process this will affect the most external stakeholders. It involves designing or defining procedures and selecting methods. Component parts and the equipment is not standardized. Reuse or go through the recycle process.

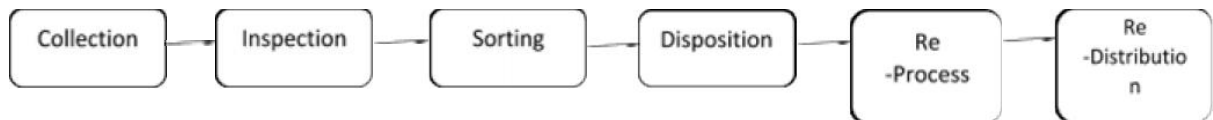
All three elements are considered as reverse logistics management. The corporate executives or the person responsible for It is very important to give Important and design appropriate to the guidelines. And take into account the results that will not impact for both inside and outside the organization. The Operations of logistics industry support activities for the environment by the use of information technology to facilitate, such as Barcode, RFID. As a result, Green Logistics has played a greater role in the industrial sector, especially in the supply chain logistics sector, from Upstream to Downstream.

### (3) Information and Information Technology Factor

Information technology (IT) plays an important role in supporting and creating competitive advantage. The reverse logistics management (RLM) is characterized by uncertainty. May occur at any time during the management The process is fast and systematic. Organizations or businesses are It is necessary to count and record the amount of products returned into system , In order to use in forecasting, monitoring and control to be effective in the future. Information technology (IT) will play a role in streamlining. Reverse Logistics Management (RLM) is comprised of multiple parties, both inside and outside the organization. Information Technology (IT) is a must and needed to support the integration of the work.

For example, the schedule arrives at the checkout facility of materials. Components and equipment or products returned. Return shipping location Carrier list Basic damage record Warranty Period Number and version and other information, such as the information mentioned above, need to be complete and send the information to the relevant person to ensure coordination and implementation effective.

Reverse Logistics can generate profits both directly and indirectly. The emphasis is on reducing the use of resources. Add value Recovery or from the cost reduction of the industry. The profit of the members of Reverse Logistics is not necessary, because the cost of Reverse Logistics has been included, but some industries see Reverse Logistics as an expense to the industry. We often find it many times in the returned items that effect to the result in a decrease in the value of current assets (products). In case of returned with low value products are increase short-term costs because of the process to increase the life cycle. It make to reduce sales and earnings from sales decreased, due to the returned items will be returned to the factory for recycle and the goods will be returned to the consumer again. The industry that interested in doing Reverse Logistics can take these bases as a guideline to improve. The new Reverse Logistics model is designed to be applied in suitable industry.



**Figure 2** The Basics of Reverse Logistics Process

In part of Corporate Social Responsibility (CSR) has attracted the attention of the business sector and empower the business operations to focus on reducing costs to enhance competitiveness and concern the action to take into account green logistics activities that is environmentally friendly.

Implementation of logistics industry support activities for the environment by the use of information technology to facilitate, such as Barcode, RFID. As a result, GREEN LOGISTIC has played a greater role in the industrial sector, especially in the supply chain logistics sector, from Up-stream to Down-stream.

#### 1. Purchase process

Purchase process focus on source of material, choosing a sender, transportation system, partners to support and makes the buying process are effective. In addition, partnering with partners enables the company to plan production efficiently.

## 2. Production

The importance of production is improving the efficiency of the production process that has to produce the lowest amount of waste and the long life cycle of raw materials used until the product has expired.

## 3. Warehouse Management

The main goal in managing a warehouse is to achieve a reduce cost to be effective of investment, Quality control of storage, Picking protection for reduces operational losses to minimize operating costs and take advantage of full space including planning to deliver goods to avoid running empty truck. Fuel and energy saving. The collection and delivery of goods is usually completed within 24 hours. The Cross dock acts as a distribution center by consolidate products from several manufacturers. The cross dock is an activity between the manufacturer and the customer. The main function of the cross dock is to gather goods for full shipping or container space utilization. Transportation costs are the main driver of most businesses and the costs it is important thing that the customer determining the sender to decrease transportation costs and gain competitiveness, Reduce the number of runs. Avoid the route or Redundant and inefficient distribution channels. To reduce damage the transport and take advantage of most resources.

### **3. An example of an industry in Thailand that uses Reverse Logistics.**

#### *Bangkok Glass Industry Co., Ltd*

Bangkok Glass Co., Ltd. is one of the most innovative glass packaging manufacturers in Asia. It is a joint venture between Boonrawd Brewery Industry Co., Ltd., Saint-Gobain Industries, Oberland Glas AG. Currently, the industry has a combined capacity of 2,230 ton per day or approximately 8,000,000-12,000,000 bottles per day. To meet the needs of consumers who use glass containers, both domestically and abroad. The industry has invented. Develop and manufacture advanced glass packaging technology more efficient and consumers acceptable. Bangkok Glass Industry company is the leader in glass packaging in Thailand and in Asia because fairness use of natural resources and create good environmental.

Because the industry is a manufacturer of glass bottles, So recycling glass bottles is to saving energy Resource and waste problem and also make the product quality is outstanding and It is also environmental friendly and consumer friendly. So, the company has a policy of reuse in many ways for examples:

#### 1. Recycle

Recycle products are made from environmentally friendly glass. Can be recycled or used in the production of new, repeated endlessly with the same features. The raw materials used in glass products are sand glass, limestone, dolomite, rock, natural minerals and soda as well as chemicals that are purchased from abroad. It also reduced the deficit of foreign chemical orders. It also saves energy 2 to 3 percent. The result of lower energy consumption is the reduction of air pollution from the exhaust in the smelting process. If the glass is separated from other waste and then bring back to re-melted. It can reduce air pollution problem.

#### 2. Refill

At this stage, the company will bring the old soft drinks bottles and other products to clean and re-packaged again for reduce costs and packaging costs to consumers.

### 3. Reuse

Many bottles can be used to pack other things, as well as fully utilized both ways, such as bottles of coffee powder when consumed, can be used to put salt.

#### *The Siam Cement Industry Co., Ltd.*

Siam Cement Industry company are responsible for the production and sales of cement and Siam Cement Industry company is The largest cement factory in the productions and have the highest production capacity in the ASEAN region. Which recognized by both domestic and foreign consumers. The company uses unused materials to replace fuels and raw materials. The cement industry uses a lot of fuel in the production process. The fuel used is fossil fuel, including coal and fuel oil. This is a non-renewable fuel and requires a large amount of imported fuel. In case of production in Thailand, it will affect the environment in terms of coal mining, transportation. So they have studied the use of alternative fuels effectively. It has little impact on the environment, including biomass and industrial waste such as sawdust, palm fiber. The using biomass fuels will reduce the loss of foreign currency in imported fuels. Reduce greenhouse gas emissions and increase the value of unused agricultural materials.

Siam Cement has used Reverse Logistics to recycle waste materials for fuel. To reduce the cost of production and also to help get rid of the right way.

### 4. Conclusion

With the concept of Reverse Logistics, international organizations are paying close attention and playing a vital role in managing returns for reuse and including waste disposal. As a result, Thai operators comply with international standards to comply with world trade rules. To be responsible for the environment and society because in the manufacture of products. Reverse Logistics helps to build customer satisfaction and also greatly affects design and development stages. Better control of production will decrease the possibility that non-quality products will be in the hands of customers. From the above, you can see that all the results can only be achieved if reverse logistics management is done in the right way. In addition to reducing production and operation costs, reverse logistic can also add value from rollback, and create value for non-desirable goods again. And most importantly, the operator can also benefit from the use of resources efficiently. we cannot deny that these are the result of the world losing its balance due to human actions. Therefore, it is a good reason that every organization should focus on the management of Reverse Logistics correctly and effectively. However, in doing Reverse Logistics, the industry or the company must focus on the factors that will affect the operation. And to carefully consider each factor in order to avoid Reverse Logistics becoming costly or to lose the opportunity to exploit the value that is still in store for the night. Or even destroy good relationships with consumers. But it should be developed as a weapon to make a difference in the competition. And impress the consumer.

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## Applying Blockchain Technology in the Supply Chain in Thailand 4.0

**RCGR<sup>2nd</sup>  
2018**

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# **Applying Blockchain Technology in the Supply Chain in Thailand 4.0**

by

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## **Abstract**

The main objectives of this research are identifying the potential of blockchain technology and how blockchain can adjust to the supply chain. Many problems in the supply chain that occur from using traditional database can be solved and get more efficiency by combining blockchain technology with Thailand 4.0 model. After studied and analyzed the research to seek and indicate the advantages, disadvantages, opportunities and risk from each side which is a traditional database and decentralize data. Acknowledging the present circumstance in the supply chain in Thailand, this research can engage diverse business to start working with the organizations that are making blockchain based application.

**Keywords:** Supply Chain, Supply Chain Management, Blockchain, Decentralized Database

## **1. Introduction**

In the present time, In Thailand that has an economic model which is Thailand 4.0 that purpose to unlock the country from several economic and pull new investment toward changing the economy so it makes many businesses are growing up, which makes supply chain plays important role in all individual organization or firm. The supply chain is vital links between firm and supplier that involves with people, information, activates technology and resources to the creation, produce and distribute specific goods. The process will start from delivery point of source material to manufacturer all over to final delivery to the end user. In order to make this links of supply chain earn more efficiency and productivity. It needs to have a good management system to control the all transaction within the chain that called supply chain management.

Supply chain management (SCM) is the management of the movement of goods and services from the origin point to consumption point. Supply chain management is simply and ultimately the business management, whatever it may be in its specific context, which is perceived and enacted from the relevant supply perspective. The best way to manage the business in to take into consideration and engage with the external organization in the decision making in order to achieve the ultimate business objective (Dawei Lu, 2011.).

It seems like every process of the transaction in businesses may need information or document from a client, supplier, factory, distribution, and retailer and so on. Which makes the company is centralization of the database that records all data and collects in a single system in the firm. Centralized databases and all data are managed by a single DBMS and placed on a single node, only users being distributed in the network. For centralized databases, major benefits are determined

by a good data integration that ensures data consistency and easy management of transactions in strict compliance (Nicoleta Magdalena Iacob and Mirela Liliana Moise, 2015). But the client needs to trust the organization before giving them information because they are the only one who has your important data and they can read and write and alter the data and if the server fails the data may lose. In fact, an organization still needs to deal with a lot of document and send it through to point to point from original over to the end. The organization has to make a document in every process of the transaction which increases of waste time, mistake, opportunity cost and the high cost of communication.

All the problems can be solved with blockchain is a distributed digital ledger of transactions that cannot be tampered with due to the use of cryptographic methods (Pilkington 2016). Blockchain had become the latest hyping Fintech, with almost daily announcements of new startups and corporate projects. It took longer until the logistics and supply chain management (SCM) community caught on and slowly realized the impact Blockchain might have on their industry (Niels Hackius and Moritz Petersen, 2017). A distributed system, like a Blockchain, holds benefits over centralized architectures as it provides the same, verified information to all network members. It creates trust between the parties by eliminating the need for trust. Blockchain can record the transfer of assets between two parties, without the need of a trusted intermediary. Such assets could be digital money, but also carbon credits or other deeds of ownership (Tapscott & Tapscott 2016).

According to Thailand 4.0 is economic model that focus on automation technology or smart automation which contain smart industry or economic prosperity, smart city or social well - being and smart people or raising human values. This time will be great opportunity to develop and improve Thailand economic if we apply the blockchain in supply chain business in Thailand, it will make economic stronger, more efficiency, reliable and more trustful in consumer or investor view for doing business or any transaction. The blockchain also help to reduce cost from middle man because in blockchain system.

## **2. Literature Review**

### *2.1 Theory and Definition*

Blockchain as the foundation technology that works behind Bitcoin (Manav Gupta, 2018, 3-6). Bitcoin and Blockchain are always come up together but they are different. Bitcoin is digital currency created by the pseudonym Satoshi Nakamoto. Blockchain acts like an operating system that provides the means for collecting Bitcoin transaction - the shared ledger - but the shared ledger can be used to collect every process of transaction and track the activity or movement of any asset whether tangible (a house, a car, cash, land), intangible (intellectual property, patents) or digital (cryptocurrency). Blockchain help to reduce risk and cutting costs for all involved because of having no central monetary authority to control, confirm or verify, and approve transactions and manage the money supply.

A blockchain is a distributed and shared digital ledger that records all transactions that take place in a business network (Etienne Schneider, 2018, 17). The business network is typically represented as public or private peer-to-peer network depending on the business context and the ledger is decentralized in the sense that the blockchain database structure is replicated across many participants/nodes in the network, each of whom collaborate in its maintenance. To ensure that ledger transactions are synchronized i.e., only validated transactions are written in the blockchain

and are written in the same order across all replicas, a blockchain network uses consensus mechanisms.

Blockchains mean a network of databases spread across multiple entities that are kept in sync, where there is no single owner or controller of the data (Antony Lewis, 2016, 5). The databases tend to be append-only, that is they can be written to, but historical data can't be altered without broad agreement from the participants of the network. This means that a user or system administrator in one entity can't alter data held on a blockchain without agreement from the other participants. Historically, when multiple parties need to rely on the same data, we have used golden sources of data, held and controlled by trusted third parties. A classic example is the use of a clearinghouse that is the golden source of data about a trade between two entities. Blockchains can empower groups of parties to agree on events without needing the third party, such as the promise of this new technology.

The blockchain is defined by BBVA Research, "is a peer-to-peer public accounting system maintained by means of a distributed network of computers which requires no central authority or third parties acting as intermediaries" (Innovation edge, 2016, 2). This technology "consists of three fundamental components: a transaction, a transaction register and a system that verifies and stores the transaction. The blocks are generated using open-code software and register information regarding when and in what sequence the transaction takes place. This "block" stores chronological information on all the transactions taking place in the chain –the origin of the name "blockchain". In other words, blockchain is a stamped and immutable hourly database of each transaction that is replicated in servers around the world. This technology is the basis of Bitcoin, a cryptographic currency".

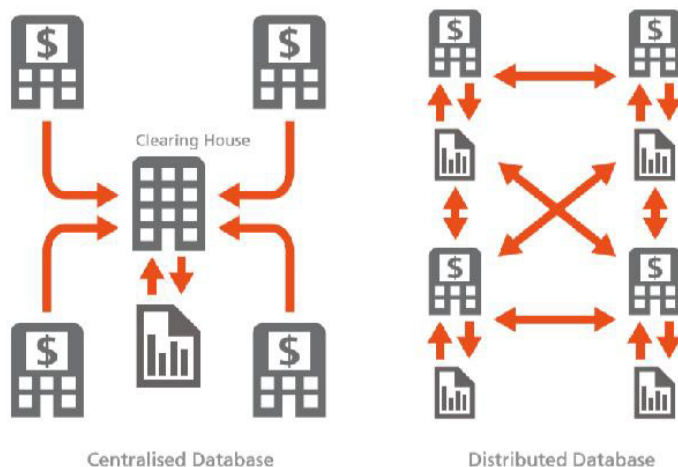
"The Fourth Industrial Revolution", or "Industry 4.0". To that end, they have devised "Thailand 4.0", an economic model based on creativity, innovation, new technology and high-level services. The aim of Thailand 4.0 is to metamorphose the Kingdom into a value-based economy by reforming its existing major industry clusters and scaling up the development of new sectors such as robotics, digital industry, aviation and logistics, biofuels and biochemical, as well as further solidifying Thailand as a major regional medical hub (Will Baxter, 2017).

## *2.2 Literature Survey*

According to what the researcher study in Blockchain and Supply chain in Thailand, it helps to understand more detail in new technology and the benefit from it. In my opinions blockchain is the system that links two nodes together without any middleman like a peer to peer so it makes the transaction get more efficiency and reliability but don't worry about the accuracy of information or data because in each blockchain network have the miner or program that check the information which called proof of work. Miner is person or group of people who participant in this network that volunteer to check the truth of the information before approves the status and the miner will get the coin in return for checking the precise information. In a system, they can have many miners for checking the information and the first miner who verify and checking the accuracy of the information that is 100% precise will receive the compensation in return. For security in the system, after a transaction is approved, it is encrypted and connected to the past transaction and if someone tries to change the data inside the link will be broke and a number of hashes will change so everyone will know what happens with that information. A hash is a process of transforming an input of message or document that contain letter and numbers inside into an encrypted output of a fixed length which is a secret code that protects the data and it extremely difficult to hack If we apply blockchain in a supply chain system it will improve a lot of thing such as 1. Greater transparency 2.

Enhanced security 3. Improved traceability 4. Increased efficiency and speed 5. Reduced cost. If all of these conditions are improved and developed, the researcher believes that Thailand will be a greater country that has a strong and stable economic system.

### 3. Conceptual Framework



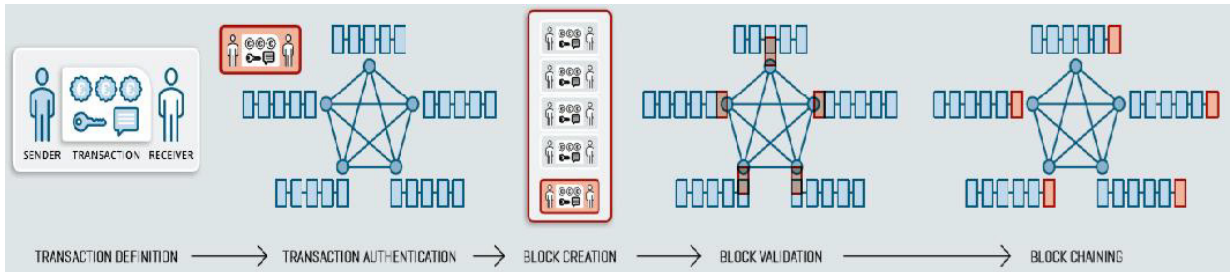
**Figure 1** Source: DBS Asian Insights

The picture on the left side shows a heart of many businesses which is the traditional database that has been used worldwide by many organizations for nearly 40 years. The traditional database or centralized database is stored, located and maintained at one central computer or server. A single node or center server has duties to manage and control the whole system. It admits its user to adjust the existing data in a database system. In a centralized database have data administrators whom you trust to manage information and who might make a change to the information and its structure. The database administrators have the right to read or write or alter the information and control the system. They are also able to decide who can access and permission. The reason why they are easy to maintain, their output is high, fast and control of security purpose is they are centralized who collect client data in the center server. In another hand, the drawback will be limited by capacity of one server, risk of loss for example if something wrong or failure occur with hardware or server, all information in database will be lost, easy to interruption and steal the information during network fail and the failure of trusting a centralized system when corrupted can defect to the entire data and it can modify the ownership of digital record and no one will know what was occurs because the history can delete or change.

In the right side is a new type of database which is distributed database or blockchain. It will help and improve the traditional database or centralized databases to have more safety and trustful in an online transaction. Distributed database or blockchain is distributed ledger that uses in between organizations or parties where trust level is low and don't have confidence in each other information in operations such as a multi-firm cross-border transaction. In order to defend the lack of trust less of a hurdle in interaction, the information in a blockchain is recorded as blocks where a new transaction is linked/chained to previous blocks in an append-only manner using cryptographic techniques which ensure that a transaction cannot be modified once it has been written to the ledger. Because of this immutability property, blockchain is sometimes defined as a system of records that simplifies the

task of determining the provenance of information. State-of-the-art blockchain solutions use smart contracts to support consistent update of information, to enable ledger functions (e.g., querying), and to automate aspects of transactions management (Etienne Schneider, 2018, 17).

### How the Blockchain Works



Source: ILNAS

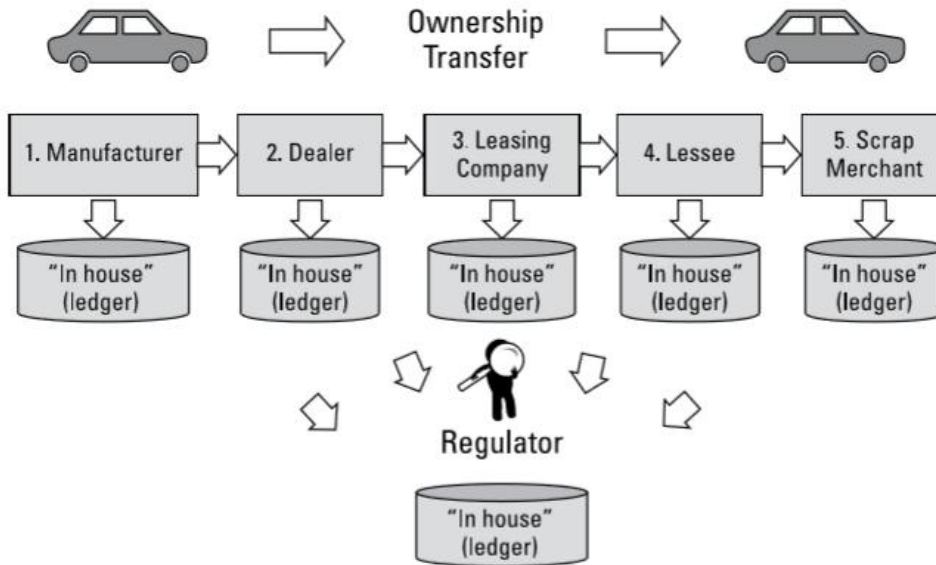
**Figure 2** Process of Creating and Validating Transactions in a Blockchain

A set of transactions in the form of blocks, which helps to improve in logical organization and scalability, include standard set, hash pointer, timestamp, nonce, transaction counter, and transaction set. However, the design must depend on the application.

First, it is called a genesis block, the function of starting a blockchain by hardcoding all the blocks together. The steps involved in the process are:

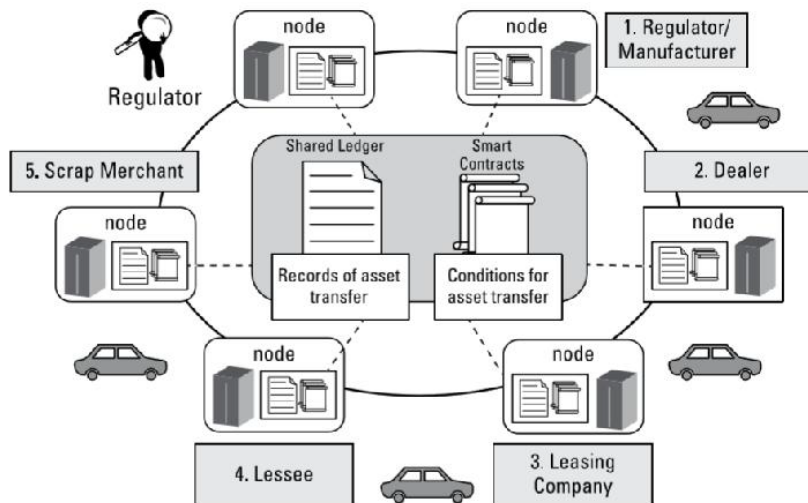
1. Transaction definition: Acknowledge that two nodes in the blockchain system admit on a transaction. The first sender at that node creates a network and sends it to the systems.
2. Transaction authentication: The nodes in the systems obtain the transaction message and approve the authenticity of the message by confirming the digital signature.
3. Block creation: One of the nodes in the system embodies pending transaction is the block and vigilant the nodes over the system about the recently built block for its authorization.
4. Block validation: The validator nodes in the network receive the new block and work to validate it through an iterative process that requires consensus from a majority of nodes in the network. These validator nodes are often referred to as Miners. Different validation techniques are used by different blockchain platforms. For example, bitcoin uses Proof-of-Work, Ethereum Metropolis uses a variant of Proof-of-Stake and Ripple builds on the Byzantine fault tolerance protocol. The primary goal of these techniques is to ensure that every transaction is valid and synchronized and that fraudulent transactions remain impossible. In general, the miner who first resolves the computation publishes the results to the entire network. At this point, the transaction is considered as confirmed (Etienne Schneider, 2018, 17).
5. Block chaining: Once all transactions are approved, the recent block is chained with the formerly approved block, organizing the blockchain. The present condition of the ledger is then transmitted to the system.

## How Blockchain works in supply chain



Source: Manav Gupta

**Figure 3** Tracking Vehicle Ownership without Blockchain



Source: Manav Gupta

**Figure 4** Tracking Vehicle Ownership with Blockchain



With the blockchain, network participants can interact as follows:

1. The controller makes and populates the registration for the new vehicle on the blockchain and exchanges vehicle proprietorship to the manufacturer.
2. The manufacturer includes the make, model, and vehicle recognizable number to the vehicle layout within the parameters permitted by the smart contract.
3. The dealer can see the new stock availability. Proprietary right of the vehicle can be conveyed from the manufacturer to the dealership after a smart contract is executed to approve the deal.
4. The leasing company can see the dealer's stock. Proprietary right of the vehicle can be conveyed from the dealer to the leasing company after a smart contract is executed to approve the exchange.
5. The lessee can see the vehicles available for rent and finish any frame required to execute the lease contract.
6. The leasing process proceeds between lessees and the leasing company until the leasing company is prepared to resign the vehicle. Now, Proprietary right of the asset is conveyed to piece merchant, who, according to another smart contract has authorization to discard the vehicle (Manav Gupta,2018,6).

#### **4. Conclusion**

At the present time Thailand still use the traditional database or centralized data which all data is recorded in the single server of the company and it will make a lot of problems in transparency and the organization need to deals with many document so it will increase the mistake on the data and the information is easy to adjust by controller of the system it still have a risk of losing or stealing the information so the pseudonym Satoshi Nakamoto was creating the block chain technology to solve the problems that happen in centralized database server. Blockchain is distributed database and shared ledger that facilitates the process of recording the all the transaction and tracking assets that occur in the network without middleman involved because they don't have centralized serve, everyone will be shared information together and the system have strong security so it is extremely difficult to hack the system. The main advantage of using blockchain in the supply chain in Thailand is traceability, cost-effectiveness, increased efficiency, speed, transparency of the transaction.

The late thing, Thailand is able to apply and adapt blockchain technology in real life but it needs to take a time for Thai people to learn, understand and adjust in the network. Researcher believes that when we have a chance to grow, you should take it and make it happen.

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## How China's New Silk Road Affecting to Thailand

**RCGR<sup>2nd</sup>**  
**2018**

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## Abstract

More than 2,000 years already has passed since the China's Silk Road were launched which is the first connection China with western countries. In the 21st century, President of China Xi Jinping launched and reformed the New China's Silk Road or One Belt One Road (OBOR) or Belt and Road in autumn 2013, it purposes to make benefits to the world's economics and the especially in China itself. Even though this strategy sounds genuinely interesting, its weaknesses are still concerned such as the risk's investment, sustainability and etc. In addition to, Thailand is one of six countries which linked with OBOR strategy; between China and Indochina Peninsular Economic Corridor and its cooperated project with China; the speed train or ASEAN Railways, it has purposes to develop the GDP in domestic and preserve the relationship between China also.

**Keywords:** China's Silk Road, One Belt One Road, Indochina Peninsular Economic Corridor

## 1. Introduction

Beginning of the new economics' world, China's Silk Road – One Belt One Road (OBOR) that were launched by the President Xi Jinping in 2013, this strategy is more focused on the business' expansion by building the infrastructure network on the maritime transport (Belt) and inland transportation (Road) which are comprehensive all the transportation modes, telecommunications, special energy (pipelines) and special industrial zone that affect to the worldwide economics more than 60 countries.

Thailand is the essential country that has many roles on ASEAN, also has a path which connects the ASEAN together. In addition to, China and Thai government are discussing about the Speed-Train from Thailand to China Project (ASEAN Railway) which is huge and necessary to One Belt One Road project. Thai governments are preparing themselves to support Chinese investors who are interested in those projects, the ASEAN Railway and OBOR in the future. In addition to Eastern Economic Corridor (EEC) following to Thailand 4.0 project, Thai government is purpose to give more chances to the Chinese investors more than it's ever had. The EEC project has the special laws that allow the foreigners to work in Thailand, especially doing the investment in Digital Park Thailand (EECd) which can gain more Chinese investors.

## 2. Literature Review

Alice Ekman (2016) to reform “China’s New Silk Roads” – or “One Belt One Road” OBOR) that were launched by President Xi Jinping in autumn 2013 and it can ever remain so until 2050. In addition to, it becomes as the popular project for every country nowadays, for sure this is the long-term project in China. Now, it’s time for China to show their abilities that they can be more than the followers but they can be more, and of course beating the world leader like America which is the biggest industrial country in the world.

Francoise Nicolas (2016) it’s well known, most of the companies in China which invested in countries outside and also in domestic are the State-Owned Enterprise that helps and supports their economics grow rapidly. Moreover, China has the new special instrument to work on this project which is loaned as the investment funds, one is called the Asian Infrastructure Investment Bank–AIIP, The Silk’s Road funds and also its major policy banks such as the China Development Bank which are used for special purpose, especially for the infrastructure project.

Asst. Prof. Worasak Mhantanobon (2017) First is to observe the Chinese’s migration, this could happen if the OBOR project were successful, not just only in Thailand that might face to this problem but it’s worldwide. China has the largest population in the world, so there will be investment and also, they may move to each country. In Thailand, the problem is about some Chinese people who are married with Thai spouses are working as the nominees and invest their money on the lands by using their spouses’ name fronting. Second is to make the balance between both, China and Thailand. Even though it’s hard to make the balance with the trading country and has a new Liberal Economy under the Tyranny that seeks to lead others to follow such as Cambodia and Laos that has to follow their lead because they have no choices so, It appears that the investment to build a train to Laos allows China get the concession of the sides on railways and are able to Chinese to work in country. Third, every negotiation must be deeply clear, because China used to be unfavorable from Japan about the gaps in the law and they’ve learned from that mistake, then brings it to use with other countries to get benefits, it’s important for Thai government to understand and know about the trading laws and Chinese’s laws to protect the own rights.

### China’s Silk Roads: A General Implementation Process

Since the Chinese government decided to reform “China’s New Silk Roads” – or “One Belt One Road” (OBOR) that were launched by President Xi Jinping in autumn 2013 and it can ever remain so until 2050. In addition to, it becomes as the popular project for every country nowadays, for sure this is the long-term project in China. Now, it’s time for China to show their abilities that they can be more than the followers but they can be more, and of course beating the world leader like America which is the biggest industrial country in the world. The purpose of this project is how to distribute all the industrial goods and also workforces outside China to develop their businesses and economics.

Throughout their many visitors to neighboring countries in 2013-2016, China is the top leader have reiterated two concepts, both are presented as the new tents of China’s economic diplomacy “the Silk Road Economic Belt” and “the Maritime Silk Road” – which would connect to China to Europe via the infrastructure and closer economic cooperation with its neighbors in Central and South East Asia.

The 21<sup>st</sup> century “China Silk Road” (Road Transport) will start from the border of Xinxiang (the western of China) to Kazakhstan, Uzbekistan, Turkmenistan, Iran, Turkey (change to the north),

Moscow (Russia), Duisburg, Rotterdam and connect with the Maritime Silk Roads at Venice (Italy), also the Maritime Silk Road will start from the port in the south of China and then move to Kuala Lumpur (Malaysia), Golgotha, Colombo, Nairobi, Red Ocean, Suez Canal, Greece and then Venice where is the last location that be able to connect with the road transport.



**Figure 1** Overview the China’ Silk Roads

Those infrastructures development is the core of this projects, so China has to come up with the funds and also good negotiations to each country they’ve been through, such as the port in Malaysia where is developed to be as the deep-sea port and not just only the port, but also the industrial areas that are not far from the port far around 5 km. to be as the convenient way for their business following to the OBOR process.

As it’s well known, most of the companies in China which invested in countries outside and also in domestic are the State-Owned Enterprise that helps and supports their economics grow rapidly. Moreover, China has the new special instrument to work on this project which are loaned as the investment funds, one is called the Asian Infrastructure Investment Bank– AIIP, The Silk’s Road funds and also its major policy banks such as the China Development Bank which are used for special purpose, especially for the infrastructure project.

### **China’s Silk Roads: Thailand Perceptions of OBOR**

Thailand is located in the South East Asia where in not directly passed through but still have some roles on the OBOR. First of all, Thailand and China have good relationship between each other excellently since long times ago, so therefore it’s easy to make decision to join in the OBOR project. Thai government estimated that there will be many Chinese investors come and do the investment in Thailand, in the special industrial areas follow to Thailand 4.0project: The EEC project where is the new special industrial areas in the Eastern Economic Corridor which has the new business’ laws for the foreigner’s investors. This could also help to run the economics thus it extremely increased the domestic GDP. Despites, the speed train that is on the process, which linked between Thailand and China also include the ASEAN countries is caught from Chinese government, to support in the OBOR in the future even though it’s been late on the process itself.



**Figure 2** The Speed Train linked between Thailand and China

The relation between Thailand and OBOR is not just only about the road transport or the maritime transport in the Indochinese Peninsula Corridor. It is not just about the infrastructure “The Smart Silk Road” or the connection with Cyber Space, also Chinese government says that it can give the benefits to the digital part in the Thailand 4.0 project.

However, Thai government has to adapt itself to keep the relationship between China, because China is the trading country that want to be the leader and also control other countries, so make sure that everything or every contract that has done with China doesn't have any gap or mistakes, such as Cambodia and Laos which are small countries and investment so they have to follow the China's proposal that may take advantages apart. In case of losing the benefits (Thailand), which can happen easily, Thai government can't avoid it but use it and make it in the acceptable way for the best result to its own country.

### **China's Silk Roads: How Thailand Adopting Itself to OBOR**

The best way to get ready for every situation is to prepare and predict for things that may happen in the future, to reduce the risks and keeps the benefits itself in unfair situations. Thailand is making a step to get into the One Silk One Road (OBOR) which is the biggest project of China, there are some recommendations from the expert in many sides.

First is to observe the Chinese's migration, this could happen if the OBOR project were successful, not just only in Thailand that might face to this problem but it's worldwide. China has the largest population in the world, so there will be investment and also, they may move to each country. In Thailand, the problem is about some Chinese people who are married with Thai spouses are working as the nominees and invest their money on the lands by using their spouses' name fronting. Second is to make the balance between both, China and Thailand. Even though it's hard to make the balance with the trading country and has a new Liberal Economy under the Tyranny that seeks to lead others to follow such as Cambodia and Laos that has to follow their lead because they have no choices so, it appears that the investment to build a train to Laos allows China get the concession of the sides on railways and are able to Chinese to work in country. Third, every negotiation must be deeply clear, because China used to be unfavorable from Japan about the gaps in the law and they've learned from that mistake, then brings it to use with other countries to get benefits, it's important for Thai government to understand and know about the trading laws and Chinese's laws to protect the own rights (Worasak Mhantanobon).



## **China's Silk Roads: Thailand's Advantages from OBOR**

After the president of China Xi Jinping announced that China is reforming the “One Belt One Road” (OBOR) again to worldwide so, therefore most of countries around awake to join and see how it effects to the economics’ global, also Thailand is a country that join into this project, and gets some benefits from this strategy: 1) the domestic GDP is willing to raise up following to the purchasing power from Chinese’ investors, because most of stuffs Thai people buy are quite similar to Chinese people. 2) There are many chances to do the business with Chinese people because Chinese and Thai has a very long connection with each other so it’s may difficult to say “no” 3) Thailand is the door to ASEAN, no matter the route doesn’t cut pass through the country but still needed following to the geography that forces to, so China must need Thailand in someway and somehow.

## **China's Silk Roads: Thailand's Disadvantages from OBOR**

However, there’s no win-win situation in the business world, moreover China. Not just only of their behavior and attitudes but because of times, every minute has meaning to businessmen/women to see how the world has been changed and what they should do to be a part of that changed world. Thailand, people spend life very chill, so how come with the rush hours, therefore it’s simple for Chinese to do the business and beat Thai businesses somehow. If the OBOR succeeded in their goals and it has the movement of workforce from China, and invest money here, of course the local business or SME business might get in trouble, if those are not dare to stay fighting and the labor cost that is more expensive than Chinese’s labor cost can occur as the problem because most of companies would like to save their cost, so Chinese labor is on the priority, but if compared it with the product’s quality, some of them are not pass the QC standard means Thai’s labor has more ability.

## **Challenge**

As long as China Silk’s Roads works on its processes, it shows the faults and questions to the cooperative countries which are separated in three important topics to be concerned.

- 1) The Huge Project “One Belt One Road” is to work on process in step by step, without purposes or details, but just only focus on the negotiations and community. Even the Chinese government still can’t understand and plan in long term intensively, due to the Chinese government that always thinks that the faster, the better but without the safety and security or even think about the risk is more concerned. So, this is one of the challenges of OBOR project which is on caught.
- 2) The Sustainability, it is in worried because of China’s Silk Roads Fund or the Asian Infrastructure Investment Bank– AIIP that China sometimes asks other countries to do project with by loan the money to themselves and sign on the contract. It has the question to people that: who is the creditor? And who is the debtor? China itself has low Public Debt but the State-Owned Enterprise Debt is very high, so it comes up with another financial question that will the OBOR survive by itself?
- 3) The conflict between other countries and China. There are many countries which have problems with China such as South Korean that is avoided from excluded from selling tours to Korea, so it barely to see Chinese people in Myeongdong Market, and China also has the disputes with the South East Asia about the South China Sea. In addition to the purpose on this project, Chinese government just wants to increase the domestic business and domestics itself and sells their products which are the cement, iron and labor workforce to others, this is

self-indulgent so the question is how long will other countries be able to accept what China would like to do? If not, the conflicts may be happened.

### 3. Conclusion and Recommendation

One Belt One Road or OBOR is the project that is launched by the president Xi Jinping in the autumn 2013, which has effects to more than 60 countries around the world, also its propose is to create the infrastructure to ship the goods from Asia to Europe and also the third countries such as South Africa, Pakistan and Uzbekistan. To follow the route map, China has been negotiations around with cooperative countries, and also with the neighboring countries where are the bypass to the main point such as Maritime Silk Road from China to the port in Indonesia where is in the Indochina Peninsular Economic Corridor, so Thailand, Cambodia, Laos, and Malaysia may have to prepare themselves as the bypass countries. However, Thailand also has many roles on OBOR projects which are include the Speed Train project that is able to link China and Thailand together along with some of ASEAN countries, such as Laos and Cambodia. For preparing itself, Thai government is concerned about the decision making that faces through all the challenges and also the opportunities of business follow to Thailand 4.0 project in the Eastern Economics of Thailand or EEC to raise the domestic GDP and grow the economics rapidly. To be honest, the way China do in this project is on questions which are extremely important to other countries and especially, Thailand, so therefore the Thai government has to come up with many plans in case of some unusual situations happen, then Plan B and C is ready to work.

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## Electronic Commerce Affecting Logistics Service Providers in Thailand

**RCGR<sup>2nd</sup>  
2018**

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# Electronic Commerce Affecting Logistics Service Providers in Thailand

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## Abstract

The objectives of the study were to 1) investigate the effecting electronic commerce to logistics service providers in Thailand 2) Study the marketing mix factor effecting e-commerce service decision to choose logistics distribution, and 3) Know the problem of E-commerce and logistics to improve for better .In the present world .Technology become the part of our activity. I do many technology to succeed what we want in lives. I have emerge technology that impact your life in many ways. The world still develop in technologies will change. E-commerce is the way to trade products by internet and send through logistics service to customers. I do research about the logistics performance evaluation of E-commerce affecting logistics service providers in Thailand. The result indicate that trust, save cost, save time, well service and information, these are five key factors that will affect the logistics performance.

**Keywords:** E-Commerce, Logistics Service Providers, Logistics Distribution Center

## 1. Introduction

E-commerce in Thailand country is separated into three catalog 1. (B 2 B) transactions, 2. (B 2 C) transactions, and 3. (B 2 G) transactions. B2B transactions are the biggest around for 56%, B2C around 30% and B2G transactions around 15%. The world market analysis company, Nielsen, Thailand's shopping online and electronic commerce marketing, except travel online, around \$4 billion by 2021, an up of \$3 billion since 2016. B2B electronic commerce in Thailand is also developing quickly because development of internet mobile phone transformation. , the sections use electronic commerce form to upper their product plus foods and service section around 32%, accordance with manufacture around 17%, and retailer and wholesaler around 16%. Interestingly, demand for electronic commerce services is start not only from Bangkok but also from the many provinces, such as Chonburi and Nonthaburi. Thailand country shopping retail online in electronic commerce is support by many reasons include increased mobile phone and increase compete at among electronic commerce process.

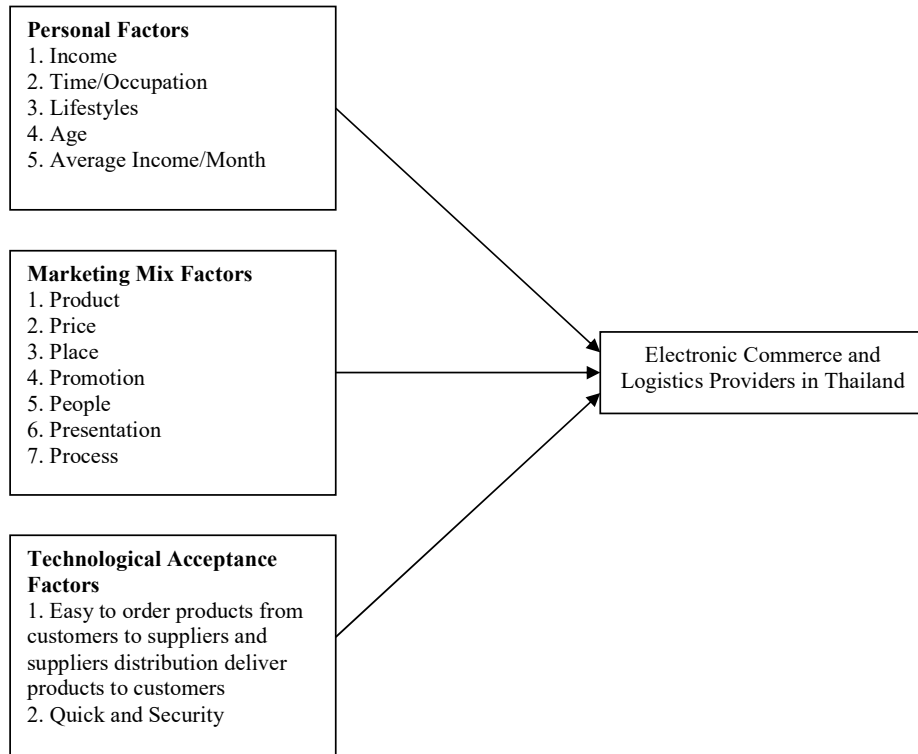
Even though the quickly succeed of B2B e- commerce, but the issues is have to be developed. Electronic commerce is increasing the quickly succeed of the online shopping and internet, the buyers of goods in the company to the goods distribution mode, accompany with online banking or e-banking , the security of network and logistics distribution three things. And these three things of the issues in some content impede the quickly succeed of e- commerce. Still improve of online shopping and network technology security and payment issues have been solved, but quality of logistics service of e-commerce Company has not been solved. In the aspects of the forms of

e- Commerce buyer, the buyers are using the mobile phone/laptop online network to buy product; Buyers have a large level of distribution, and for person consume, the digit of its buy of goods, such a wild level, and height. The electronic commerce marketing in Thailand has never been well and all the logo to tell large opportunity for succeed in the next years. Thailand 4.0 start support commercial investiture and improve to the transportation. It have no time as the present for company in the ASEAN region to enlarge electronic commerce process into this quickly-improving nation.

## 2. Conceptual Framework

### Independent variables

### Dependent variables



### 3. Literature Review

#### 3.1 E-commerce Logistics

Enlarge of electronic commerce company has improved the buyers for logistics level and bring into the biggest important adapt in the supply chain and logistics process in Thailand. Many transportation companies have started their price-efficiency and luxury-quality logistics services and bring into country end-to-end delivery to the market. Many business have set up major warehouses, accompany with small drop-off and pickup point across the country, to maintain the increase in demand. For small and medium company, It means larger comfortable and rapidly process to deliver to their buyers, at much little cost. Such as Aden, Central Group, DHL Express Thailand, Kerry Express, Lazada, Pomelo, and Shopee, are companies the central electronic commerce and logistics companies in the country. Logistics distribution is a line between e-commerce Company and buyers. From the point of aspects of company, the important compete of e-commerce enterprises is not limited to price competition, the logistics service is becoming more and more important, and the logistics distribution has a great influence on consumer's cognition and trust.

#### 3.2 Logistics Distribution Center Performance

The E-commerce population and buyers demand for many day transport have forced E-commerce companies and their logistics partners to use both their warehouse and delivery model to remain competitive in this quickly change industry. Prior to the quickly increase of E-commerce, increase retailer did not have warehousing and logistics networks in place which could deliver goods from start in the country within a 24 period, the new quality of buyers expectation. The time use from warehouse to buyers through outlet was not the first concern when process the destination of warehouses, with cost being of greater concern. Now if E-commerce companies want to remain competitive, the location of their warehousing and logistics network, comfortable in next day delivery in the country, is of paramount importance. In Bangkok, the concentration of E-commerce Company warehousing is in and around Bangna-Trad Road from Kilometer 15-23. This area has become the first logistics hub in the country process an ideal destination with products transport links to the airport, from Laem Chabang Port and into Bangkok and the surrounding provinces. Bangkok remains the largest market for E-commerce companies in Thailand and they manage their countrywide logistics out of central warehouses in the Bangna-Trad area, supplemented by smaller drop off and pick up points across the country. Major E-commerce and logistics companies namely, Lazada, Shopee, Aden, Pomelo, Central Group, Kerry Express and DHL Express Thailand, have facilities located in this area. James Lamrock, Vice President of Regional Operations at one of the newer E-commerce companies, Pomelo Fashion commented that "E-commerce businesses in the (SEA) region are growing extremely quick, in order to doing with upper order volumes and assortment expansion, requirements are generally shorter duration leases and flexible lease terms - while individual space leases may be of shorter duration than traditionally expected, fostering these relationships can be extremely valuable in working with the tenant as they grow into needs for larger or even multiple fulfilment locations. Pomelo's space requirement in 2018-2020 has increased fivefold since 2014. Adam Bell, Head of CBRE's industrial and logistics property team believes that over the coming years, the continued expansion of Thailand's E-commerce businesses will not only drive demand for logistics space but also see ongoing changes in the supply chain, logistic operations of E-commerce companies and their logistics partners as E-commerce strategies and concepts develop. While Thailand's E-commerce is still at the early stage, more firms are likely to offer wide range of E-commerce concepts and strategies to adapt to the ever-evolving needs of a consumers.

## 4. Research methodology

This research, the researcher use the quantitative research as the objective attainment using the survey research. The questionnaire is the instrument for the data collection. The study of relationship among various variables as the hypothesis determination. The result of the study as quantitative approach able to analyses clearly. The researcher determine the procedure of research as follows:

### 4.1 *The population and the sample*

The population used in the study is Government Saving Bank's customer in Bangkok Metropolis using MyMo application service of Government Saving Bank.

The sample use in the study is Government Saving Bank's customer in Bangkok Metropolis using MyMo application service of Government Saving Bank. The researcher had determined the sample size from the infinite population of Taro Yamane (1973) referred to Thanin Sincharu, 2014, p. 46). The 400 customers was the sample of the study.

### 4.2 *The statistics use in the analysis*

From the determined variables and data collection, the researcher processed the analysis by the statistic packages program. The statistics were as follows:

1. The descriptive statistics consist of frequency count, percentage, mean, and standard deviation.
2. The inferential statistics consist of the multiple regression analysis.

## 5. Anticipated the result

“In this paper, we make the performance evaluation of the logistics distribution center of e-commerce enterprises, by combines the characteristics of e-commerce logistics distribution, \, establishes a set of performance evaluation system suitable for the electronic commerce enterprise distribution center. In this paper, we establish the index system from five aspects: reliability index, economic index, time index, service flexibility index and information index, which have the evaluation of economic benefit and the evaluation of the whole process. Practical applications and e-commerce enterprises should be in the quality of homework, strengthening management, reducing cargo loss and damage of frequency, the establishment of good electronic information platform, logistics and distribution of high efficiency; on staff training, improve staff's basic quality; establish a good feedback mechanism, improve customer satisfaction and service level.” (Garces and Fong, 2014).

## 5. Conclusion

### *Strengthen Cooperation between Enterprises*

“For B2C e-commerce enterprises, the perfection of the transaction have to be encourage by the logistics system. For Logistics Company, the development of electronic commerce has bring into a content for its develop. Therefore, electronic commerce enterprises and Logistics Company should



strengthen cooperation and achieve win-win. The electronic commerce enterprise should be the one accompany to the actual need of the business in the selection of the logistics cooperation supplier. For the third party logistics supplier and level have a detail to get. Secondly, because some company is the logistics outsourcing to the third party, so the ability of its company control greatly weakened, in order to reduce the risk of e-commerce enterprises can contact more logistics providers, the risk sharing. E-Commerce enterprises should share third party logistics service provider's product distribution information in real time, and have a timely to get about of the service quality feedback. At the same time, the electronic business enterprise should be from the customer to get the logistics service quality report to the logistics cooperation enterprise, so that it can improve. The third party logistics enterprises should have regular communication with the electronic business enterprise, and have a certain understanding of the development of e-commerce enterprises.

**Promote the Improvement of the Third-party Logistics** The third party logistics enterprise, although it can help B2C e-commerce enterprises to focus on the core business, can reduce logistics costs, but the premise is the advantage of the third party logistics enterprise development is good. At present, the development of the third party logistics enterprises in China is not very optimistic. Most of the existing third party logistics enterprises are small, the majority can only provide a single transport, warehousing, distribution services, the third party logistics enterprises have the ability to provide value-added services, the overall service level is low. The management of distribution service staff has a very important influence on the quality of logistics service quality of B2C e-commerce enterprise. For consumers, only under the order and pick up time and logistics enterprises have the most direct contact, so at this time staff service attitude is good or bad for consumers have the most direct impact. In addition, in the empirical research part of this paper, we also see that consumers are not high, so the enterprise must pay attention to the management of logistics and distribution personnel.

**Strengthen the Construction of Self-logistics System** B2C e-commerce enterprise self-built logistics system involves a warehousing, packaging, transportation, and other links, one-time investment, the cost is bigger. But for the operating condition of good, logistics and distribution to achieve the scale effect of B2C e-commerce enterprises, self-built logistics has a greater advantage than the cost. First, self-built logistics can help enterprises to strengthen control. In the case of self-built logistics enterprises can be controlled by the internal system of the self-built logistics. At the same time, the supply chain can be controlled in time. Secondly, self-built logistics is a part of the whole logistics system, which is closely related with other departments of the enterprise, and can reflect the logistics requirements of customers in a short time." The best way to implement a strategy, it should take the actions taken by competitors into account, because, as mentioned above, the companies have different resources that allow them to compete. Thus, observing the behavior, it gives the company a generic vision of actions to take to compete with the resources it currently has and can apply them differently as charged by its competitors (Garces and Fong, 2014).

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## Applying Inventory Management Skills with Productive Daily Life

**RCGR<sup>2nd</sup>  
2018**

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## Abstract

Inventory management is a part of logistics activities that every logistics people really need to learn, in order to maximize the cost reduction efficiently and minimize wasting and unnecessary cost of holding. Instead of business and working, inventory management can also be applied with daily life such a dealing with messy room, stuffs in refrigerator. As the same purpose as improving warehouses, managing inventory inside own houses is able to increase the house too. Plus, applying stock administration abilities with the everyday exercises, it can build efficiency of time and it impacts to orderly reasoning and others, for example, loosening up time after work, without concerning the weight behind. Simply proficient closet, it can give additional time in every year nearly 60 days and it is so difficult to comprehend, if all stock administration strategies are just in surface. To where it counts to inside or center of compelling expanding efficiency of time and stuff, taking in a dynamic and logic, or assimilate the guiding principle from results of that mark that offer that reason. It can decrease how much time that are spent squandering. Looking at between less garments closet, a large portion of individuals disregard their detail and overseeing need, at that point it causes an ensuing inconvenience and flopping on time-task which wind up general reasons. These exercises are struckle of advancement and efficiency on time. The reason for this paper isn't just made to consolidate the scholastic speculations, for example, FIFO, Just In Time or Zero-Inventory however it speaks to how to apply these hypotheses with every day exercises and utilizing stuff, so as to have greater profitability and powerful working and private time the executives.

**Keywords:** Inventory Management, Zero-Inventory, KPI, Inventory Forecasting

## 1. Introduction

Suppose your house is a big company that has a thousand of inventories which are kept in each room as warehouses, according to types of using. For kitchen, we have vegetable, meat, eggs, milk, orange juice and cold water kept in refrigerator. Frozen food, ice cream, butter and chocolate are in freezer. Ketchup, pepper, Magi, pickled ginger and chilli sauce are on the table. Coconut milk, salt, spice and fish sauce are on the stove shelf. Instant noodle, fish can and all dry food are in the pantry. Honey, sugar, coffee and tea are in the drinking bar. Whiskey, wine, beer and champagne are in the alcohol bar. Tableware and all glasses and cups are in the kitchen cabin. For living room, we have novels, literatures, encyclopedias and textbooks in the bookcase. For bedroom, we have t-shirts, sweaters, jacket, belt and pants in wardrobe. For the last in bathroom, we have toothpaste, toothbrush, soap, shampoo and conditioner, plus washing powder and fabric softener in shelf near washing machine. Theses all samples are inventories that we use daily as routine.

Most of people overlook their detail and managing priority, then it causes a consequent trouble and failing on time-operation which become general excuses such “Have No Time” or “Where is that stuff located”. These activities are struckle of development and productivity on time. Imagine if we have to spend 3 minutes to find remote for 365 days that takes 1,095 minutes or around 18 hours per year comparing to watch 18 movies. This we call losing opportunity cost. The purpose of this paper is not only made to combine the academic theories such as FIFO, Just In Time or Zero-Inventory but it represents how to apply these theories with daily activities and using stuff, in order to have more productivity and effective working and private time management.

## 2. Literature Review

In this part, several relevant literatures that pertain to inventory management skilled with productive daily life will be briefly represented.

### *Inventory Management*

Lining Bai and Ying Zhong (2008) researched that independent companies have constrained budgetary assets and haggling power. Long-separate providers, huge vacillation of interest and absence of formalized stock control framework result in HEM-SOL awful execution on stock administration. They broke down the gathered information and build up a formal stock control framework as the solution to enhance the organization's stock administration by concentrate of considered as subjective single-contextual investigation. Information accumulation is predominantly through the meetings with the best administrator and other staff associated with stock control tasks. Optional information is recovered from the data framework to give the yearly buying and deals report around twenty things utilizing a purposive examining approach. Information examination pursues the hypothetical system.

Bhavana Padakala (2008) studied that the significant test of overhauling is the basic leadership with respect to both item substitutions and stock administration. Since the client is guaranteed a working item consistently, these choices turn out to be imperative in an overhauling situation and hence the exploration in these regions. Likewise, the stochastic idea of the item quality turns into an issue in the re-fabricating situation. Condition checking assumes a noteworthy job in lessening the quantity of fizzled items and getting better quality re fabricated returns.

Musenga Francis Mpwanya (2005) summarized that as every one of the associations are worried about stock administration, a specific accentuation must be put on it. A normal stock administration suggests the coordination of vital capacities (creation, fund, and advertising) of the association in the motivation behind accomplishing goals. The accomplishment of any association's destinations is connected to the relationship of useful objectives. Routroy and Kodali (2005: 1) take note of that 'stock in the inventory network expands the item accessibility and diminishes the expense by abusing any economies of scale that exist amid both creation and dissemination. Stock is a noteworthy wellspring of expense and it hugy affects client responsiveness. From this investigation, obviously stock administration affect on client the board . This imply stock administration prompts abnormal state of consumer loyalty.

Jing Zhang (2017) summarized that the significant setups in SAP were considered. Without the arrangement in SAP, changes don't occur. Therefore, the draft proposition is a flowchart that contains three stages, from stock order to allocating stock control framework (MRP type in SAP) to characterizing renewal parameters, each progression point to the settings in SAP. In addition, the

draft proposition was displayed to buyers, coordinations supervisors and senior administration for criticisms and upgrades.

Daniel Arrelid & Staffan Backman (2012) said that the interest designs were characterized and the items were partitioned into various gatherings. In the wake of displaying these gatherings, it turned out to be evident that the stock control could be moved forward. The second explanation, clarifying the conditions for achieving the principal articulation, was halfway satisfied. The stock dimension did diminish and consequently enhanced amid the usage, however this was not done to a specific administration level from a hypothetical viewpoint. Why this happened will be clarified further down in the ends where the diverse parts of the ace theory are depicted and talked about.

### **3. Proposed Inventory Management Skills In Daily Life**

#### **KPI**

Key performance indicator it is just as significant as the activity it moves. Over and over again, associations aimlessly embrace industry-perceived KPIs and afterward ask why that KPI doesn't mirror their very own business and neglects to influence any positive change. A standout amongst the most essential, yet regularly neglected, parts of KPIs is that they are a type of correspondence. In that capacity, they submit to indistinguishable principles and best-rehearses from some other type of correspondence. Compact, clear and important data is substantially more prone to be ingested and followed up on. KPIs are a powerful apparatus to enable form to better performing groups.

#### **Zero Inventory**

Zero inventory is a framework in which an organization keeps no or almost no inventory away, just ordering precisely what will be sold and receiving it when required. It is increasingly successful, more affordable, and progressively adaptable. It lays on the just-in-time (JIT) principle, which depends on short lead time rather than gigantic inventories, and was first effectively connected in Japan by Toyota to vehicle manufacturing, before its ubiquity spread toward the West in the 1980s. At last, it lays on the possibility that if supply chains are 100% solid, and convey precisely the crude materials and segments required, when they are required.

#### **Inventory Forecasting**

Inventory Forecasting might be characterized as a procedure of anticipating inventory in future eras. All the more explicitly inventory forecasting is a logical methodology of foreseeing deals amid a predefined future period dependent on the proposed showcasing plan and an arrangement of wild and aggressive powers.

#### **Applying KPI, Zero Inventory and Inventory Forecasting with The Room**

1. Choose what is fundamental, best, and superfluous for the room. This will assist us with prioritizing what we need sitting out, and what we can bear to bury more often than not. Discard some stuff that we believe isn't basic.
2. Discover storage room. Dresser/work area drawers, storage rooms, space under the bed, upper rooms/cellars, save rooms. Whatever works, put additional stuff there. Make a framework for putting away garments, both spotless and grimy. Have a go at purchasing a pencil holder for pens

and pencils.

3. Make the bed. The primary concern in your room is typically your bed. In this manner, when the primary concern is clean, it will improve the rest appear. So simply pull the spreads over your bed and ensure the cases are on the cushions. Likewise its incredible in the event that can take everything off your bed yet redundant. Make it each morning. A little measure of time goes far to making the room feel clean and empowering a decent night's rest toward the finish of every day.

4. Get stuff. Begin with extensive things first, at that point proceed onward to papers, and so on.

5. Get all the messiness from around your room and put everything endlessly perfectly. Pursue the straightforward standard of "taking something out and after that returning it right". Sing the cleanup tune, on the off chance that you should! Putting on music can enable this procedure to go much quicker.

6. Keep the room clean by vacuuming, scouring, washing, tidying, or whatever else you have to do to keep it satisfactory. On the off chance that your stuff begins amassing once more, simply take a couple of minutes every day to put everything where it has a place. Take a couple of minutes consistently before you go to bed and ensure everything is in its place or conveniently secured. You ought to likewise make it a propensity to make up your bed each morning before you go out.

7. Ensure all drawers are closed, for example, dresser, night table, or work area. This can have a colossal effect to how we feel, as should be obvious yawning holes of more stuff.

8. Attempt not make things watch spread out, it makes it resemble room isn't as large as it seems to be. Clean it at any rate once per week to shield it from getting excessively untidy.

9. Discover storage rooms and when you do, put your things in there, yet have a framework. It very well may be that every one of your papers about diversions can go in a green organizer and the green envelope goes into the white fastener and goes on the main rack. Whatever works best for you, do it.

### **In Real Practices By Joshua Becker**

He said that numerous individuals will miss the delights of minimalism since they are hesitant to start. Frequently, they fear on the off chance that they expel a thing from their home, they will think twice about it later on the off chance that they require it once more. While that once in a while occurs (you require such a great amount of short of what you think), if this dread is keeping you from beginning, attempt this elective technique. Start by essentially decreasing the overabundance things in your home. For instance, your family needs towels so you will never evacuate them totally yet you could disentangle your life by diminishing the quantity of towels you claim. This methodology evacuates all hazard. When you venture out, will begin to encounter the advantages of owning less. You will appreciate the invigorating sentiment of a less-jumbled material wardrobe or restroom cabinet. Before long, you will see endless different things that can be lessened in your home. Before you know it, you will have gained noteworthy ground in your voyage towards a progressively rearranged life. To all the more likely comprehend the capability of this basic, hazard free advance, I ordered a rundown of 101 Things That Can Easily Be Reduced In Your Home. This list is not meant to overwhelm or frustrate you, it's simply meant to give you an idea of how significant a step this can be—just choosing 10 things on this list to start with would result in a noticeable difference in your home.



## **Other Relevant Inventory Management with Productive Life**

### *Minimalist*

Minimum, the smallest or humblest amount or amount possible, plausible, or required. Minimal is to some degree progressively versatile, where it suggests being the smallest amount or degree in non-out and out terms. Minimal of a minimum amount, amount, or degree. "Of a minimum amount", without showing the minimum amount.

### *Zen*

Having a Zen frame of mind implies finding careful consciousness of the present minute. This will enable you to discharge yourself from stress, uneasiness, disappointment and outrage. Rather, center around positive considerations and activities that will enable you to unwind and react in an increasingly adjusted manner to your regular daily existence.

### *Muji*

This expression typifies how we can give Muji items at lower costs. It propelled Muji image by planning and creating items that may nearly be viewed as substandard whenever dependent on conventional criteria, in spite of the fact that they are, obviously, really of good quality. Through the watchful determination of materials, streamlining fabricating forms, and disentangling our bundling, we have ceaselessly presented brilliant Muji mark items onto the market, at lower than common costs. By and by there are around 7,000 things sold as Muji items. Muji's characteristic and straightforward plan proposes sound ways of life for the present world.

## **4. Conclusion and Recommendation**

To apply inventory management skills with the daily activities, it can increase productivity of time and it influences to systematic thinking and others such as relaxing time after work, without concerning the burden behind. Just efficient wardrobe, it can give more time in each year almost 60 days and it is so hard to understand, if all inventory management methods are only in surface. To deep down to inside or core of effective increasing productivity of time and stuff, learning an abstract and philosophy, or absorb the core value from products of that brand that offer that purpose. It can reduce how much time that are spent wasting. Comparing between less clothes wardrobe. Moreover, there are 8 benefits that we will gain from applying inventory management skills with daily life.

1. Make space for what's critical. When we cleanse our garbage drawers and storerooms we make space and harmony. We lose that claustrophobic inclination and we can really inhale once more. Make the space to top off our lives with significance rather than stuff.
2. More freedom, the accumulation of stuff is like an anchor, it ties us down. We are always terrified of losing all our 'stuff'. Let it go and you will experience a freedom like never before: a freedom from greed, debt, obsession and overworking.
3. Concentrate on wellbeing and leisure activities, when you invest less energy at Home Depot attempting unsuccessfully to stay aware of the Joneses, you make an opening to do the things you cherish, things that you never appear to possess energy for.

4. Less spotlight on material belonging, all the stuff we encircle ourselves with is just a diversion, we are filling a void. Cash can't purchase bliss, yet it can purchase comfort. After the underlying solace is fulfilled, that is the place our fixation on cash should end.
5. More opportunity The aggregation of stuff resembles a grapple, it secures us. We are constantly unnerved of losing all our 'stuff'. Release it and you will encounter an opportunity more than ever: an opportunity from covetousness, obligation, fixation and workaholic behavior.
6. More genuine feelings of serenity, when we stick onto material belonging we make pressure since we are constantly terrified of losing these things. By streamlining your life you can lose your connection to these things and at last make a quiet, serene personality.
7. Less dread of disappointment, when you take a gander at Buddhist priests, they have no dread, and they have no dread since they don't have anything to lose.
8. More certainty, the whole moderate way of life advances independence and confidence. This will make you progressively certain about your quest for joy.

These are all recommendations results and summary of applying inventory management skills with productive daily life.

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**Reverse Logistics in Electronic Commerce**

**RCGR<sup>2nd</sup>  
2018**

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# Reverse Logistics in Electronic Commerce

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## Abstract

Reverse logistics in e-commerce is process to decrease cost of operation and maintained to increase customers' satisfaction to create loyalty with firm. Reputation is important to the company image, therefore they need to concern in return goods policy in order to create strength point through competition in online market. E-commerce is online platform that linked directly between seller and buyer. To enhance the e-commerce business to gain more firms' sales they need to develop the reverse logistics response to customer demand and use the information communication technology to be helpful and support the information system include enhancing internet server efficiency and shipment operating have effectively the company able to improve procedure to minimize the complicate in process returning item to customer. This paper define the meaning, method and assessment for reverse logistics and have literature review to ensure the information that necessary to analyze the reason and issue the problem in reverse logistics to develop and reinforce the e-commerce have more efficiency.

**Keywords:** Reverse Logistics, E-commerce, Information Communication Technology, Supply Chain

## 1. Introduction

The growth of reverse logistics (RL) has a tendency to increase since the key factors to encourage for free return shipping policy of electronic commerce. RL is generally formed in e-commerce business, which customers' requirement to return goods from various reasons such as faulty goods, defective product, and wrong delivery. From the data, it is estimated that return rate approximately 30% of online order amount via whole online shopping. The assessment world market of e-commerce will be increasing rate approximately 23% YOY in 2018, the proportion is 12% per world retail market and as a result of RL with an additional as well and moreover free return shipping can create the most decision to purchase in online shopping, which is the key element that encourage reverse logistic (SCB Economic Intelligence Center, 2018). The most returned items are fashionable clothing (30%) and electronics (15%). From the data show that in Europe, the value of return items around 45% of the world due to there is the policy to customers right associated with returning. Consequently, customers able to return items purchased (which include online, phone and email orders) within 14 days in any case, if the return policy has establish in the global economy, it will make reverse logistics market play increasingly important role in ecosystem of business and logistics to encourage the return shipping.

Reverse logistics operations are concentrate on the process that are involve with reusing products, materials, component, equipment and facilities. Rogers and Tibben-Lembke, 2002 has defined that reverse logistics is movement of products or materials in reverse direction with create a value or available products to utilize in value and eliminate appropriately. Which by include a variety of the difference things but the movement of products from destination process to handle appropriately of them. When a customer have been purchase the defective goods, reverse logistics process would concern about the returning customer goods to the store, manufacturers shipping the defective goods back to their facilities to repair or recycle the products in order to minimize losses the value of product. As a cause from environment and customers security in the case of Dell requested consumer for return the battery that come along with some laptop model, which probably exploding be able to dangerous to the customers. In Europe and Japan are pay attention to the environmental preservation of various products, manufacturers have to obvious policy in managing system to return expired and unwanted goods for recycle and none toxic waste to the environment such as returning plastic or glass bottles at retail stores, campaigning for separate the types of waste, limitation to use plastic or foam packaged in transportation, and using the types of plastic bag that able to recycle.

The problem in reverse logistics is challenging to save the cost of shipping return, the company have to manage both transportation and deposition of returning not only created customer satisfaction but also maintain corporate satisfaction. The method to procedure reverse logistics company have to collaborate with third-party in order to improve efficient of process that simplify in returning service to facilitate with the customer.

## 2. Literature Review

Fiksel (1996) argues that organizations have definite potential to become eco-friendly towards product remanufacturing. Heavy industries that have complex supply chains should take into consideration the benefits of reverse logistics (RL).

A. I. Kokkinaki, R. Dekker, J. van Nunen, & C. Pappis (1999) e-commerce for reverse logistics is an area of web applications that has been active and progressing aggressively, especially in the US, though it has not been explicitly recognized until now. It has given reverse logistics in general and especially remanufacturing of parts and re-use of surplus goods an important stimulus.

Jian Xu (2009) has researched on reverse logistics, set reverse logistics strategy, improve the reverse logistics system will be benefit for the healthy development of e-business. China's e-commerce companies need to seriously study the phenomenon of reverse logistics, pay attention to the value of reverse logistics, Build e-commerce reverse logistics system. With the further development of e-commerce, the reverse logistics will become a huge competitive advantage for e-commerce.

Dr. Amit Kumar Singh, & Malsawmi Sailo (2013) increased Internet penetration, annoy free shopping environment and very high levels of Net savings to see Indians online shopping. But at the same time the companies want to decrease the risks associated to customer. The response of an online customer should be taken to classify defects in service transfer.

Sergio Rubio, & Beatriz Jiménez-Parra (2014) interest of academics and professionals in activities related to closed-loop supply chain (CLSC), reverse logistics (RL) and remanufacturing has provided a better understanding of the characteristics, processes and implications that the recovery of end-of-use products and end-of-life products have on business activity. In spite of this fact, some



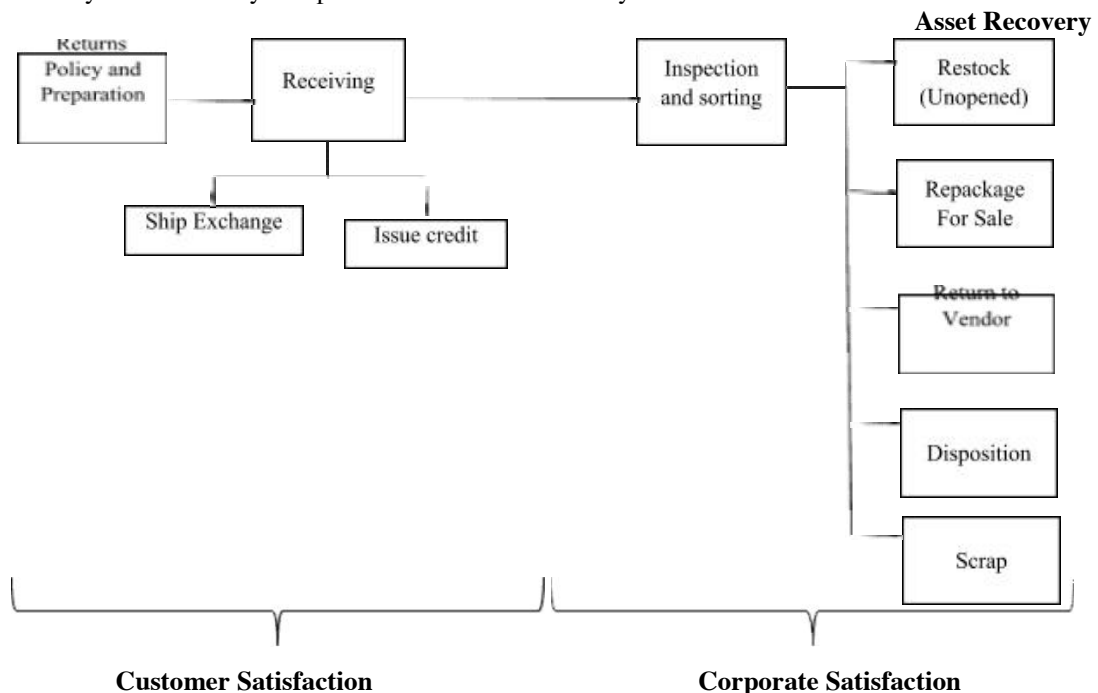
concerns require our attention; for example, those related to the strategic aspects of the CLSC, and particularly those issues related to the potential commercial activities and marketing policies that firms can establish.

Guojun Ji (2014) outsource logistics providers or 3PRLs are ideally suited to help handle reverse logistics and generate significant savings since reverse logistics is an easy extension of the existing business services of 3PL operations. Outsourcing reverse logistics should be handled like other outsourcing decisions. The customers will be looking for: Cost savings - monthly costs, one time savings; Easy management; Regular status updates; One stop shopping - one provider who can handle as many of their requirements as possible; A partnership-the nature of returns will require a close working relationship.

Lian Zhikang (2016) the research significance and purpose of the paper, then uses the SWOT analysis method to list the SO strategy, the ST strategy, the WO strategy, the WT strategy, and the SO strategy of the corresponding SWOT in view of the present situation and problems of the reverse logistics of the automobile industry in China. Combined with China's automobile reverse logistics industry characteristics, pointed out that China's specific reverse logistics development strategy of the automotive industry.

### 3. E-commerce Reverse Logistics Framework

In e-commerce the reverse logistics is challenging for business to have efficiency to deal with product return from online customer, you need to assure that location for return product is not only create the customer satisfaction but also reduce the cost of reverse logistics operating so they can have an impact on your company profits. Therefore, e-commerce reverse logistics have to estimate and analyze with the key component for make it efficiency.



**Figure 1** Key Component of E-commerce Reverse Logistics

The key component in term of customer satisfaction begins from the returns policy, e-commerce companies that have arrange for return policy to increase purchasing from the customers and minimize the effect cost of returning. They have to concern with cost of returning; who will responsible for cost return shipping and substitute goods, the location that can return, time for operate a return, and determine goods that are allowed explicitly to return and exchange. The returns preparation is prepare to provide customer to return their goods, that more convenient to make return goods for customers. Receiving is a procedure emphasis task, they have to establish the assemble line in order to make staff to perform more accelerate and proceeded effectively to analyze inward goods. The process of receiving detail is issue credit to ensure the item have same condition as original order purchased to allow goods for exchange and ship exchange.

In addition to corporate satisfaction through inspect and sorting process to recovery value of item so staff must have knowledge to know and understand the product for use process that appropriate for each product and estimate value for highly recovery items. In order to create highest value of return item to assets recovery in e-commerce have to handle with restock that along with unopened product from correct deliver and unsatisfied so loss of product value can be low because it can return to sale in online store due to it not have any damage, assets recovery forecasts inbound, triage their terms, and quickly split them for further processing or disposition. Repackage for sale to design packaging for reduce the production cost to sales that point is important to purchasing staff for contact with another suppliers to find the sources that propose in appropriate to their requirement. The occurrence process return good between customer, retailer and vender is called Return to Vender involve when customer send goods to the vender directly. Another is consider that product returned have not condition to receive value will be led to scrap by disposal process which recycle to be raw material for manufacture.

### *3.1 Reverse Logistics and Support Information System*

The recurrent reverse logistics to deals with the activities which have to inspection and sorting, Restock (unopened), repackage for sale, and return to vendor, disposition, and scrap. Some supply chain product of traditional chain will be introduced into the market since the final product used, it is likely to be used in the same way. Another point is despite repeated changes in ownership, the product remains in its original form. The product is brought into the supply chain for the purpose but reverse logistics has created the idea to use this product as well.

### *3.2 Information Technology for Reverse Logistics*

Information flow is enhanced by the flow of products between partners through the supply chain and other networks. The conventional system consist on traditional source is the difference from information communication technology (ICT) as a reverse logistics to procedure the return goods process that different from the traditional logistics. Moreover, the ICT system have to use for track the data flow in returns process to have more efficient for collect data correctly to prevent the defect possibility in work flow process. Therefore, ICT is important to advocate the information reference to manage reverse logistic more efficiency and accurate information to adequate result for the information basic and prepare the related information to respond the specific requirement of reverse logistics. Anyway, there are related issues that need to be investigated:

- We have to concern about quality data of product in order to entered reverse logistics product.
- Address the problem (Information exchange between traditional and reverse logistic) which one can resolve.
- The most relevant and potential reverse logistics web application need to be implemented.

The product should be returned according to the time, place, and condition of the product. For a commercial purpose, the condition is marked to continue, which is the key reason that the product is being returned for proper operation and can be processed at a later time. Considering a product with expiry date, it is important to see that the returned product should within the time allowed because after the time has passed, the damage cannot be repaired. In general, it should be explained reasonable of specific product has become part of the reverse chain.

#### **4. Research Methodology**

The paper use qualitative to design method in order to collect data from online customer as a survey research. Provide a questionnaire to collect data implement to obtain result clearly for analysis the data collection. To identify the research methodology as scope according to:

##### *3.1 Population and Sample*

The population that used in the study is survey in customer in online shopping websites or applications such as Lazada, Shopee and UPS. To determine the sample size from the popular platform online shopping in scope obvious to reach customer make decision before buying and design to return goods when have damage thus these applications set a period to determine time to return goods for customer have not satisfaction with their receiving goods.

In case of Shopee have “Shopee Gurantee” that customer can file a petition return goods purchased or refund to company returned is within specific time period according to the policy. Shopee Gurantee is service requirement to customer to manage and reduce the conflict between transaction periods, the user can contact in private zone to resolve the different problem and contact with local authorities to help to receive goods for returns. We will use survey by asking the customer to answer questionnaire about satisfaction after receive goods at destination and the convenience point to process return goods for shipping to the origin as reverse logistics.

##### *3.2 The statistics use in the analysis*

Since data collection, researcher able to analyze data from the statistics of using online shopping and frequency to return goods after purchased, statistics are summarize in term of these:

- The statistics consist of frequency count, percentage, mean, average, and standard deviation.
- The statistics data will exhibit in graph format to summarize.

#### **5. Anticipate Results**

In my opinion, population in sample group from the survey have frequency to return goods purchased is more happen in the end of the years the day before Christmas, many retailers, and e-commerce business will have a promotion appeal to customer in order to gain peak sale volume for holiday shopping before the end of the years. Other is special promotion for free shipping will stimulate the sales. After period of time the amount of returning is enhancing continuously for each years, therefor customer behavior is contributed to collect data from he or she decision before buy and order goods. Customer has satisfaction when company have responsibility cost of shipping return in defect goods.

Shopee returning goods policy not include the case that customer changed their mind to not satisfaction with goods are not defect. The company is only platform online intermediary between seller and buyer. Which is return goods policy based on seller's agreement but the buyer can file a petition return goods purchased or refund in situation that buyer do not receive goods due to incorrect location delivery, Defective goods or damage between shipping, the seller does not delivery goods that agreed specification (e.g. incorrectly size or color) to the buyer. This point will effect to customer buying decision because customer have to concern about service after sale, they need to return defective goods but the condition depend on the cost of product, cost of return shipping due to seller will responsible only the goods that sale in higher price which include by shipping and returning goods cost. Therefore, the customer have to accept the term of agreement before buying.

Retailer is more concern about logistics process and supply chain perfectly but hardly disregard in reverse logistic. As a result, many retailer will lost value in product waste and warehouse space so enhancing reverse logistics of UPS are reprinted labels for shipping return and offer the option that pick-up goods from customer location in order to improve the facilities in reverse logistics. UPS use Optoro to applied procedure analysis data based to determine refund on unwanted or damage goods, it facilitate faster on return to inspection which process is appropriate to product. Optoro is outsourcing logistics provider or 3RPLs that help to analyses data based and identify addition to refund greater value which by recycling, resale to customer by use e-commerce and repackage for sale as well through eBay sales, and return to vendor.

To created effective services for reverse logistics in e-commerce, the company need required outsourcing logistics provider to be helpful in existing business and expand the service coverage to other location. Outsourcing reverse logistics provider (3RL) is help business easier to manage due to handle accurately with the information system, save cost and minimize the time to customer procedure in return shipment. 3RL is facility to convenient making decision from outsourcing to provide helpful that easy to manage in processing.

## 6. Conclusion

To conclude the paper provide the overview of the literature review are relevant in necessary of reverse logistics to develop e-commerce, build e-commerce reverse logistics system and development reverse logistics to become an effectiveness competitive advantage for e-commerce. The keys of e-commerce reverse logistics illustrates the process that create the customers' satisfaction associated with return policy, Receiving, Ship Exchange, Issue credit and cooperate satisfaction need to asset recovery to minimize the waste and increase the valuable of goods by restock for unopened goods, repackage for sale, return to vendor, disposition, and scrap by disposal process which recycle to be raw material for manufacture. Enhancing information flow by use information system for reverse logistics to other supply chain network and use information communication technology enter to help the procedure return goods process to have more effective. This paper use quantitative to analyze the data from the survey by use the questionnaire provide the customer answer from population and sample after use online shopping. As a result, customer have frequency return goods in the end of the year due to special promotion from e-commerce provider to buyer, which appeal to customer to gain peak sale volume for holiday shopping before the end of the years. To enhancing reverse logistics in e-commerce the company need to using outsource reverse logistics provide service to handle reverse logistics that significant for saving the cost and simplify of process to management easier for business.

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## Developing a Logistics Facilitation Monitoring Mechanism



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# Developing a Logistics Facilitation Monitoring Mechanism

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## Abstract

Trade facilitation has been focused on addressing issues related to customs clearance and regulatory processes of other agencies dealing with clearance of goods. However, addressing the overall incidence of transaction costs and systemic inefficiencies requires a much more holistic view of cross border movement of goods that include ground level challenges of port and airport operations. Even regulatory bottlenecks are often related to implementation issues at the ground level rather than policy. This paper discusses an alternative bottom-up approach for logistics facilitation based on monitoring ground level operational issues, and an institutional mechanism that can use this information to address facilitation challenges quickly in the Indian context.

**Keywords:** Trade Facilitation, Logistics Facilitation, Big Data, Time Release Study, Reforms, Logistics Efficiency, Customs Reforms, Port Operations, Airport Operations, Cargo Management

## 1. Trade Facilitation: Thinking Holistically

The 'Make in India' initiative can help India's greater integration into global value chains through exponential increase in trade and investment. This pre-supposes that global and Indian investors are confident of servicing their global production networks and consumer markets from facilities in India. Given India's relatively inefficient ports and airports, and poor reputation for regulatory transparency and quality of governance on the ground, this is where 'Make in India' hits a very important roadblock that needs to be overcome urgently.

## 2. Developing a Comprehensive Logistics Monitoring Facilitation Mechanism

In order to integrate the three principles outlined in Table 2, this working paper proposes a 'Logistics Facilitation Monitoring Mechanism' or LFMM (Box 3) that creates a technology enabled data capture mechanism for all of these 'hard' infrastructural and 'soft' regulatory micro-processes that a shipment of goods arriving/leaving a port or Airport in India has to undergo. Developing and implementing such a LFMM would not just require a framework that integrates existing methodologies with some new ones, but also require technology and institutional solutions. A critical challenge would be to find a governance structure that can analyze the granular level data of micro-processes in the logistics chain, identify problems at the operational level of such activities from such data, and implement solutions. Since the responsibility

for the operational issues in the logistics chain are spread over several line ministries and departments, the institutional leadership for such reforms cannot be left to an individual line ministry, but should come from the very top.

A related challenge would be to make the process of data capture a continuous and real time one. This would be a key differentiator between existing methodologies being implemented to study efficiency of cross-border trade processes today and the proposed methodology. This would require the development of a robust mechanism that can do real-time monitoring of ground level operational and regulatory performance of India's key ports, airports, freight movement by the railways, internal container depots (ICDs), land customs stations (LCS), and ancillary facilities such as container freight stations (CFS) near ports, free trade warehousing zones (FTWZs), and major bonded warehouses. Fortunately, developments in big data, especially techniques now available for easy quantification of visual data, and falling costs of technology can provide the solution for this seemingly mammoth task.

### 3. Next Steps to LFMM 1: Developing Indicators

The main objective of this section is to discuss the building blocks of a robust and comprehensive facilitation methodology (drawn largely from the TRS but with additional data parameters that covers infrastructural performance). It needs to be re-emphasized that the data elements and methodology presented here are just suggested building blocks, and would need refining based on context of the port/airport in question. This issue of contextualization with reference to the port/airport is an important one. It essentially means that importance of monitoring certain performance measures and their related data elements might differ between ports/airports. For example, container handling parameters are relatively less relevant to a port that handles mostly break-bulk. The issue of contextualization is also critical to an area that remains largely missing or hidden in traditional TRS or other trade facilitation studies, i.e. the quality of logistics services (in terms of pricing, efficiency and productivity) at ports and airports.

Building on the discussion in the preceding section, this is also an important aspect where the LFMM framework being proposed here goes beyond traditional methodologies. A TRS or related studies do not fully address the transaction cost aspect of cross-border trade. The transaction costs incurred in cross-border trade incorporates payments made by trade to import or export, including the cost of services used in ports/airports. Since LFMM proposes to integrate the pricing, productivity and efficiency parameters and their monitoring, it provides a powerful tool to benchmark the quality of logistics services being offered, the specific cost elements of such services and their pricing.

LFMM methodology would have three types of data elements that would need to be captured. These would fall under the following distinct heads:

- Operational Indicators: Mapping the efficiency of port and airport management in terms of traffic management within and outside port/airport including management of congestion
- Efficiency and Productivity Indicators: Mapping the productivity of human and capital resources deployed in ports/airports and the efficiency of their utilization. These have a direct relation to the cost of port/airport services and logistics quality.
- Regulatory Procedural indicators: This is replication of TRS type Indicators with some refinements. These indicators provide insight on the how quickly and how efficiently customs and other partner government agencies handle all administrative and regulatory functions in the trade process.

#### **4. Next Steps to LFMM 2: Integrating Technology and Big Data Parameters**

The next logical step to developing the LFMM would be the integration of technology that enables electronic data capture of both the operational and procedural process flow indicators discussed in Table 1 and visual data discussed in Table 2 in a real-time basis and developing an analytical framework that can develop a comprehensive report on performance at various port and airports. Data capture real-time and continuously are the two key elements of this and critical to the concept of LFMM.

The first step would be to put in place 'autonomous' data collection infrastructure. This would require creating port and airport community data systems that report on the different indicators identified in the preceding section 3. Such a data system would integrate the electronic data already available with customs (filing of documents by shipping/airlines, filing of shipping bills/bills of entry, clearance and potentially even out of charge) with that of airport and ports and terminal operators. Given that Indian custom's proposed single-window (SWIFT) would integrate other partner government agencies (PGAs) and also proposes accept electronic copies of all supporting documents and make procedures like 'out of charge' from manual to electronic, SWIFT on its own would therefore be capable of capturing quite a few of the data points.

#### **5. Conclusion**

The government of India can consider piloting such a system in India's 2 largest container ports and 2 largest airports (in terms of cargo volumes) as a start. India's 2 largest container ports (JNPT and Chennai Port) handle close to two-thirds of containerized cargo traffic, and piloting the program here would give significant coverage of the overall ocean borne trade. Similarly, India's 2 largest airports, Delhi and Mumbai, handle close to two-third of the international air cargo. A pilot implemented here would again result in significant coverage of the air borne trade. At a later stage, the program can be expanded to cover all important ports and airports.

First step towards initiating the pilot would be discussions with industry and other domain experts to refine the data points and collection methodologies would need to take place. All the major stakeholders in the port and airport environment would also need to be brought together, and firm commitment to cooperate and implement their respective roles in LFMM would need to be put in place.

In our current government framework the ability to demand accountability across ministries is institutionally present in the PMO and the Cabinet Secretariat. It therefore makes sense if this institutional mechanism is part of either the PMO or Cabinet Secretariat. It needs to be noted that the ministries involved go beyond the transport related ministries (i.e. ports and shipping, civil aviation, rail and road), and thus even a future integrated Ministry of Transport would not be the right place as an institutional base for the LFMM.

In summary, a strong real-time data management and reporting system coupled with autonomous data collection technology and institutions that enforce mandatory reporting requirements would establish a platform to develop a system of operational yardsticks and fact based accountability for all stakeholders in the logistics chain. If this platform is then effectively used by establishing governance system administered from the very apex of central government any deviation from performance standards would stand to be quickly rectified and allow India to achieve the world's highest standards in logistics efficiency.

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## High-Speed Rail Linking 3 Airports Project

**RCGR<sup>2nd</sup>  
2018**

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# High-Speed Rail Linking 3 Airports Project

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## Abstract

This content analysis focused on the high-speed rail linked three airport projects of Thailand's Eastern Economic Corridor or EEC. This research begins on the definition of high-speed rail, the description of the project, the investment values, and the problem from opinion of population around construction area. The process of this research study includes researching the general information. Collect the data. Analyze the data and find the solution. The result of the studying and analyzing showed the benefits of the project, the advantages of the project, and the solutions of the problem.

**Keywords:** High-Speed Rail, Eastern Economic Corridor

## 1. Introduction

Now, Thailand is entering to the Thailand 4.0, which is an economic model for developing country from the Government of Thailand. Thailand 4.0 focuses on automation technology. Before Thailand 4.0 the economic development models which "Thailand 1.0 agricultural", focus on agricultural and handmade, "Thailand 2.0 Industrialization" focus on light industry such as garment, natural resource, cheap labor cost, and "Thailand 3.0 Globalization" focus on Heavy industry or advanced industry" such as export and import, foreign investment.

To developing country forward to Thailand 4.0, they have the development strategy name Eastern Economic Corridor or EEC. The eastern part of Thailand is located in strategic point that can be linked to China and India that the population is large and high expansion rate of economic. In addition, 3 provinces in the eastern part of Thailand, Chacerngsao, Chonburi, and Rayong are also an important industrial production base of the country, including the petrochemical industry, the automotive and parts.

EEC focuses on the implementation of infrastructural development projects and seamless operation of transportation in providing vital linkages for air, land, rail and sea routes. And also emphasizes to reduce cost and time of transportation. EEC has several projects, but researcher select one project to study that is the high-speed rail linked to 3 airports (Don Muang – Suvarnabhumi- U-Tapao).

Some people who live nearby the construction planning area concern about the effect from construction the high-speed railway that including the noise pollution the damage and effect while construction or finished working.

The objectives of this research are to study and analyze about the High-Speed rail of EEC project. The objectives of the study were: 1) Study and analyze the project of the EEC. 2) Analyze the worthiness of the EEC's project. 3) Find the solution of problem that people concern.

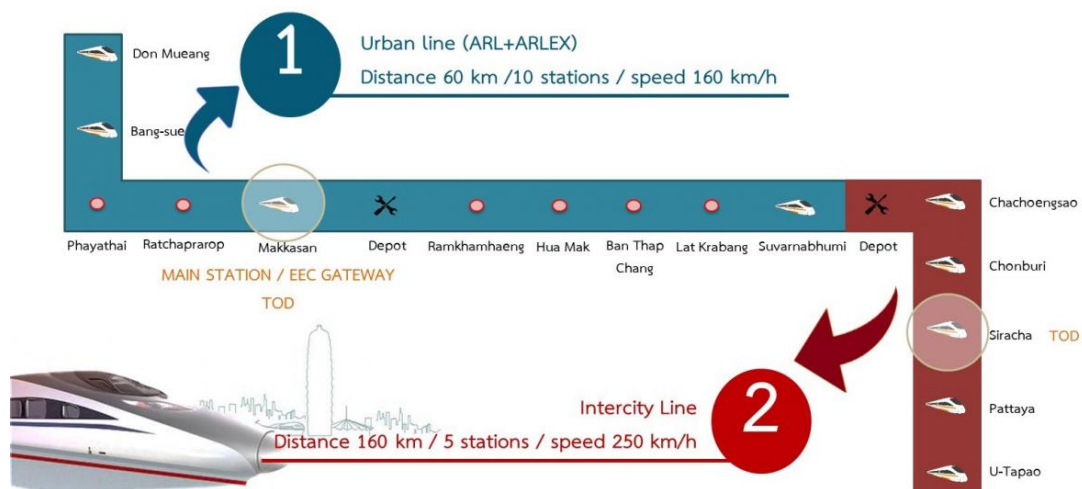
## 2. Literature Review

### 2.1 High-speed rail definition

High-speed rail is widely used in many countries because its capacity is high to transport passengers or freight. A high-speed rail transport that operates significantly faster than traditional rail traffic, using an integrated system of specialized rolling stock and dedicated tracks. While there is no single standard that applies worldwide, new lines in excess of 250 kilometers per hour and existing lines in excess of 200 kilometers per hour are widely considered to be high-speed, with some extending the definition to include lower speeds in areas for which these speeds still represent significant improvements.

### 2.2 Project description

The High-Speed Rail project use structures and routes seen in the form of an airport rail link system. The construction size of high-speed rail track is 1.435 meters that is the standard gauge. Two new connecting routes 1) from Phaya Thai to Don Muang airport and 2) from Lad Krabang to U-Tapao airport (Rayong), these routes can access to and from the airports. These expansions will largely make use of existing routes from the State Railway of Thailand and in total comprise 220 kilometers of seamless railway routes. Urban line within Bangkok will see slower speeds of 160 km/hr. (Don Muang Station to Suvarnabhumi Station) while intercity line will reach a maximum speed of 250 km/hr. (Suvarnabhumi Station to U-Tapao Station). The routes will connect to 5 provinces including Bangkok, Samut Prakan, Chachoengsao, Chonburi, and Rayong.





## 2.3 Project Investment Values

2.3.1 Investment Value for High-Speed Railway Project	
1) Land acquisition	3,570.29 million Thai baht
2) Construction cost for civil work and track works	113,303.88 million Thai baht
3) Construction cost for Red Line Missing Link to construct the tunnel at Chitlada, Northern high speed train, Northeastern high speed train (Bangsue-Don Muang)	7,210.67 million Thai baht
4) Mechanical and Electrical works	24,712.00 million Thai baht
5) Rolling stocks	15,491.32 million Thai baht
6) Consultant service (for construction supervision and independent audit, ICE)	4,429.84 million Thai baht
Total	168,718.00 million Thai baht
2.3.2 Investment Value for Property Development	
1) Makkasan Airport Link area	40,193.26 million Thai baht
2) Sri Racha high speed train area	3,513.01 million Thai baht
3) Facilities & Utilities	1,449.00 million Thai baht
Total	45,155.27 million Thai baht
2.3.3 Total construction cost	
1) Railway system for Don Muang, Suvarnabhumi and U-Tapao Airports	168,718.00 million Thai baht
2) Property Development	45,155.27 million Thai baht
3) Airport Rail Link operation right	10,671.09 million Thai baht
Total	224,544.36 million Thai baht

## 2.4 Comparison between road and rail

(Chattaya, 2004) stated the capability of the mass rapid transit systems to transport enormous amount of passengers including convenient transfer facilities to other transport systems, high economical rate return despite low financial rate of return, and vitally less adverse impact to environment and local arts and cultures. However, only mass rapid transit systems cannot solve traffic congestion problems; the solid traffic policy, feeder systems, linked transportation networks, and urban planning, etc. must be taken into account.

The rates of high-speed rail service cost (information from State Railway of Thailand 04/2018) are entry fee 80 Thai baht + 1.8 Thai baht per kilometer. The total cost is around 476-500 Thai baht and travel time is 2 hours and 20 minutes.

The distance by car between Don Muang to U-Tapao around 189-200 kilometers, time travel at least 3 hours, the cost is at least 600 Thai baht (including the fuel and toll way – motorway). Travel by taxi or van between Don Muang to U-Tapao use time to travel around 3 hours and half or more, the cost is at least 400 Thai baht.

The amount of passenger by the high-speed rail for eastern coastal routes (thousand people per day)		
Technology	In 2000	In 2020
<u>HRS 200</u>	57.0	130.0
<u>MMG</u>	56.1	128.7

## 2.5 Estimated the number of passengers

Analysis of passenger numbers by passenger type and purposes of travel as follows:

- Passengers travel between Bangkok and Eastern coastal
  - Business
  - Go/ Back to work
  - Other purposes
- Passengers travel only Eastern coastal
  - Business
  - Go/ Back to work
  - Other purposes
- Passengers travel between airports
  - Airport passengers
  - Airport workers
  - Passengers from airport surrounding

MMG run 150 km/hr. with 1 meter track

HSR200 run 200 km/hr. with 1.435 meters track (the standard gauge)

(Ekkarat, 2014) stated the suggestion for respond to expectation of passengers are many factor such as the travel cost that the service provider should be set the properly price to construction but not too high. Service convenience such as the connectivity from airport to sky train, subway or bus station. On-board comfort, the quality and space of seat, and on-board should be clean.

## 2.6 The problem and effect from construction

(Pakpoom, 2015) study about the structure of high-speed rail to Rayong. He stated that the design of high-speed rail and station should be support the amount of travelers. Convenient and safety should be concerns.

1. Sri Racha people concerns about drainage at the point where the railway established because some points had been face flooding problems already. May affect to people houses.
2. People concern about noise pollution both from construction working and when the rail running.
3. The construction will cause damage to the surrounding roads. Like that is caused by the creation of motorway.

### 3. Research Methodology

#### 3.1 Research Design

Researcher makes the content analysis for analyze the factors of the high-speed rail linked three airports project

#### 3.2 Processing

##### 3.2.1 Research general information

Research about the high-speed rail, the high-speed rail linked three airports project, the cost of investment and construction.

##### 3.2.2 Collect the data

Researcher collect the data from the another researches. The comparison of different way to travel Don Muang – U-Tapao (Rayong), problems and effect from the high-speed rail linked three airports project

##### 3.2.3 Analyze the data

##### 3.2.4 Summary

### 4. Anticipated Results

#### 4.1 Benefits

From Bangkok to the eastern coastal are good route because construction cost rather inexpensive and many passengers will use this route. The EEC also has another priority project is “New Cities or Smart Cities” that will have completely public utilities such as residence, hospital, university, and department store. Together with the high-speed rail station at Chacerngsao, that can development province in accordance with the purposes of EEC project.

The connection routes three airports will help to reduce traffic congestion that caused by the amount of using private car from Pattaya to Rayong. Even if the calculation of travel cost between private cars and high-speed rail are similar but travel by high-speed rail can more reduce time, have a fixed schedule (knowing arrive time), fixed costs different from private car that the travel time and cost are non-fixed, it depends on depart time.

#### 4.2 Economic

From the project to take U-Tapao airport to be commerce airport (the third international airport in Thailand). That can reduce the passengers’ congestion at the airport. Reduce oil consumption. Reduce travel time. Reduce pollution from using cars. Developing economic along the route. Employment and inputs at the “new city” are higher rates and the government can raise taxes. The value added from the developing economic area around the high-speed rail route.

Makkasan will be adding to the main station. The problem is that the existing station is not connected to the BTS, that the parking is required. Makkasan area will adjustments new traffic system.

Sri Racha area wills development of the station and repair shop. Private pay land rental to the SRT.

The employment rates from the related business of the project are higher. For the construction part estimated 16,000 workers. Use the materials in country for construction such as cements.

### 4.3 Worthiness

The rates of high-speed rail service cost (information from State Railway of Thailand 04/2018) are entry fee 80 Thai baht + 1.8 Thai baht per kilometer. The total cost is around 476-500 Thai baht and travel time is 2 hours and 20 minutes.

The distance by car between Don Muang to U-Tapao around 189-200 kilometers, time travel at least 3 hours, the cost is at least 600 Thai baht (including the fuel and toll way – motorway). Travel by taxi or van between Don Muang to U-Tapao use time to travel around 3 hours and half or more, the cost is at least 400 Thai baht.

The estimation information can showed the competitive advantages of the high-speed rail.

### 4.4 Solution

Noise outside the train will have an environmental impact on the occupants along the line. Lowest speed rail train especially the external sound requirements. In Japan, It is one of the most stringent requirements in the world. From the perspective of environmental conservation Japanese standards will be most needed.

The details of the volume include:

A) For trains that are parked on a straight and flat surface; all doors are closed. And backup systems that work simultaneously under. Most energy-consuming conditions

B) For trains running at speeds of 250 km / h. accelerate or reduce speed. Including brake with friction and every system working are with the door closed.

The flooding problem should solve by raise the ground around the construction area, improved drainage system optimization by construction the pumping well or drains to release water.

After finish the construction, the building contractors should maintenance and repair the road and area by good quality material.

## 5. Conclusion

All countries have the same opinion about the railway connection. Compare capitalize on road transport. It is a safety public transport and reduces air pollution caused by road transport. Expansion of the economy to dispersed regions. And attract passengers from various types of passenger back to use the train. It may be the center of future Southeast Asian transport.

The high-speed rail project will make the economic in country better related to the objective of EEC. It can attract tourists well because travelling between Bangkok and Pattaya is convenience. And the government can collect the tax more. The values of investment attract foreigner investors to invest to this project. The economy in the area in which high-speed trains pass is better. There are many people traveling. People in the project area have opportunity to invest the business to increase their income. Higher employment rates in related businesses. And the construction is also using domestic materials to reduce costs.

For the problem that people concern can solve by the general solution to improve the project, environment and people, that the responsible of agency.

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## Behavioral Factors Influencing Partner Trust in Logistics Collaboration



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# Behavioral Factors used power Partner Trust in Logistics Collaboration

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## Abstract

Logistics collaboration has emerged a prevalent strategy to mitigate challenge individuals and organizations encounter. A successful collaboration, however, depends on certain trustworthy behaviors partner exhibit. To that end, understanding aspects constituting behavioral uncertainty and mechanisms by which such aspects affect partner trust is a necessary. This necessity counts on emergent behavioral trust uncertainties, constituted by partner's actions and interactions occurring during collaboration. While this is a necessary requirement, most of the studies in the literature lack to take into account the influence of behavioral uncertainty on collaboration and partner trust. To that effect, this paper uncovers outlined limitation by establishing behavioral factors influencing partner trust in operational stage of logistics collaboration. To accomplish this objective, a systematic literature review (SLR) is deployed to consolidate research domains of logistics, supply chain, collaboration, and trust. SLR proceeds by defining a review protocol, followed by a search process conducted in 5 databases using 20 search terms on articles published between 2001 and 2015 inclusively. Among findings this SLR has revealed are four behavioral factors and thirteen criteria proposed to affect partner trust. Additionally, these factors constitute success and measurable criteria needed for empirical investigation which may employ experimental and/or case-study methods. Moreover, synthesized factors extend further an understanding of behavioral trust in ad hoc collaborative networks, a large part of which being supported by networks of humans and computers.

**Keywords:** Trust Partner, Behavioral, Logistics Collaboration

## 1. Introduction

Logistics collaboration is achieved when two or more companies form partnerships, or work with existing supply chain partners (customers, suppliers and carriers) to optimize transportation operations by sharing truck capacity to cut the high costs of Less Than Truckload shipments and empty backhauls. In particular, logistics collaboration helps to brings supply chain trading partners and logistic service does work together. Logistics collaboration helps to reduce transportation cost and increases delivery reliability.

## 2. Developing a Comprehensive Logistics Monitoring Facilitation Mechanism

Trust is psychology, sociology, economics, computer science, and engineering. This many diverse programs loop for how trust is critical to life of human. As trust is many diverse programs make, its generalised theory remains not reached. As an effect, definitions of trust in the literature are ample, largely compounded with contexts specific to applications. In computer science, trust should be established based on potential risks, context-dependent, and may represent system reliability Computer Science and Engineering. In social, trust has a prestige whose purpose to refuse dislike. In economics, high trust lowers costs and speed up your business, and low trust adds cost and slows everything down. As mentioned, the following are some of the trust definitions proposed in the literature. According to Frank Sonnenberg, author of Follow Your Conscience, trust is like blood pressure. It's silent, vital to good health, and if abused it can be deadly. According to Bob Vanourek, author of Triple Crown Leadership, trust is built when someone is vulnerable and not taken advantage of. Harold Duarte-Bernhardt, define trust is involved in all the basic elements of a healthy relationship: namely, love (respect and consideration for another person), communication, commitment and honesty. According to K. Cunningham, trust is something that is difficult to establish. According to Arthur Ashe is credited with saying, Trust has to be earned, and should come only after the passage of time.

The definition by Bob Vanourek, built when someone is vulnerable and not taken advantage of this is a difficult to know psychological and physical of partner as now but can ask and observe on that moment is can come to talk or can't come to talk may cause not credible. While sounds to be more of psychology, partner trust can good be defined and represented under confidence and credible to trust. The definition applies to individual and organizational relationships. Partner trust to organizational relationships is have credible and weight to trust about work and decision making. According to K. Cunningham, trust is something that is difficult to establish. It is very fragile that needs to be taken care of. Once trust breaks or shatters into pieces, it is very difficult to rebuild it.

## 3. Partner trust

Arthur Ashe is credited with saying, Trust has to be earned, and should come only after the passage of time. That's the conventional wisdom. Surface level trust is common. It happens all the time. But finding someone you can trust with your life is a much taller order. That kind of trust requires a more proactive approach. In other words, sitting back and waiting for partner to earn your trust isn't likely to create a deep sense of loyalty. If you want that kind of trust, you'll have to build it on purpose as a family. For how to build relationship with partner is the practice of giving trust builds trust. But that's just the beginning; to create a really deep sense of trust, with partner will need to know what issues are the most important to you. Must have to openly share some experience or information of company and share together. This is, itself, an act of trust. And once both know the other's core fears about trust violation, Will be able to practice giving each other trust in those specific areas. For example of practice, would be to talk to partner about the things that cause to lose trust. Explain feelings. Let partner know why these things make you uncomfortable. Don't sugars coat it or act like it's no big deal. Tell partner in no uncertain terms that this is the kind of stuff that could undermine your trust in partner. However, communication and used word for communicate can build better relationship with your partner but not just talk but operate following of the word you saying.

#### 4. Review protocol

A systematic literature review (SLR) is to connected behavior factors attracting partner trust. A society with Restricted Liability (SRL) an entity that is established under the Societies with Restricted Liability Act, but also identifying key scientific contributions on a concerned topic. Agreeing to denyer, SLR for details how a study is behavior, enabling readers to draw a reason and essential conclusion. According to Thorpe et al., SLR offers broad cover by applying systematic strings and obligation within have more experience electronic databases.

Step of SLR for the first step is review planning, plan the review effort and training activity. Next step, have question formulation, define the research question. Next, search strategy defines the review scope and search strings. Next, selection process defines inclusion and exclusion criteria. Strength of evidence defines what makes a high quality. Analysis extracts the evidence from the selected papers. Synthesis structure the evidence in order to draw conclusions. Finally, process monitoring ensures the process is repeatable and complete. All of step can know how to studies behavior of partner in company and can adapt behavior to connect relationship with partner and to build better relationship in the past and future to do work together as well.

#### 5. Conclusion

This review has drawn many useful implications to both, practitioners and academia. To practitioners, trust building in logistics collaboration must be supported with relationship and behavioral of partner. Although acting this requirement may offer one time benefits, there can be long-term disadvantages due to negative experiences. Behavioral trust is built relationship of partner in company, individual and firms are observing on uncertainty with behavior factors. individuals and firms inspiring to collaborate or already collaborating are impulse to care on how they exchange information, allocate incentives, compromise conflicting preferences, and less opportunity.

The present paper has provided thorough review, findings, and implications concerning behavioral factors which influence partner trust in logistics collaboration. While this is true, an acknowledgment of limitations of this study is provided. Firstly, whereas trust in logistics collaboration is also affected by non-behavioral factors, this review concentrated on behavioral ones because they are closely aligned to operate stage requirements. Secondly, applied SLR may have left out some works in databases which were not specified in review obligation. Following this limitation, it is acknowledged that synthesized behavioral factors may not be universally careful.

The all information will partner trust must have confidence, more experience of work and in real life, good behavior to connect with partner. However, if better behavior must be receive good partner in logistic connection. Logistics collaboration must used trust to receive belief of work and for developing relationship between partner and company to drive business bigger than now.

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# Organization and Human Resource Management

**RCGR<sup>2nd</sup>  
2018**





0008

**Quality of Work Life Affecting Organizational Commitment  
of Officers in SC Asset Public Company Limited**

**RCGR<sup>2nd</sup>  
2018**

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# Quality of Work Life Affecting Organizational Commitment of Officers in SC Asset Public Company Limited

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## Abstract

This research aimed to investigate the Quality of Work Life Affecting Organizational Commitment of Employees in SC Asset Public Company Limited. The research methodology is survey research by using questionnaires to collect data. The population is the employees in SC Asset Public Company Limited. Proportional stratified probability sampling was applied in this research. The questionnaires were verified for content validity by experts and tried out the reliability. The statistical analyses were frequency, percentage, mean, standard deviation and multiple regressions. The research results show that quality of work life in terms of Adequate and Fair Compensation affecting organizational commitment of employees in SC Asset Public Company Limited.

**Keywords:** Quality of Work Life, Organizational Commitment

## 1. Introduction

Quality of Work Life is an important tool in the human resource management, and ensures a balance between work life and personal life. The coordination between people and work harmoniously make the job satisfaction to live happily until the Organizational Commitment of Employees. Meanwhile, the author's interest to study about Quality of Work Life Affecting Organizational Commitment of Employees in SC Asset Public Company Limited.

## 2. Literature Review and Hypotheses

Quality of work life means that individual's satisfaction receiving from experience and environment of work responded to needs and desires of individuals in both physical and mental health aspects through organizational process preparing to support wealthiness of employees including adequate and fair compensation, safety and healthy working conditions, development of human capacities, growth and security integration, constitutionalism, work-life balance and social relevance.

Adequate and fair compensation means that all forms of reward in which staff in company to get away from work in the organization by getting enough to live by the standards of society. Fair compensation comparing to their positions and other positions have similar job characteristics.

Safety and healthy working conditions means that staff in company should not be in the physical environment and the working environment in which contributes to poor health and should set standards regarding environment that promotes health including control over the sounds, smells and visual disturbances.

Development of human capacities means that providing opportunities for staff in company to use their skills knowledge. As a result, staff in company have sense that they have value and are feeling challenged from their work.

Growth and security means that staff in company has a chance to advance to higher position than ever as recognized by colleagues, relatives and others in society as well as a steady income for the positions they do.

Social integration means that staff in company feel that their valuable and successful. It affects staff in company in its freedom from bias and changing in the better way. Constitutionalism means that staff in company has the rights to anything and how to defend their rights. This would depend on the culture of their organization. That is how much respect the right to privacy and acceptance to the idea conflict including the standards for fair returns to staff in company. Work-life balance refers to work of staff in company should be balanced their personal life and family. This role is about dividing time, career and travel which has approximate proportion for the personal and family time including advance and get a better reward.

Social relevance refers to the activities of work unites are involved in society responsible production.

Organization commitment means the desire of individuals to maintain their organization members, the commitment towards the benefits receiving from organization, commitment and recognition of value towards organization, organization loyalty, believe and acceptance of value consisting of Affective commitment, continuance commitment and Normative commitment. Affective commitment refers to the desire of staff in company to be involved in the company. Staff in company is dedicated effort in working for the company. If staff in company has more affective commitment, it was a better performance.

Continuance commitment refers to the behavior of staff in company expressed in the form of a continuous or consistent behavior in the workplace. Try to maintain membership of their organization. Normative commitment mean that loyalty and willingness to contribute to the company

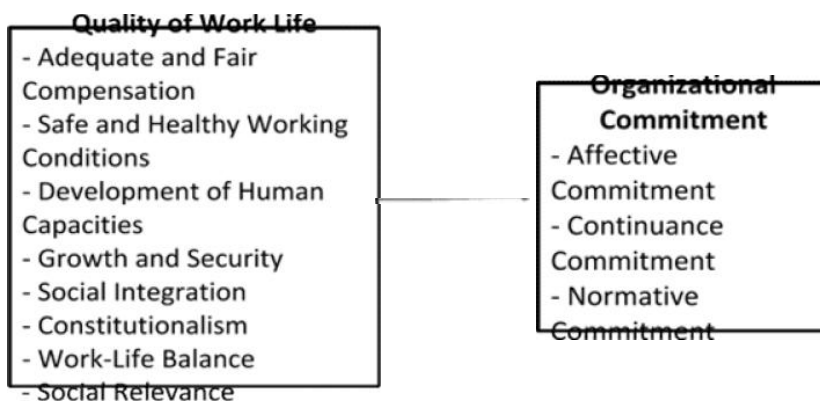
which is the result of social norms and corporate ethics or conscience. Staff in organization will feel that they were a member of the organization and commit to the organization.

Sompong Morarit (2014) conducted the research on quality of work life affecting organizational commitment of health staff at health center region 10 of Chiang Mai province found out that quality of work life affecting organizational commitment of health staff at health center region 10 of Chiang Mai province.

Walton (1975), the QWL is getting importance as a way to rescue human and environmental values that have being neglected in favor of technological advancement of the productivity and economic growth.

Patsaya Jantravukorn (2014) conducted the research on quality of work life affecting organizational commitment of teachers in secondary school at secondary educational service area office 4 Saraburi province found out that quality of work life in terms of safety and healthy working conditions, growth and security, social integration, constitutionalism and work-life balance affecting organizational commitment of teachers in secondary school at secondary educational service area office 4 at Saraburi province.

Worawan Tovivat (2012) conducted the research on quality of work life affecting organizational commitment of Thai Customs officer at a central area in Bangkok found out that quality of work life in terms of adequate and fair compensation, work-life balance and social relevance of Thai Customs officer at a central area in Bangkok.



**Figure 1 Conceptual Framework**

*Hypotheses*

Quality of work life has an effect towards organizational commitment of employees in SC Asset Public Company Limited.

### 3. Research Methodology

The Methodology of this research is the quantitative and survey research. The populations are officers' employees in SC Asset Public Company Limited of 486 people. (Source: Human Resource Department, November, 2018). The specified proper sample size by using the researcher used the table of Krejcie and Morgan (1970) so the sample size is 219 people. The questionnaires have the reliability value at the statistical significance level of .05.

The author designed the research tool from concepts, theories and related literature reviews to cover the studied point, specified objective and hypotheses for using to develop questionnaire by experts' opinions to examine content validity. The researcher was created from the study of research Quality of Work Life Affecting Organizational Commitment of Employees in SC Asset Public Company Limited. The statistics using for data analysis are frequency and percentage to analyze general information of respondent. Mean ( $\bar{X}$ ) and Standard Deviation (S.D) are used for quality of work life Affecting Organizational Commitment. Multiple Regression Analysis is used for Quality of Work Life Affecting Organizational Commitment of Employees in SC Asset Public Company Limited.

### 4. Results and Discussion

There were 219 employees of sample size, who completed the questionnaire, responded the questionnaire. Most of the respondent is male or 126 or 57.5%. 105 employees or 47.9% are the age 25-29 years old. 107 employees or 49.5% are single status. 172 employees or 79.6% graduated in the bachelor degree. 112 employees or 51.9% of most respondent have experienced in their current companies between 1-5 years. 81 employees or 37.5% have the average income at THB 20,000 – 25,000 above SC Asset Public Company Limited.

**Table1** Mean, Standard Deviation (S.D) and Interpretation of Quality of Work Life and Organizational Commitment

	<b>Quality of Work Life</b>	$\bar{X}$	S.D	Interpretation
	<b>Adequate and Fair Compensation</b>			
1	You received all forms of adequate compensation in your company in order to pay costs of your living in the current economy.	4.30	.614	highest
2	You received all forms of proper and fair compensation compared to other company in the same job and industry.	4.17	.713	high
	<b>Safe and Healthy Working Conditions</b>			
3	Your work has taken care of the environment in order to provide safety, clean, no pollution and healthy working conditions away.	4.19	.640	high
4	Your workplace has the clear rules or the measures on the working conditions, safety, accident prevention and environment to promote healthy.	4.18	.717	high
	<b>Development of Human Capacities</b>			
5	Your work is the interesting and challenging job to give you the opportunity to develop the knowledge and skills to work.	4.24	.703	high
6	Your work can use your skills to work and feel challenged and valued in the work.	4.22	.677	high

<b>Growth and Security</b>				
7	You feel that your work, your company and your revenue are stable.	4.19	.746	high
8	You are supported from your supervisor to the progressive career.	4.20	.701	high
<b>Social Integration</b>				
9	You have a good relationship with colleagues at all times.	4.08	.716	high
10	You can get help from your colleagues always.	4.17	.746	high
<b>Constitutionalism</b>				
11	You feel that the evaluation of your performance related to the fair compensation.	4.22	.664	high
12	You think that promotion process of employees in your company is transparent and fair.	4.26	.669	high
<b>Work-Life Balance</b>				
13	You feel satisfied with your work time, personal and family time.	4.21	.718	high
14	Obligations on your work are not a barrier to your family time.	4.22	.717	high
<b>Social Relevance</b>				
15	You get a chance to participate in the activities of your company that are beneficial to your community or society.	4.19	.721	high
16	Your company made a part of social responsibility such as waste disposal or reduction or other relevant in your manufacturing.	4.16	.748	high

<b>Quality of Work Life</b>		<b>X</b>	<b>S.D</b>	<b>Interpretation</b>
1	Adequate and Fair Compensation	4.23	.663	high
2	Safe and Healthy Working Conditions	4.18	.678	high
3	Development of Human Capacities	4.23	.690	high
4	Growth and Security	4.19	.723	high
5	Social Integration	4.12	.731	high
6	Constitutionalism	4.24	.666	high
7	Work-Life Balance	4.21	.717	high
8	Social Relevance	4.17	.734	high
<b>Total</b>		<b>4.18</b>	<b>.700</b>	<b>high</b>

<b>Organizational Commitment</b>		<b>X</b>	<b>S.D</b>	<b>Interpretation</b>
<b>Affective Commitment</b>				
1	You are willing to work in this company for your lifetime.	4.19	.748	high
2	You feel involved in this company and dedicated effort in working for this company.	4.23	.708	high
3	Although other companies have to offer a higher compensation than this company but you do not think to leave this company.	4.10	.687	high
4	You will not leave this company because you feel a sense of obligation to employees and executive in this company.	4.18	.659	high
<b>Continuance Commitment</b>				
5	You feel that the problem of your company is your problem.	4.19	.704	high
6	You continue to work every day as this company, this is your second home.	4.15	.727	high
7	You try to work for this company fully without thinking about leaving this company.	4.17	.675	high

Normative Commitment				
8	You feel that you are a part of this company.	4.15	.770	high
9	This company has meant a lot to you without changing to the other companies.	4.17	.702	high
10	You have to loyalty of this company and willing to dedicate yourselves to this comoany.	4.07	.813	high

Organizational Commitment		$\bar{X}$	S.D	Interpretation
1	Affective Commitment	4.17	.700	high
2	Continuance Commitment	4.17	.702	high
3	Normative Commitment	4.13	.761	high
<b>Total</b>		<b>4.15</b>	<b>.721</b>	<b>high</b>

From Table 1, it was found out that the respondents have the opinion towards quality of work life at high level of the average = 4.18. When analyzing each aspect, it was found out that there are some aspect having very high level of the average, for example, Constitutionalism has the maximum average at = 4.24, the second level are Adequate and Fair Compensation and Development of Human Capacities at = 4.23, Work-Life Balance is at = 4.21, Growth and Security is at = 4.19 and Safe and Healthy Working Conditions are at = 4.18 accordingly.

**Table2** Results of multiple regression analysis between quality of work life and organizational commitment

Variables		$\beta$	$p$
	Constant	1.289	.000
1	Adequate and Fair Compensation	.211	.000
2	Safe and Healthy Working Conditions	-.027	.729
3	Development of Human Capacities	-.145	.065
4	Growth and Security	.063	.446
5	Social Integration	-.101	.157
6	Constitutionalism	.092	.241
7	Work-Life Balance	-.033	.673
8	Social Relevance	.092	.111
9	$R^2$	.379	
10	Adjusted $R^2$	.355	
11	F-Value	16.002	

\*significant at the level 0.05

As seen from Table 2, the coefficient of determination, Adjusted, accounted for 35.5% of organizational commitment, Adequate and Fair Compensation  $\beta = .211$ ,  $p < .05$  have an effect towards organizational commitment with significantly at 0.05. If the executive focus on more development of adequate and fair compensation the employees do more organizational commitment also. It also mean that the employees satisfice for this point and made their willingness to work with. It conforms to the research study of Worawan Tovivat (2012) conducted the research on quality of work life affecting organizational commitment of Thai Customs officer at a central area in Bangkok found out that quality of work life in terms of adequate and fair compensation, work-life balance and social relevance of Thai Customs officer at a central area in Bangkok.



## 5. Conclusion and implications

The executive should create adequate and fair compensation of employees in order to employees affecting organizational commitment. The executive should focus on adequate and fair compensation because employees want stability in welfare and wages to better support.

## 6. Future Research

There should be a study of other variables which might have an impact on organizational commitment i.e. and etc.

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0023

**Work Motivation Affecting Organization Commitment of  
Staffs at Finance Division of Land Development Department**

**RCGR<sup>2nd</sup>  
2018**

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# **Work Motivation Affecting Organization Commitment of Staffs at Finance Division of Land Development Department**

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### **Abstract**

The research aimed to investigate work motivation affecting organization commitment of staff at Finance Division of land development department. This research was the quantitative research. Questionnaires were used to collect data from the sample size. staff at Finance division of Land Development Department and willing to provide information 92. The statistical analyses of the data were frequency, percentage, mean, standard deviation and multiple regression. The research result shows that work motivation factor of advancement and development of training affecting Organization commitment of staff at finance division of land development Department.

**Keywords:** Work Motivation, Organization Commitment

### **1. Introduction**

The importance of the issue incentives to work, affecting organization commitment of staff at finance division of land development department. The finance division of land development department. The agency responsible action on finance and accounting. fiscal management, supply management, premises and vehicles of Land Development Department. Interoperability, or support the work of other agencies involved. or assigned by the Finance Division of Land Development Department. An agency of Land Development The staff consists of government officials, government staff into permanent staff, temporary workers and the good service. The personnel who helped to propel the organization to function effectively. Factors such as income, status as a motivation in the work of the security personnel. And because there are plenty. But there are not enough staff to work. Make each person has to serve multiple functions in a single individual. Makes work sometimes lacking in performance. And the staff at the agency, it is the lack of personnel to work sometimes. Some make no organization commitment. This is why researchers are so interested to learn that the people who are motivated to work, however, the influence of organization commitment.

## 2. Literature Review and Hypothesis

**Work Motivation** is the driving force or any condition in individual which drive work occurred, direction of works, intensity, and timing. So, motivation is mental process occurred from interaction between individual and environment.

**Intrinsic motivation** is condition of person which would like to self-learning, no require any help from others.

**Achievement** is skills of individual to solve the problems to get successful of works. Once the works were completed, it will make satisfy in the individual.

**Recognition** is the recognition of individual from manager, colleagues, and others. Individual may be recognized in form of appreciate, encourage, or acceptance of competence.

**Authority in duty** is when the individual was assigned to works from supervisor. It is free to work fully.

**Challenge** is to be able to work in the right capacity and be an important part of the organization.

**Participation** in the job is getting to be a consultant, to comment or suggestion of wok.

**Advancement** are channels of work that can lead to higher levels of work.

**External motivation** is the need of the person to show the behavior by extrinsic incentives, reinforcement or rule as a condition that allows the person to show desirable behavior. External incentives may rely on positive external incentives to keep desirable behavior and concentration on behaviors such as rewarding or gaining positive results such as expressing admiration, giving gifts or money, etc.

**Development of training** is supported by training and further education.

**Policy and administration** is the management of the organization, communication within the organization.

**Promotion Opportunity** is the encouragement to get a higher position.

**Technology** is the modernization of tooling equipment. Facilities used in the work

**Interpersonal Relation Peers** is a verbal expression with good relationship. Can work together, have a good understanding each other.

**Supervisor** is the way that the supervisor use to command, such as care for subordinates and colleagues, intimacy, and advising on both work and personal matters.

**Security** is a safe working environment.

**Increasing pay** is an increase in salary or welfare as appropriate.

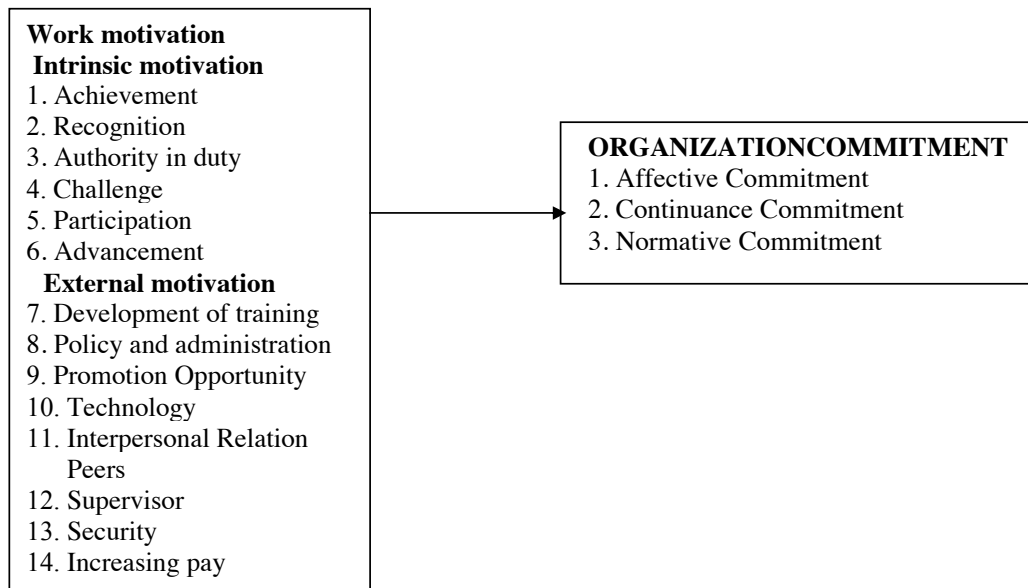
**Affective Commitment** refers to the desire of staff to participate in the organization. The individual will be dedicated to the organization's work. If members of the organization are mentally bound, they will be good performers.

**Continuance Commitment** is an emphasis on the behavioral expression of members of the organization when the person's commitment to the organization is expressed in a continuous or consistent behavior pattern. Try to maintain the membership without moving.

**Normative Commitment** refers to the desire at the commitment to the organization. Be loyal and willing to devote to the organization. It is the result of the norms of the organization and society, the ethics or the mind. A person feels that he or she is a member of the organization, they should have the loyalty to the organization.

Wanna Arwon (2557) has studied the subject. Job Motivation and Organizational Commitment of Parliamentary Commissionerat An Operational Level, Secretariat of The House of Representatives According to studies, The research result shows that work motivation to different organizational commitment at different levels of statistical significance 0.05.

Chuthamat Pojsompong (2560) has studied the subject. Leadership and motivation to work, affecting the organizational commitment of personnel and strategic planning division. The Office of the Permanent Secretary for Public Health According to studies, it has been found that Personal factors can affect the position of personnel and organizational commitment. Position by analysts and academics plan to have a computer and organizational commitment differences are statistically significant at the 0.05.



**Figure 1** Conceptual Framework

## **Hypothesis**

The incentive to work motivation different have an effect Organization commitment.

### **3. Research Methodology**

The Methodology of this research is the quantitative and survey research. The staff at Finance Division of Land development of 120 people. The specified proper sample size by using the researcher used the table of Krejcie and Morgan (1970) so the sample size are 92 people. The questionnaires have the reliability value at the statistical significance level of .05.

### **4. Result and Discussion**

There were 92 staff of sample size, who completed the questionnaire, responded the questionnaire. Most of the respondent are female 70 people or 66.3 percent. age between 31-35 years or 25 people to 27.2 percent Single 55 people, or 59.8 percent of bachelor's degree 66 people. 71.7 percent had worked for 2 - 5 years and 6 -10 years 25 people or 27.2 percent. work status of temporary staff accounted 44 people for 47.8 percent of the average monthly income of 9000-15000 baht of 42 accounted for 45.7 percent.in at Finance Division of Land Development

**Table 1** Mean ( $\bar{x}$ ) Standard Deviation (S.D) and interpretation of work Motivation of staff at finance division of land development

<b>Work Motivation</b>	<b><math>\bar{x}</math></b>	<b>(S.D)</b>	<b>Interpretation</b>
1. You work according to the objectives set.	3.89	0.73	High
2. You can solve problems, through successful work.	3.90	0.74	High
3. You have the feeling that the work quality. And work effectively	3.85	0.73	High
4. The works and ideas of the people is the acceptance of colleagues.	3.63	0.69	High
5. You have the freedom to decide to operate fully	3.52	0.67	High
6. You are assigned tasks that match their knowledge. Ability to work	3.59	0.76	High
7. The job description that was made for a challenging person.	3.75	0.75	High
8. The work you do is important to the organization	3.79	0.85	High
9. You are a person who contributed to the success of the agency.	3.52	0.82	High
10. Suggestions in your work is being used.	3.18	0.86	Medium
11. Do you feel proud of the results of their own work.	3.76	0.88	High
12. Work in the position of the people has the opportunity to a higher position.	2.92	1.06	Medium
13. You have the opportunity to develop the abilities of the person.	3.62	0.81	High
14. Organization of training seminars for developing students ' abilities.	3.57	0.92	High



<b>Work Motivation</b>	$\bar{x}$	(S.D)	<b>Interpretation</b>
15. The agencies of the system of management that enables more comfortable work	3.67	0.80	High
16. Regulations of the Organization Make you work more efficiently	3.66	0.79	High
17. The agency provides support and promotion of personnel who are performing well	3.63	0.81	High
18. When you get a higher position. Make you work hard, up	3.76	0.91	High
19. Technology. Help you work more efficiently	4.06	0.74	High
20. Technology equipment is in working condition with the task ready to work.	3.90	0.77	High
21. You organization of the modified using modern technology at all times	3.80	0.83	High
22. Your supervisor understands the issues, and attention to the work of the people as well.	3.82	0.88	High
23 Supervisors, human relationships and caring for all employees as well	3.83	0.90	High
24. You have the cooperation of other departments within your organization as well.	3.68	0.78	High
25. Your colleagues are friendly and help support each other.	3.84	0.76	High
26. Are you happy in working with friends to join your organization	3.85	0.81	High
27. Working environment without endangering the health of your body.	3.75	0.82	High
28. You will receive a compensation based on knowledge. The ability to do your job.	3.67	0.81	High
29. When you receive the compensation increases. Make people willing to do more, and more efficient.	3.79	0.83	High
30. You will have to adjust the salary increase, depending on the results of the work and the lack of the line la people.	3.78	0.81	High
31. You receive other benefits and compensation increases. When you work towards achieving goals set appropriately.	3.64	0.83	High
<b>Work Motivation</b>	$\bar{x}$	(S.D)	<b>Interpretation</b>
1. Achievement	3.88	0.68	High
2. Authority in duty	3.63	0.69	High
3. Challenge	3.52	0.67	High
4. Work itself	3.71	0.67	High
5. Participation	3.35	0.77	High
6. Advancement	3.43	0.71	High
7. Development of training	3.57	0.92	High
8. Company policy and administration	3.66	0.70	High
9. Promotion Opportunity	3.76	0.91	High

Work Motivation	$\bar{x}$	(S.D)	Interpretation
10. Technology	3.92	0.69	High
11. Interpersonal Relation Peers	3.83	0.87	High
12. Supervisor	3.79	0.65	High
13. Security	3.75	0.82	High
14. Increasing pay	3.72	0.70	High
<b>Work Motivation</b>	<b>3.70</b>	<b>0.56</b>	<b>High</b>

From table 1, it was found out that the respondents have the Work Motivation at high level of the average  $\bar{x} = 3.70$ . When analyzing each aspect, it was found out that there are some aspect having very high level of the average, for example, Technology has the maximum average at  $\bar{x} = 3.92$ , the second level is Interpersonal Relation Peers has the average at  $\bar{x} = 3.83$ , Commander at  $\bar{x} = 3.79$ , Possibility Growth has the average at 3.76 Security has the average at  $\bar{x} 3.75$ .

**Table 2** Mean ( $\bar{x}$ ) Standard Deviation (S.D) and interpretation of Organization commitment of staff at Finance Division of Land Development

Organization commitment	$\bar{x}$	(S.D)	Interpretation
<b>Affective Commitment</b>			
1. You are willing to work in this company for your lifetime.	3.65	0.94	High
2. You feel involved in this company and dedicated effort in working for this company	3.71	0.76	High
3. Although another companies have to offer a higher compensation than this company but you do not think to leave this company	3.46	0.87	High
4. You will not leave this company because you feel a sense of obligation to employees and executive in this company	3.35	0.91	High
<b>Continuance Commitment</b>	3.40	0.89	High
5. You feel that your problem of your company is your problem.			
6. You continue to work every day as this company, this is your second home.	3.67	0.84	High
7. You try to work every day as this company fully with thinking about leaving this company	3.41	0.84	High
<b>Normative Commitment</b>			High
8. You feel that you are a part of this company	3.65	0.87	
9. This company has meant a lot to you without changing to the other companies.	3.48	0.78	High
10. You have the loyalty of this company and willing to dedicate yourselves to this company	3.59	0.80	High
<b>Organization commitment</b>	<b><math>\bar{x}</math></b>	<b>(S.D)</b>	<b>Interpretation</b>
1. Affective Commitment	3.54	0.74	High
2. Continuance Commitment	3.49	0.72	High
3. Normative Commitment	3.57	0.72	High

Organization commitment	$\bar{x}$	(S.D)	Interpretation
Organization commitment	3.54	0.70	High

From table 2, it was found out that the respondents have the Organization commitment at high level of the average  $\bar{x} = 3.54$ . When analyzing each aspect, it was found out that there are some aspect having very high level of the average, is Normative Commitment has the maximum average at  $\bar{x} = 3.57$ , the second level is Affective Commitment has the average at  $\bar{x} = 3.54$ , and Continuance Commitment has the average at  $\bar{x} = 3.49$ .

**Table 3** Results of multiple regression analysis between Work motivation and Organization commitment

Variables	$\beta$	<i>p</i>
Constant	.932	.020
1. Achievement	-.115	.346
2. Authority in duty	-.085	.486
3. Challenge	.159	.155
4. Work itself	.120	.489
5. Participation	-.131	.271
6. Advancement	.293	.019*
7. development of training	.214	.040*
8. Company policy and administration	.247	.108
9. Promotion Opportunity	-.120	.197
10. Technology	-.190	.118
11. Interpersonal Relation Peers	.002	.988
12. Supervisor	.172	.332
13. Security	.68	.531
14. Increasing pay	.111	.507
R	.745	
R Square	.555	
Adjusted R Square	.474	
F-value	6.848	

\* significant at the level 0.05

As seen from Table 3, the coefficient of determination, Adjusted, accounted for 0.474 of Organization commitment. Advancement  $\beta = 0.293$ , *p* – value = 0.019 and Development of training  $\beta = 0.214$ , *p* – value = 0.040 Affecting the organizational commitment of staff gold warehouse. land development department Statistically significant at the 0.05 level.

## 5. Conclusion and Implications

1. The executive should foster advancements in proper working order. The competitive examination To be able to move and make more progress in the work. The promotion must be fair and open. It should encourage the development and training. Opportunity for people to learn the job prepare to move position

2. The executive should developed and trained. learn something new, there may be a rotation of work done within the group itself. The opportunity for employees to improve work.

## **6. Future Research**

1. Should study of other factors affecting organizational commitment (i.e. performance efficiency, attitudes towards colleagues, attitude toward organization etc.).

2. Should study of other organizations. With the same factors that have led to personnel and organizational commitment. The guidelines apply to the organization of their own for the better. And affect the way the organization.

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0025

**Organizational Culture Affecting Organizational Citizenship  
Behavior of Employees in Saha Pathanapibul Public Company Limited**



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# **Organizational Culture Affecting Organizational Citizenship Behavior of Employees in Saha Pathanapibul Public Company Limited**

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## **Abstract**

The research aimed to investigate the organizational culture affecting organizational citizenship behavior of employees in Saha Pathanapibul Public Company Limited. This research was the survey research. Questionnaires were used to collect data from the sample size of the employees in Saha Pathanapibul Public Company Limited 210. The statistical analyses of the data were frequency, percentage, mean, standard deviation, and multiple regression. The research found that organizational culture in terms of integration, conflict tolerance and communication patterns affect organizational citizenship behavior.

**Keywords:** Organizational Culture, Organizational Citizenship Behavior

## **1. Introduction**

The working environment in an organization is a center of variety working people. Thus, each one has different ideas and attitudes. Working together with other people isn't an easy task. In order to achieve the same goal, there must be something that make people in an organization go in the same direction. Organizational culture is one of important factors that guide both small and large organization. This factor helps adjust each employee's opinions in order to make a decision in the same direction.

Creating organizational culture is a basic step of creating a policy because business owners definitely want the best for their business. In order to apply the culture in the organization should be done in the effective ways throughout the people within a company.

## 2. Literature Review and Hypothesis

Robbins (1994) gave the definition of organizational culture that everything individuals in organization similarly perform is characteristic of those organizations occurring by the mix of attitudes, values, beliefs, norms as well as actions of individual, group, organization, policy and objective of organization, technology, group state and the success of the organization until it comes to the acceptance of people in organization composed of Individual initiative, Risk tolerance, Direction, Integration, Management support, Control, Identity, Reward system, Conflict tolerance and Communication patterns.

Individual initiative represents staff in industry group has freedom to invent something or create new initiative and which should have their responsibility.

Risk tolerance means that staff in industry group has been encouraged to promote confidence and dare to take risks in organizational decisions to changing organization to the new things.

Direction refers to organizational executive set objectives and expectations in performance obviously.

Integration means that the various departments of the organization has been urging for coordination and cooperation to achieve diversity and participation in the work between the units in the organization to support the coordination between the units.

Management support refers to the management team have the clear communication and provide support and assistance to staff in industry group.

Control means that the organization has rules and regulations to control staff behavior in the work.

Identity means that the members of the organization have faith or that they are members of the organization and see the organization as a whole rather than the specific interests of their work units.

Reward system refers to setting the criterion of giving the award such a salary raise or promotion etc. by reward from based on performance more than the close, seniority or preference.

Conflict tolerance refers to the level of the organization encourages staff in industry group can openly criticize and manage conflict.

Communication patterns refer to the level of the official communication by the chain of command.

Organ (1988) mentioned that OCB mean the action over than task of staff in industry group willing to perform and create the benefit for organization. The activities that support the social relationship and cooperation in organization help support the success of organization including Altruism, Courtesy, Sportsmanship, Civic virtue and Conscientiousness.

Altruism means voluntary and willingness of staff in industry group to help work problems solving of colleagues or supervisors including advising new staff.



Courtesy means that gestures of staff in industry group implies respect for others and humility with regard to others to help problems preventing that may occur, compassion for others, interdependence one another, consultation with colleagues before you take any action on jobs.

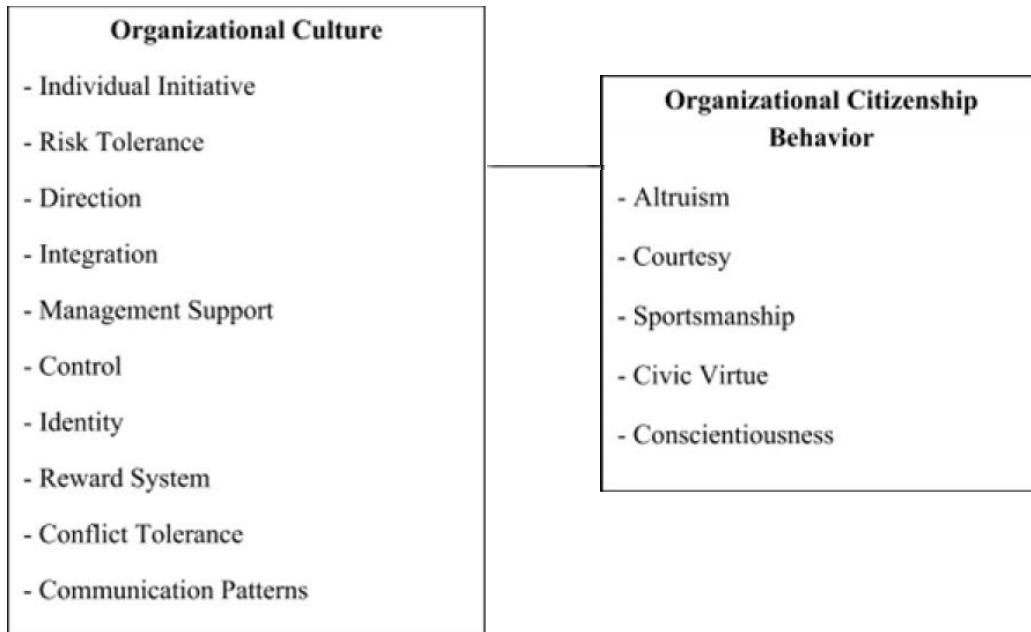
Sportsmanship means tolerance of staff in industry group on what happened, whether grievances, discomfort or even stress. Sometimes, we have the right to express grievances that arise on the job. However, such a complaint may lead management to bear too much burden. Staff in industry group who know waiting for in style of the sportsmanship.

Civic virtue refers to behavior of staff in industry group in term of participation in the processes within the organization, cooperation with the convention, well-kept secret, commenting at the appropriate time and in a format consistent with the organization.

Conscientiousness refers to behavior that expresses acceptance rules and regulations in the organization by respect for the rules and regulations, on time, behave in rules, regard to organizational assets and do not take a job time to do anything other than work.

Kanchanaporn Phanthet (2017) conducted the research organizational culture and quality of work life affecting organizational citizenship behavior and performance efficiency of one of government bank's officers. The sample was 343 employees. The research results revealed that the personal factors as follows gender, age, educational level, marital status, income per month and tenure don't affect organizational citizenship behavior. The organizational culture and quality of work life have an affect towards organizational citizenship behavior of a government bank's employees.

Anchalee Sornthaisong (2017) The study of factors affecting organizational citizenship behavior of employees for environmental consultant company in Bangkok metropolitan. The sample size was 378 persons. The research results revealed that the person factors were gender, age, education, age years of employment, marriage status and income per month has no different influence on organizational citizenship behavior of employees for environmental consultant company in Bangkok metropolitan.



**Figure 1** Conceptual Framework

### *Hypothesis*

1. Personal factors as gender, age, marital status, educational level, duration of employment and income per month that affect organizational citizenship behavior of employees in Saha Pathanapibul Public Company Limited.
2. Organizational culture affect organizational citizenship behavior of employees in Saha Pathanapibul Public Company Limited.

### **3. Research Methodology**

The Methodology of this research is the quantitative and survey research. The population are officers in Saha Pathanapibul Public Company Limited of 460 people. The specified proper sample size by using the researcher used the table of Krejcie and Morgan (1970) so the sample size was 210 people. The questionnaires have the reliability value at the statistical significance level of .05.

The author designed the research tool from concepts, theories and related literature reviews to cover the studied point, specified objective and hypotheses for using to develop questionnaire by experts' opinions to examine content validity. The researcher was created from the study of research organizational culture affecting organizational citizenship behavior of employees in Saha Pathanapibul Public Company Limited. The statistics using for data analysis are frequency and percentage to analyze a general information of respondent. Mean () and Standard Deviation (S.D) were used for organizational culture and organizational citizenship behavior. Multiple Regression Analysis was used for organizational culture affect organizational citizenship behavior of employees in Saha Pathanapibul Public Company Limited.

#### 4. Result and Discussion

There were 210 employees of sample size, who completed the questionnaire, responded the questionnaire. Most of the respondents are female 174 employees or 82.9%, the age between 30 and less than 40 years old are 75 employees or 35.7%, 121 employees or 57.6% are single status, 164 employees or 78.1% graduated in the bachelor degree, 91 employees or 43.3% of most respondent have experienced in their current companies more than 10 years and 87 employees or 41.4% have the income per month at THB 20,000 - less than 30,000 in Saha Pathanapibul Public Company Limited.

Table 1 represent Mean ( $\bar{X}$ ) and Standard Deviation (S.D) of the average of organizational culture and organizational citizenship behavior.

**Table 1** Mean ( $\bar{X}$ ) Standard Deviation (S.D) and interpretation of organizational culture and organizational citizenship behavior.

<b>Organizational Culture</b>	<b><math>\bar{X}</math></b>	<b>S.D</b>	<b>Interpretation</b>
1. Your company supports you to invent, create and initiate new things.	3.1714	.85232	Medium
2. You dare to express new ideas which will be beneficial to the company in meetings even though such ideas are not agreed by the meeting president.	2.9524	.73700	Medium
3. The Company determines clear targets and objectives.	3.8333	.69574	High
4. Employees in the company coordinate with each other and collaborate between sectors in the Company.	3.3952	.67843	Medium
5. Supervisors contact and communicate with you clearly.	3.6048	.73918	High
6. The Company has clear rules and regulations in controlling your behaviors to work effectively.	3.6286	.59112	High
7. You are pleased to introduce yourself that you work in this company.	4.0952	.67808	High
8. The Company has clear system of pay raise, promotion or uplifting of personnel.	2.8429	1.09329	Medium
<b>Organizational Culture</b>	<b><math>\bar{X}</math></b>	<b>S.D</b>	<b>Interpretation</b>
9. When having conflicts, the supervisors will discuss such conflicts in the meeting to find solution together.	3.1524	.82753	Medium
10. Communication is mostly in sequence by chain of command from top to bottom.	3.4952	.76557	High
11. You are fully free in your responsibilities.	3.6190	.78113	High
12. You are ready to accept changes affecting yourself in working for progress of the company.	3.7143	.70153	High
13. You realize that the Company expects what performance from you and it can be clearly measured.	3.5048	.74659	High
14. The Company often arranges activities to stimulate sectors in the Company to have coordination and collaboration behavior in working.	3.2190	.70515	Medium
15. When you have work issues you cannot solve, you inform a supervisor. He/she supports and helps you fully in solving such issues.	3.6619	3.6619	High
16. Your supervisor directly controls your operations so that you work effectively and efficiently.	3.6190	.66175	High
17. When somebody defames a company you are working in,	3.7476	.67641	High

you are ready to introduce yourself as an employee of the Company and to give explanation for good understanding to the Company you are working in.			
18. You see that pay raise, promotion or uplifting of the Company are considered based on your performance rather than intimacy, seniority or preference.	3.0762	.93004	Medium
19. The Company's executives give an opportunity to employees to criticize the Company's policy you disagree with openly.	2.7429	.89152	Medium
20. The supervisors give you a chance to explain or give reasons about mistakes in working by chain of command.	3.3381	.84433	Medium
<b>Organizational Culture</b>	<b>X</b>	<b>S.D</b>	<b>Interpretation</b>
1. Individual Initiative	3.3952	.63092	Medium
2. Risk Tolerance	3.3333	.54319	Medium
3. Direction	3.6690	.62732	High
4. Integration	3.3071	.55742	Medium
5. Management Support	3.6333	.64618	High
6. Control	3.6238	.50015	High
7. Identity	3.9214	.56811	High
8. Reward System	2.9595	.80639	Medium
9. Conflict Tolerance	2.9476	.73016	Medium
10. Communication Patterns	3.4167	.64256	High
<b>Organizational Culture</b>	<b>X</b>	<b>S.D</b>	<b>Interpretation</b>
<b>Organizational Culture</b>	<b>3.4207</b>	<b>.41449</b>	<b>High</b>

<b>Organizational Citizenship Behavior</b>	<b>X</b>	<b>S.D</b>	<b>Interpretation</b>
1. Employees in your company accommodate and help colleagues, supervisors and newcomers.	3.5905	.68049	High
2. Employees in your company care and encourage colleagues when they are desperate or depressed.	3.4857	.79609	High
3. Employees in your company are willing to help colleagues, supervisors and newcomers when they have work-related problems.	3.5381	.83636	High
4. Employees in your company consider impacts on others and help each other to think and prevent problems in working.	3.3286	.77128	Medium
5. Employees in your company are sympathetic to each other.	3.4286	.80497	High
6. Employees in your company rely on each other, discuss with colleagues before taking any actions about works.	3.4286	.74316	High
7. In a meeting, employees of your company are pleased to listen to arguments of others.	3.4667	.77727	High
8. Employees in your company fully work even though they have some frustrations.	3.4524	.67073	High
9. Employees in your company accept changes for learning.	3.3095	.80928	Medium
10. Employees in your company re pleased to join an activity arranged by the company without request.	3.1571	.80612	Medium
11. Employees in your company are pleased to work to achieve the Company's goals.	3.6952	.62060	High
12. Employees in your company always give useful opinions to the Company.	3.4190	.70921	High

13. Employees in your company will strictly comply with the Company's regulations and emphasize appointment and punctuality.	3.4810	.66500	High
14. Employees in your company work by using company's resources worthwhile.	3.3810	.80526	Medium
15. Employees in your company spend time to work for the Company only and never works or do other tasks not involved with the Company.	3.3143	.73614	Medium
<b>Organizational Citizenship Behavior</b>	<b>X</b>	<b>S.D</b>	<b>Interpretation</b>
1. Altruism	3.5643	.68085	High
2. Courtesy	3.4143	.70187	High
3. Sportsmanship	3.4595	.63738	High
4. Civic Virtue	3.4019	.57641	Medium
5. Conscientiousness	3.3921	.64826	Medium
<b>Organizational Citizenship Behavior</b>	<b>3.4464</b>	<b>.53682</b>	<b>High</b>

From Table 1, it was found out that the respondents have the opinion towards organizational culture at high level of the average = 3.4207. When analyzing each aspect, it was found out that there are some aspect having high level of the average, for example identity has the maximum average at = 3.9214, the second level is direction at = 3.6690, management support at = 3.6333, control at = 3.6238 and communication patterns at = 3.4167 accordingly. Organizational citizenship behavior at high level of the average = 3.4464. When analyzing each aspect, it was found out that there are some aspect having high level of the average, for example altruism as the maximum average at = 3.5643, the second level is sportsmanship at = 3.4595 and courtesy at = 3.4143 accordingly.

**Table 2** Results of multiple regression analysis between organizational culture and organizational citizenship behavior

Variables	$\beta$	P
Constant	.772	.006
Individual Initiative	.093	.096
Risk Tolerance	.001	.986
Direction	.015	.793
Integration	.185	.003*
Management Support	-.115	.055
Control	.083	.236
Identity	.104	.077
Reward System	-.039	.355
Conflict Tolerance	.189	.001*
Communication Patterns	.275	.000*
R	.695 <sup>a</sup>	
R Square	.483	
Adjusted R Square	.457	
F-value	18.568	

\* significant at the level 0.05

As seen from Table 2, the coefficient of determination, Adjusted, accounted for 45.7% of organizational citizenship behavior, organizational culture for example integration  $\beta = 0.185$ ,  $p < 0.05$ , conflict tolerance  $\beta = 0.189$ ,  $p < 0.05$  and communication patterns  $\beta = 0.275$ ,  $p < 0.05$  have an effect organizational citizenship behavior with significantly at 0.05.

## 5. Conclusion and implications

1. The executives should emphasize coordination and collaboration to generate variety and participation in works. They also need to support and promote the employees to work together between sub-sectors in the organization.
2. The executives should focus on support and promotion to operators to criticize and manage conflicts openly.
3. The executives should highlight on level of formality in communication by chain of command.

## 6. Future Research

1. There should be additional study on employees in other sectors or between operating employees and other employees in the organization.
2. There should be a research study on organizational culture affecting good membership of employees in other companies.

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**Quality of Work Life Affecting Organizational  
Commitment of Employees in Siam Commercial Bank**

**RCGR<sup>2nd</sup>  
2018**

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# Quality of Work Life Affecting Organizational Commitment of Employees in Siam Commercial Bank

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## Abstract

The research aimed to investigate the quality of work life has an effect toward organizational commitment of employees in Siam Commercial Bank. The research methodology is the survey by using questionnaires to collect data. The population is the employees in Siam Commercial Bank. Accidental sampling was applied in this research. The questionnaires were verified for content validity by expert and tried out the reliability. The statistical analyses were frequency, percentage, mean, standard deviation, and multiple regressions. The research result shows that quality of work life in term of development of Employees capacities relevance affecting performance efficiency of officers in Siam Commercial Bank.

**Keywords:** Quality of Work Life, Organizational Commitment

## 1. Introduction

Quality of work life is an important tool in the human resource management, and ensures a balance between work life and personal life. The coordination between person and work harmoniously make the job satisfaction to live happily unit the efficiency of employees. Meanwhile, the author is an officer in Siam Commercial Bank. This co-ordination brings to the author interest to study about "Quality of work life has an effect toward Organizational Commitment of Employees in Siam Commercial Bank"

## 2. Literature Review and Hypothesis

Quality of work life means that individuals satisfactions receiving from experience and environment of work responded to needs and desires of individuals in both physical and mental health aspects through organization process preparing to support wealthiness of employees including adequate and fair compensation, safety and healthy working conditions, development of human

capacities, growth and security, social integration, constitutionalism, work-life balance and social relevance.

Adequate and fair compensation means that all from of reward in which staff in industry group to get away from work in the organization by getting enough to live by the standard of society. Fair compensation comparing to their positions and other positions have similar job characteristics. Safety and healthy working conditions means that staff in industry group should not be in the physical environment and the working environment in which contributes to poor health and should set standards regarding environment that promotes health including control over the sounds, smells and visual disturbance. Development of human capacities mean that providing opportunities for staff in industry group to use their skill and knowledge. As a result, staff in industry group have a sense that they have value and are felling challenged from their work.

Growth and security means that staff in industry group has a chance to advance to a higher position than ever as recognized by colleagues, relative and other in society as well as steady income for the position they do. Social integration means that staff in industry group feel that their valuable and successful. It affects staff in industry group in its freedom from bias and changing in the better way. Constitutionalism means that staff in industry group has the right to anything and how to defend their right. This would depend on the culture of their organization. That is how much respect the right to privacy and acceptance to the idea conflict the standards for fair returns to staff in industry group. Work-life balance refers to the work of staff in industry group should be balanced their personal life and family. This role is about dividing time, career and travel which has approximate proportion for the personal and family time including advance and get a better reward.

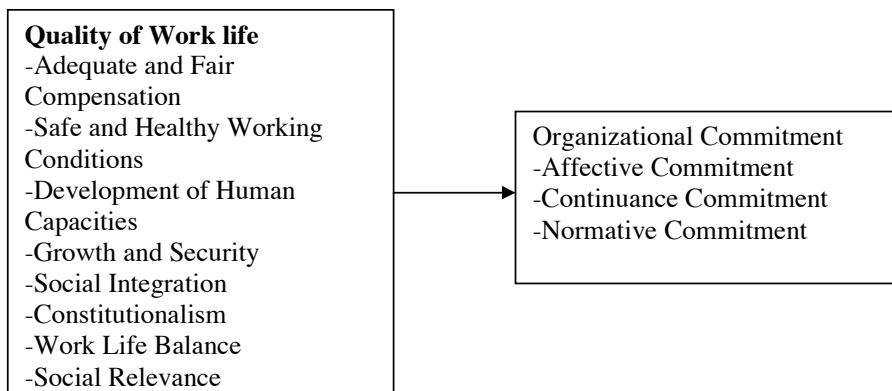
Social relevance refers to the activities of work units are involved in socially responsible production. Organization commitment means the desire of individual to maintain their organization members, the commitment towards the benefits receiving from organization, commitment and recognition of value towards organization, organizational loyalty, believe and acceptance of value consisting of Affective commitment, Continuance commitment and Normative commitment. Affective commitment refers to the desire of staff in industry group to be involved in the company. Staffin industry group is dedicated effort in working for the company. If staff in industry group has more affective commitment, it was better performance.

Continuance commitment refers to the behavior of staff in industry group expressed in the form of a continuous or consistent behavior in the workplace. Try to maintain to membership of their organization. Normative commitment mean that loyalty and willingness to contribute to the company which is the result of social norms and corporate ethics or conscience. Staff in organization will feel that they were a member of the organization and commit to the organization. Sompong Morarit (2014) conducted the research on quality of work life affecting organization commitment of health staff at health center region 10 of Chiang Mai province found out that quality of work life affecting organizationcommitment of health center region 10 of Chiang Mai province.

Petersen & Plowman (1953) said that the performance efficiency means the ability to produce the product or service in appropriate quantity and quality in needs, on time and with lowest cost which rely on the actual situation consisting of Quality, Quantity, Working time and Cost.

Nataphol Tobaramseekul(2012) conducted the research on quality of work life affecting organizational commitment of employees in Thanachart Bank of 3 central Region found out that quality of work life in terms of adequate and fair compensation and growth and security of employees in Thanachart Bank of 3 Central Region.

Worawan Tovivat (2012) conducted the research on quality of work life affecting organizational commitment of Thai Customs officer at a central area in Bangkok found out that quality of work life in terms of adequate and fair compensation, work-life balance and social relevance of Thai Customs officer at a central area in Bangkok.



**Figure 1** Conceptual Framework

### *Research Hypothesis*

Quality of work life has an effect toward Organizational Commitment of Employees in Siam Commercial Bank.

### **3. Research Methodology**

The Methodology of this research is the quantitative and survey research. Employees in Siam Commercial Bank of 3,000 people. The specified proper sample size by using the researcher used the table of Krejcie and Morgan (1970) so the sample size are 341 people. The questionnaires have the reliability value at the statistical significance level of .05.

The author designed the research tool from concepts, theories and related literature reviews to cover the studied point, specified objective and hypotheses for using to develop questionnaire by experts' opinions to examine content validity. The researcher was created from the study of research Quality of work life has an effect toward Organizational Commitment of Employees in Siam Commercial Bank. The statistics using for data analysis are frequency and percentage to analyze a general information of respondent. Mean ( $\bar{x}$ ) and Standard Deviation (S.D) are used for quality of work life Affecting Organizational Commitment. Multiple Regression Analysis are used for Quality of Work Life Affecting Organizational Commitment of Employees in Siam Commercial Bank.

### **4. Results and Discussion**

There were 341 employees of sample size, who completed the questionnaire, responded to the questionnaire. Most of the respondents are female or 204 or 59.82%. 101 employees or 29.62% are the age between 30 and less than 35 years old 159 employees or 46.63% are single status. 160

employees or 46.92% graduated in the bachelor degree. 211 employees or 61.88% have the average income at THB are the between 30,000 to 39,999 in Siam Commercial Bank. 90 employees or 26.39% of respondents have experienced in companies between 6 and 10 years.

**Table 1** Mean, Standard Deviation (S.D) and Interpretation of Quality of Work Life and Organizational Commitment

	<b>Quality of Work Life</b>	$\bar{X}$	S.D	Interpretation
	<b>Adequate and Fair Compensation</b>			
	1. You received all forms of adequate compensation in your company in order to pay costs of your living in the current economy.	4.50	.863	Very High
	2. You received all forms of proper and fair compensation compared to other company in the same job and industry.	4.39	.870	Very High
	<b>Safe and Healthy Working Conditions</b>			
	3. Your work has taken care of the environment in order to provide safety, clean, no pollution and healthy working conditions away.	4.62	.647	Very High
	4. Your workplace has the clear rules or the measures on the working conditions, safety, accident prevention and environment to promote healthy.	4.45	.720	Very High
	<b>Development of Human Capacities</b>			
	5. Your work is the interesting and challenging job to give you the opportunity to develop the knowledge and skills to work.	4.52	.688	Very High
	6. Your work can use your skills to work and feel challenged and valued in the work.	4.50	.714	Very High
	<b>Growth and Security</b>			
	7. You feel that your work, your company and your revenue are stable.	4.45	.783	Very High
	8. You are supported from your supervisor to the progressive career.	4.42	.765	Very High
	<b>Social Integration</b>			
	9. You have a good relationship with colleagues at all times.	4.52	.653	Very High
	10. You can get help from your colleagues always.	4.55	.634	Very High
	<b>Constitutionalism</b>			
	11. You feel that the evaluation of your performance related to the fair compensation.	4.31	.855	Very High
	12. You think that promotion process of employees in your company is transparent and fair.	4.37	.818	Very High
	<b>Work-Life Balance</b>			
	13. You feel satisfied with your work time, personal and family time.	4.38	.797	Very High
	14. Obligations on your work are not a barrier to your family time.	4.37	.739	Very High
	<b>Social Relevance</b>			
	15. You get a chance to participate in the activities of your company that are beneficial to your community or society.	4.49	.769	Very High
	16. Your company made a part of social responsibility such as	4.44	.805	Very High

waste disposal or reduction or other relevant in your manufacturing.			
<b>Quality of Work Life</b>	<b><math>\bar{X}</math></b>	<b>S.D</b>	<b>Interpretation</b>
1. Adequate and fair compensation	4.42	.780	Very High
2. Safe and healthy working condition	4.54	.623	Very High
3. Development of human capacities	4.51	.650	Very High
4. Growth and security	4.43	.690	Very High
5. Social integration	4.54	.578	Very High
6. Constitutionalism	4.31	.855	Very High
7. Work-Life balance	4.37	.716	Very High
8. Social relevance	4.47	.721	Very High
<b>Quality of Work Life</b>	<b>4.45</b>	<b>.617</b>	<b>Very High</b>

<b>Organizational Commitment</b>	<b><math>\bar{X}</math></b>	<b>S.D</b>	<b>Interpretation</b>
<b>Affective Commitment</b>			
1. You are willing to work in this company for your lifetime.	4.53	.776	Very High
2. You feel involved in this company and dedicated effort in working for this company.	4.48	.644	Very High
3. Although other companies have to offer a higher compensation than this company but you do not think to leave this company.	4.26	.910	Very High
4. You will not leave this company because you feel a sense of obligation to employees and executive in this company.	4.38	.728	Very High
<b>Continuance Commitment</b>			Very High
5. You feel that the problem of your company is your problem.	4.49	.750	Very High
6. You continue to work every day as this company, this is your second home.	4.52	.658	Very High
7. You try to work for this company fully without thinking about leaving this company.	4.38	.782	Very High
<b>Normative Commitment</b>			Very High
8. You feel that you are a part of this company.	4.46	.661	Very High
9. This company has meant a lot to you without changing to the other companies.	4.36	.817	Very High
10. You have to loyalty of this company and willing to dedicate yourselves to this company.	4.43	.710	Very High

From Table 1, it was found out that the respondents have the opinion towards the Quality of Work Life Affecting Organizational Commitment of Employees in Siam Commercial Bank the very high level of the average ( $\bar{x} = 4.45$ ). When analyzing each aspect, it was found out that there are some aspect having very high level of the average, for example, Safe and healthy working condition has the maximum average at ( $\bar{x} = 4.54$ ) and Social integration has the maximum average at ( $\bar{x} = 4.54$ ) the second level is Development of human capacities at ( $\bar{x} = 4.51$ ), Social relevance are ( $\bar{x} = 4.47$ ), Growth and security are at ( $\bar{x} = 4.43$ ), Adequate and fair compensation at ( $\bar{x} = 4.42$ ) and Work-Life Balance at ( $\bar{x} = 4.37$ ) and Constitutionalism at ( $\bar{x} = 4.31$ ) accordingly.

**Table2** Results of multiple regression analysis between quality of work life and organizational commitment

	<b>Variables</b>	$\beta$	<i>P</i>
	Constant	.983	.000
	Adequate and Fair Compensation	.296	.000
	Safe and Healthy Working Conditions	-.092	.227
	Development of Human Capacities	.052	.347
	Growth and Security	.243	.001
	Social Integration	.152	.004
	Constitutionalism	-.003	.940
	Work-Life Balance	.071	.187
	Social Relevance	.058	.321
	R <sup>2</sup>	0.664	
	F-Value	81.830	

\* *significant at the level 0.05*

As seen from Table 2, The regression analysis found that the Quality of work life has an effect toward Organizational Commitment of Employees in Siam Commercial Bank is Adequate and Fair Compensation , Growth and Security and Social Integration at (Sig. < 0.05)When considering the coefficient of regression, it was found that the quality of life in all three aspects is equal to the regression coefficient at 0.156 – 0.296 The quality of life in work is Adequate and Fair Compensation , Growth and Security and Social Integration has a positive effect on engagement quality of work life has an effect toward Organizational Commitment of Employees in Siam Commercial Bankis Employeeshas Adequate and Fair Compensation, Growth and Security and Social Integration Employees have a greater commitment to the organization.

## 5. Conclusion and implications

The executive should create policy or annual plans for development of human capacities of employees in order to increase the capacity of employees affecting organizational commitment. The executive should focus on work life balance because employees do not want work all the time. work, do not disturb the employees back at work or give priority to the families of employees etc.

## 6. Future Research

There should be a study of other variables which might have an impact on performance efficiency i.e. work motivation and human resource management etc.

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**Quality of Work Life Affecting Organizational Commitment of  
Employees in Dejo Shanghai Furniture And Construction Co., Ltd.**



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# **Quality of Work Life Affecting Organizational Commitment of Employees in Dejo Shanghai Furniture And Construction Co., Ltd.**

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## **Abstract**

The purpose of this research was to study about Quality of Work Life Affecting Organizational Commitment of Employees in Dejo Shanghai Furniture And Construction Co.,Ltd.. Data was collected from sample size of 136 people by using questionnaires. The research results show that quality of work life in terms of human capacities, work-life balance and social relevance affecting organizational commitment of employees in Dejo Shanghai Furniture And Construction Co., Ltd..

**Keywords:** Quality of Work Life Affecting Organizational Commitment

## **1. Introduction**

Quality of Work Life is an important tool in the human resource management, and ensures a balance between work life and personal life. The coordination between people and work harmoniously make the job satisfaction to live happily until the Organizational Commitment of Employees. Meanwhile, the author's interest to study about Quality of Work Life Affecting Organizational Commitment of Employees in Dejo Shanghai Furniture And Construction Co.,Ltd.

## **2. Literature Review and Hypotheses**

Quality of work life means that individuals satisfaction receiving from experience and environment of work responded to needs and desires of individuals in both physical and mental health aspects through organizational process preparing to support wealthiness of employees including adequate and fair compensation. Safety and healthy working conditions. Development of

human capacities, growth and security integration, constitutionalism, work-life balance and social relevance

Adequate and fair compensation means that all forms of reward in which staff in company to get away from work in the organization by getting enough to live by the standards of society. Fair compensation comparing to their positions and other positions have similar job characteristics. Safety and healthy working conditions means that staff in company should not be in the physical environment and the working environment in which contributes to poor health and should set standards regarding environment that promotes health including control over the sounds, smells and visual disturbances. Development of human capacities means that providing opportunities for staff in company to use their skills knowledge. As a result, staff in company have sense that they have value and are feeling challenged from their work.

Growth and security means that staff in company has a chance to advance to higher position than ever as recognized by colleagues, relatives and others in society as well as a steady income for the positions they do. Social integration means that staff in company feel that their valuable and successful. It affects staff in company in its freedom from bias and changing in the better way. Constitutionalism means that staff in company has the rights to anything and how to defend their rights. This would depend on the culture of their organization. That is how much respect the right to privacy and acceptance to the idea conflict including the standards for fair returns to staff in company. Work-life balance refers to work of staff in company should be balanced their personal life and family. This role is about dividing time, career and travel which has approximate proportion for the personal and family time including advance and get a better reward.

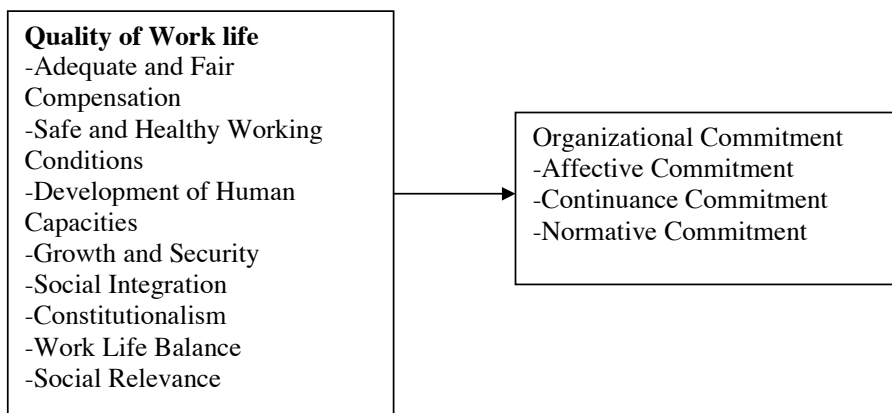
Social relevance refers to the activities of work unites are involved in society responsible production. Organization commitment means the desire of individuals to maintain their organization members, the commitment towards the benefits receiving from organization , commitment and recognition of value towards organization, organization loyalty, believe and acceptance of value consisting of Affective commitment, continuance commitment and Normative commitment. Affective commitment refers to the desire of staff in company to be involved in the company. Staff in company is dedicated effort in working for the company. If staff in company has more affective commitment, it was a better performance.

Continuance commitment refers to the behavior of staff in company expressed in the form of a continuous or consistent behavior in the workplace. Try to maintain membership of their organization. Normative commitment mean that loyalty and willingness to contribute to the company which is the result of social norms and corporate ethics or conscience. Staff in organization will feel that they were a member of the organization and commit to the organization. Sompong Morarit(2014) conducted the research on quality of work life affecting organizational commitment of health staff at health center region 10 of Chiang Mai province found out that quality of work life affecting organizational commitment of health staff at health center region 10 of Chiang Mai province.

Patsaya Jantravukorn (2014) conducted the research on quality of work life affecting organizational commitment of teachers in secondary school at secondary educational service area office 4 Saraburi province found out that quality of work life in terms of safety and healthy working conditions, growth and security, social integration, constitutionalism and work-life balance affecting organizational commitment of teachers in secondary school at secondary educational service area office 4 at Saraburi province.

Nataphol Tobarameekul(2012) conducted the research on quality of work life affecting organizational commitment of employees in Thanachart Bank of 3 central Region found out that quality of work life in terms of adequate and fair compensation and growth and security of employees in Thanachart Bank of 3 Central Region.

Worawan Tovivat(2012) conducted the research on quality of work life affecting organizational commitment of Thai Customs officer at a central area in Bangkok found out that quality of work life in terms of adequate and fair compensation, work-life balance and social relevance of Thai Customs officer at a central area in Bangkok.



**Figure 1** Conceptual Framework

### *Research Hypotheses*

Quality of work life has an effect towards organizational commitment of employees in Dejo Shanghai Furniture And Construction Co.,Ltd.

### **3. Research Methodology**

The Methodology of this research is the quantitative and survey research. The population are officers employees in Dejo Shanghai Furniture And Construction Co.,Ltd.of 210 people. (Source: Human Resource Department, October, 2018). The specified proper sample size by using the researcher used the table of Krejcie and Morgan (1970) so the sample size are 136 people. The questionnaires have the reliability value at the statistical significance level of .05.

The author designed the research tool from concepts, theories and related literature reviews to cover the studied point, specified objective and hypotheses for using to develop questionnaire by experts' opinions to examine content validity. The researcher was created from the study of research Quality of Work Life Affecting Organizational Commitment of Employees in Dejo Shanghai Furniture And Construction Co.,Ltd. The statistics using for data analysis are frequency and percentage to analyze a general information of respondent. Mean () and Standard Deviation (S.D) are used for quality of work life Affecting Organizational Commitment. Multiple Regression Analysis are used for Quality of Work Life Affecting Organizational Commitment of Employees in Dejo Shanghai Furniture And Construction Co.,Ltd.

#### 4. Results and Discussion

There were 136 employees of sample size, who completed the questionnaire, responded the questionnaire. Most of the respondent are female or 89 or 65.4%. 49 employees or 36% are the age 35 years old above. 51 employees or 37.5% are single status. 66 employees or 48.5% graduated in the bachelor degree. 34 employees or 39.5% of most respondent have experienced in their current companies between 6- 10 years. 103 employees or 75.7% have the average income at THB 20,000 above Dejo Shanghai Furniture And Construction Co.,Ltd

**Table1** Mean, Standard Deviation (S.D) and Interpretation of Quality of Work Life and Organizational Commitment

<b>Quality of Work Life</b>	$\bar{X}$	S.D	Interpretation
<b>Adequate and Fair Compensation</b>			
1. You received all forms of adequate compensation in your company in order to pay costs of your living in the current economy.	4.24	.523	high
2. You received all forms of proper and fair compensation compared to other company in the same job and industry.	4.37	.484	high
<b>Safe and Healthy Working Conditions</b>			
3. Your work has taken care of the environment in order to provide safety, clean, no pollution and healthy working conditions away.	4.29	.454	high
4. Your workplace has the clear rules or the measures on the working conditions, safety, accident prevention and environment to promote healthy.	4.07	.262	high
<b>Development of Human Capacities</b>			
5. Your work is the interesting and challenging job to give you the opportunity to develop the knowledge and skills to work.	4.51	.502	highest
6. Your work can use your skills to work and feel challenged and valued in the work.	4.35	.477	high
<b>Growth and Security</b>			
7. You feel that your work, your company and your revenue are stable.	4.29	.454	high
8. You are supported from your supervisor to the progressive career.	4.43	.497	high
<b>Social Integration</b>			
9. You have a good relationship with colleagues at all times.	3.93	.262	high
10. You can get help from your colleagues always.	4.46	.500	high
<b>Constitutionalism</b>			
11. You feel that the evaluation of your performance related to the fair compensation.	3.99	.272	high
12. You think that promotion process of employees in your company is transparent and fair.	4.12	.440	high
<b>Work-Life Balance</b>			
13. You feel satisfied with your work time, personal and family time.	4.39	.489	high
14. Obligations on your work are not a barrier to your family time.	4.11	.379	high
<b>Social Relevance</b>			
15. You get a chance to participate in the activities of your company that are beneficial to your community or society.	4.40	.491	high
16. Your company made a part of social responsibility such as waste disposal or reduction or other relevant in your manufacturing.	4.14	.407	high

<b>Quality of Work Life</b>		<b><math>\bar{X}</math></b>	<b>S.D</b>	<b>Interpretation</b>
Adequate and Fair Compensation		4.30	.503	high
Safe and Healthy Working Conditions		4.18	.358	high
Development of Human Capacities		4.43	.489	high
Growth and Security		4.36	.475	high
Social Integration		4.20	.381	high
Constitutionalism		4.11	.356	high
Work-Life Balance		4.25	.434	high
Social Relevance		4.27	.449	high
<b>Total</b>		<b>4.26</b>	<b>.430</b>	<b>high</b>

<b>Organizational Commitment</b>		<b><math>\bar{X}</math></b>	<b>S.D</b>	<b>Interpretation</b>
<b>Affective Commitment</b>				
1. You are willing to work in this company for your lifetime.		4.14	.407	high
2. You feel involved in this company and dedicated effort in working for this company.		4.06	.380	high
3. Although other companies have to offer a higher compensation than this company but you do not think to leave this company.		3.95	.549	high
4. You will not leave this company because you feel a sense of obligation to employees and executive in this company.		3.98	.463	high
<b>Continuance Commitment</b>				
5. You feel that the problem of your company is your problem.		4.07	.250	high
6. You continue to work every day as this company, this is your second home.		4.10	.295	high
7. You try to work for this company fully without thinking about leaving this company.		4.07	.262	high
<b>Normative Commitment</b>				
8. You feel that you are a part of this company.		4.03	.170	high
9. This company has meant a lot to you without changing to the other companies.		4.21	.406	high
10. You have to loyalty of this company and willing to dedicate yourselves to this comoany.		4.05	.281	high

<b>Organizational Commitment</b>		<b><math>\bar{X}</math></b>	<b>S.D</b>	<b>Interpretation</b>
Affective Commitment		4.03	0.449	high
Continuance Commitment		4.08	0.269	high
Normative Commitment		4.10	0.285	high
<b>Total</b>		<b>4.07</b>	<b>0.334</b>	<b>high</b>

From Table 1, it was found out that the respondents have the opinion towards quality of work life at high level of the average = 4.26. When analyzing each aspect, it was found out that there are some aspect having very high level of the average, for example, Development of Human Capacities has the maximum average at = 4.43, the second level is Growth and Security at = 4.36, Adequate and Fair Compensation are at = 4.30, Social Relevance at = 4.27 and Work-Life Balance at = 4.25 accordingly.

**Table 2** Results of multiple regression analysis between quality of work life and organizational commitment

Variables	$\beta$	$p$
Constant	2.820	.000
Adequate and Fair Compensation	-.232	.000
Safe and Healthy Working Conditions	-.554	.000
Development of Human Capacities	-.119	.035
Growth and Security	.665	.000
Social Integration	-.254	.006
Constitutionalism	.400	.000
Work-Life Balance	-.527	.000
Social Relevance	.907	.000
R <sup>2</sup>	.869	
Adjusted R <sup>2</sup>	.740	
F-Value	48.973	

\*significant at the level 0.05

As seen from Table 2, the coefficient of determination, Adjusted, accounted for 74% of organizational commitment, Adequate and Fair Compensation  $\beta = -.232, p < .05$  :Social Relevance  $\beta = .907, p < .05$  :Safe and Healthy Working Conditions  $\beta = -.554, p < .05$ : Development of Human Capacities  $\beta = -.119, p < .05$  :Growth and Security  $\beta = .665, p < .05$  :Social Integration  $\beta = -.254, p < .05$  :Constitutionalism  $\beta = .400, p < .05$ :Work-Life Balance  $\beta = -.527, p < .05$  have an effect towards organizational commitment with significantly at 0.05. It conforms to the research study of Patsaya Jantravukorn (2014) quality of work life affecting organizational commitment of teachers in secondary school at secondary educational service area office 4 Saraburi province found out that quality of work life in terms of safety and healthy working conditions, growth and security, social integration, constitutionalism and work-life balance affecting organizational commitment of teachers in secondary school at secondary educational service area office 4 at Saraburi province. and conforms to the research study of Nataphol Tobameekul(2012) quality of work life affecting organizational commitment of employees in Thanachart Bank of 3 central Region found out that quality of work life in terms of adequate and fair compensation and growth and security of employees in Thanachart Bank of 3 Central Region.

## 5. Conclusion and Implications

1. Internal staff should be expert in their work. Include information. The new news of the agency is always ready to improve the ability of employees in the organization to feel part of the organization and not to leave the organization.

2. According to studies, it has been found that The staff is very important. The use of democracies in business organizations is equitable and participatory. It is based on the principle of mutual benefit. Maintaining majority and protecting the voice. Minority of employees Equality in Employee Benefits The employees feel good and the result is a sense of commitment to the organization.

3. The staff is very important. Management should focus on the quality of work life, social relationships that are beneficial to society, and the need for the organization to be recognized in the outside world. That show social responsibility, such as in the production. Management should



encourage all employees in the organization to participate in these socially beneficial activities to create acceptance within and outside the organization affecting organizational commitment.

## 6. Future Research

There should be a study of other variables which might have an impact on organizational commitment i.e. work motivation and human resource management etc.

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**Compensation Affecting Organizational  
Commitment of Power Development Officers**

**RCGR<sup>2nd</sup>  
2018**

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# **Compensation Affecting Organizational Commitment of Power Development Officers**

by

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## **Abstract**

The research aimed to investigate remuneration affecting organizational commitment of power development officers. The research methodology is the survey by using questionnaires to collect data. The population is the Power Development Officers. Accidental Sampling was applied in this research. The questionnaires were verified for content validity by expert and tried out the reliability. The statistical analyses were frequency, percentage, mean, standard deviation, and multiple regressions. The research result shows that non-monetary remuneration caused by work and environment affect the organizational commitment of power development fund officials.

**Keywords:** Compensation, Organization Commitment

## **1. Introduction**

The Power Development Fund must take into account the recruitment of good officers. Skilled in the organization. And when it comes to developing those people better. They must be motivated by the dedication of the staff. Morale and wisdom for the task assigned. How to get the job done efficiently and achieve the set objectives? And how to keep the staff to stay with the organization as long as possible. Therefore, the researcher is interested in studying the compensation that affect the organizational commitment of power development fund officials. This is a good way to improve the efficiency of compensation. This is an important strength for the organization to grow and achieve its objectives.

## 2. Literature Review and Hypothesis

Compensation is at the heart of human resources management. It can be used to create organizational strategies. This is motivating to retain the knowledgeable staff of the organization. It can also be used as a motivational force for skilled personnel to work fully and fully. Therefore, the wage system has to be adjusted to be flexible. Flexible Fair and efficient in order to have a good organizational behavior, the organization must have good organizational behavior and work efficiency to create sustainable growth for the organization in the future.

Labor scholars means that the wage is the amount paid by the employer for compensation. Or employee services means the money or things that an employer pays to an employee for remuneration pursuant to an employment agreement or contract. The pay may be paid in different ways, such as hourly, daily, weekly, monthly, or individual items. Wages in this sense do not include overtime, bonuses or special benefits that are employee benefits.

Monad and Nino (2005) provide the meaning of compensation, meaning all the rewards that employees receive in exchange for work. Include salary, salary, bonus, incentives. And, other benefits composition of compensation. All that the organization pays to its employees. There are two types: Financial Compensation and Non Financial Compensation.

Compensation management for employees will be both types. Financial Compensation and Non Financial Compensation it will help employees have morale. The atmosphere in the work or the job satisfaction. Interesting job If the agency has enough staff, then the agency can accept that. The organization has a competitive edge.

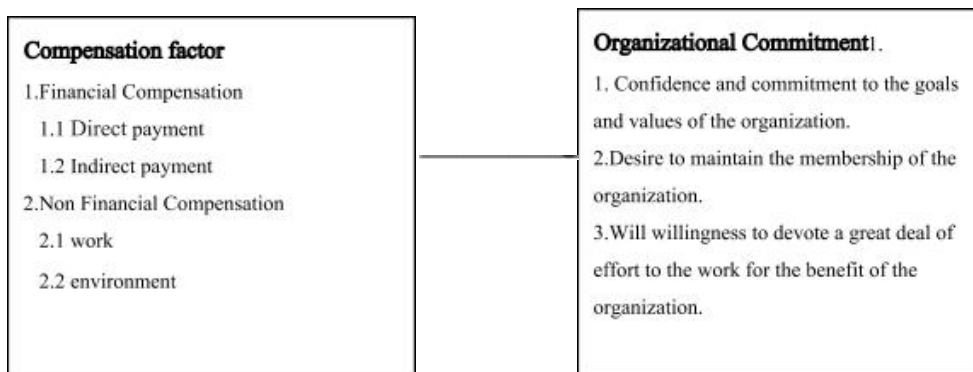
Allen and Mayer (1990) studied organizational commitment as a mental state. The psychological state of the organization is divided into 3 groups:

1. Organizational commitment to the mind. It is the desire of the person to get involved in the organization that these people will be dedicated to working for the organization. If the members of the organization are mentally bound, they will be good performers.
2. Organizational commitment to survival is an emphasis on the expressionist behavior of the member. In the organization, when people are committed to the organization. It will be expressed in a continuous behavior pattern. Invariably in work Try to maintain the membership without moving it, because it has to compare carefully to the results that will happen. If you leave your membership or resign from the organization, this will be considered as a lost benefit.
3. Normative commitment Look at the commitment to the organization. Be loyal and willing to dedicate to the organization. This is due to the norms of the organization and the society, the ethics or conscience. A person feels that he or she is a member of an organization, so there must be a commitment to the organization. Loyalty to the organization, because that is the rightfulness to act or to bond. Membership commitments must be made to the organization.

Wena Sweet (2012) conducted a study on "Welfare satisfaction of employees of CH. Karnchang Public Company Limited" found employees with different personal information. Satisfaction with welfare is not different. Satisfaction with employee welfare is correlated with security benefits. The economic welfare was significantly at the 0.05 level. The relationship was moderate and the relationship was in the same direction. Health is associated with relatively low levels of satisfaction. No recreation. Relationships with satisfaction with employee welfare.

Suttipong Suwannasit (2012) studied "factors affecting the efficiency of Working under the policy of increasing the productivity of the production staff of B.T. Engineering Co., Ltd. ". The instrument used was a questionnaire for data collection. Average percentage Standard deviation, T-test, F-test. The personal factors of the employees are: marital status, age, education, work experience and average monthly income. Does not affect the performance of waste and output per month? In terms of employee attitudes, there is a correlation in terms of the efficiency of both the waste and the output per month at relatively low levels.

Sukanya Boonchai (2012) studied the subject. "Organizational Commitment and Employee Satisfaction in Case Study of Staff of The pharos Co., Ltd." found that the personnel of the company are very proud to be part of the company. Have a loyal and willing. To work fully with sacrifice, accept the values and goals of the company. Concern for the future of the company is very much. The overall welfare satisfaction was average at medium.



**Figure 1** Conceptual Framework

### *Research Hypothesis*

1. Monetary compensation factors affect organizational commitment of power development fund officers.
2. Non-monetary remuneration factors affect organizational commitment of power development fund officers.

### **3. Research Methodology**

The Methodology of this research is the quantitative and survey research. The population are of power development fund officials. of 160 people. (Source: Human Resource Department, October, 2018). The specified proper sample size by using the researcher used the table of Krejcie and Morgan (1970) so the sample size is 113 people. The questionnaires have the reliability value at least 95% and error value at 0.05

The author designed the research tool from concepts, theories and related literature reviews to cover the studied point, specified objective and hypotheses for using to develop questionnaire by experts' opinions to examine content validity. The researcher was created from the study of research Compensation affecting organizational commitment of power development officers. The statistics using for data analysis are frequency and percentage to analyze a general information of respondent.

Mean () and Standard Deviation (S.D) are used for quality of work life and performance efficiency. Multiple Regression Analysis are used for organizational commitment of energy development fund officials.

#### 4. Results and Discussion

There were 113 employees of sample size, who completed the questionnaire, responded the questionnaire. Most of the respondent are female or 88 or 77.88%. 50 employees or 44.2% are the age between 31 and less than 40 years old. 34 employees or 30.1% are community project officer. 96 employees or 85% graduated in the bachelor degree. 56 employees or 49.6% of most respondent have experienced in their current companies more than 5 years. 60 employees or 53.1% have the average income at THB 15,001-less than 20,000 in energy development fund officials.

Table 1 represent Mean ()and Standard Deviation (S.D) of remuneration affecting organizational commitment of energy development fund officials.

**Table 1** Mean () Standard Deviation (S.D) of officers compensation

Compensation.		(S.D)	Interpretation
1. Wages and other compensation such as overtime, lunch specific expertise allowances able to work under pressure. You receive from the fund. Suit your position and responsibility.	2.43	.981	Low
2. Wages and other compensation such as overtime, lunch Specific Expertise Allowance Able to work under pressure. You get the right fit for your education and work experience.	2.41	.932	Low
3. You get paid and other compensation such as overtime, lunch fee. specific expertise allowance able to work under pressure. When compared to the fund. The other is similar.	2.36	.955	Low
4. Are you satisfied with Wages and other compensation such as overtime, lunch specific expertise dividends or dividends, etc., are received today.	2.42	.873	Low
5.The annual prize money or bonuses you receive are appropriate for your assignment.	1.44	.801	Minimal
6. You get the annual prize money. Or increased bonuses. When performance is in line with the criteria set by the Fund.	1.55	.886	Low
7. Medical expenses, other than social security, such as group health insurance. This is enough for your medical expenses.	2.27	.876	Low
8. The medical treatment benefits you in morale.	2.40	1.138	Low
9. Child support allowance for child care.	1.57	.925	Low
10.Your child's education allowance is adequate for your child's education expenses.	1.47	.849	Minimal
11. The work you have been assigned by the fund. Encourage you to use the knowledge. The ability to work truly.	3.33	1.004	Medium
12. You have the feeling that your job is a monotonous job.	3.13	1.090	Medium
13. You are assigned a job that meets your knowledge. And you have the enthusiasm to work.	3.58	.894	High
14. The nature of the work you do is a work that requires a lot of knowledge and skills.	3.68	.837	High



15. The assigned task allows you to fully use your knowledge.	3.79	.829	High
16. You have the freedom to solve problems that you have a heavy responsibility.	3.38	.919	Medium
17. You complete the task as assigned by the supervisor.	4.05	.692	High
18. You try to think new ways of working to get the job done successfully.	3.93	.716	High
Your job is to create a position to promote.			
19. Your job is to create a position to promote.	2.90	1.165	Medium
20. You have the opportunity to develop your skills from the job.	3.48	.927	Medium
21. The work you do is likely to be promoted.	2.61	1.097	Medium
22. Praise from your colleagues is what you want to do when you work.	3.21	.959	Medium
23. Trustees entrusted to entrust other special tasks of the Fund. Let you practice	3.53	.846	High
24. Your performance has been recognized by your colleagues.	3.50	.908	High
25. You fulfill your duties with the utmost satisfaction.	3.96	.876	High
26. You feel that your work is important to success the fund.	3.96	.784	High
27. You feel satisfied with your wages. For example, wages increase each year.	2.65	1.155	Medium
28. You think the fund. Has a policy of pay properly.	2.70	.990	Medium
29. Your supervisor is concerned about your performance.	3.26	1.016	Medium
30. Your supervisor is a person who can discuss. Clarify or ask for work instructions.	3.48	1.310	Medium
31. Your supervisor gives you the opportunity to express your views and have the freedom to make decisions based on your responsibilities.	3.34	1.049	Medium
32. Workers in the fund. Your cooperation in working and coordinated well.	3.44	1.093	Medium
33. Colleagues respect and listen to each other to improve their work.	3.38	1.020	Medium
34. Your performance suggestions are always used.	3.13	.911	Medium
35. You have contributed to the work and activities of the fund.	3.17	.972	Medium
36. You have the opinion that the fund. Have a clean and organized workplace.	3.38	.967	Medium
37. Environment of the Fund In general, you have the enthusiasm to work.	3.34	.830	Medium
38. The workplace is appropriate to the nature of the fund.	3.43	.925	Medium
<b>Financial Compensation</b>		<b>(S.D)</b>	<b>Interpretation</b>
1. Direct payment	2.10	.744	Low
2. Indirect payment	2.08	.787	Low
<b>Financial Compensation</b>	2.09	.689	Low
<b>Non Financial Compensation</b>			
1. Work	3.31	.560	Medium
2. Environment	3.38	.820	Medium
<b>Non Financial Compensation</b>	3.35	.612	Medium
<b>Organizational Commitment.</b>		<b>(S.D)</b>	<b>Interpretation</b>
1. You are willing to work in the fund. This is my life.	3.23	1.188	Medium
2. You feel that the problem of the fund. Is your problem.	3.22	1.067	Medium
3. You feel that you are part of the fund.	3.69	.955	High

4.You feel involved in the fund. This effort is dedicated to the fund.	3.85	.909	High
5.You come to work every day like a fund. This is your second home.	3.95	.875	High
6.This fund is meaningful to you without thinking of changing your workplace.	3.36	1.142	Medium
7.Although the fund. Other will give higher returns than the fund. You do not want to leave this fund.	3.10	1.134	Medium
8.You tried to work for the fund. I do not think to move.	3.25	1.122	Medium
9.You are loyal and willing to dedicate yourself to this fund.	3.56	1.008	High
10.You do not want to leave the fund. This is because there is a sense of commitment to people in this fund.	3.24	1.152	Medium
<b>Organizational Commitment.</b>		<b>(S.D)</b>	<b>Interpretation</b>
1.Confidence and commitment to the goals and values of the organization.	3.50	.789	Medium
2.Desire to maintain the membership of the organization.	3.41	.928	Medium
3.Will willingness to devote a great deal of effort to the work for the benefit of the organization.	3.40	.985	Medium
<b>Organizational Commitment.</b>	3.45	.838	Medium

From table 1, it was found out that the respondents have Financial Compensation at high level of the average  $\bar{x} = 2.09$  and Non Financial Compensation at high level of the average  $\bar{x} = 3.35$ . Organizational commitment at high level of the average  $\bar{x} = 3.45$ . When analyzing each aspect, it was found out that there are some aspect having very high level of the average, for example, Confidence and commitment to the goals and values of the organization has the medium average at  $\bar{x} = 3.50$ , the second level is desire to maintain the membership of the organization has the medium average at  $\bar{x} = 3.41$  and will willingness to devote a great deal of effort to the work for the benefit of the organization has the medium average at  $\bar{x} = 3.40$  accordingly.

**Table 2** Results of multiple regression analysis between compensation and organizational commitment

Variables	$\beta$	Sig.
Constant	.479	.000
Direct payment	.005	.972
Indirect payment	.228	.073
Work	.617	.000*
Environment	.272	.004*
R	.602	
R Square	.363	
Adjusted R Square	.351	
F-value	31.324	

\* Significant at the level 0.05

As seen from Table 2, the coefficient of determination, Adjusted, accounted for 35.1% of performance efficiency, development of human capacities  $\beta = .342$ ,  $p < .05$  have an effect organizational commitment with significantly at 0.05. The personnel of the company are very proud to be part of the company. Have a loyal and willing. To work fully with sacrifice, accept the values and goals of the company. Concern for the future of the company is very much. The overall welfare

satisfaction was average at medium. It conforms to the research study of Sukanya Boonkchai (2012) Organizational Commitment and Employee Satisfaction in Case Study of Staff of Thepharos Co., Ltd. Moreover, employees with different personal information. Satisfaction with welfare is not different. Satisfaction with employee welfare is correlated with security benefits. The economic welfare was significantly at the 0.05 level and conforms to the research study of Wena Sweet (2012) The study of Welfare satisfaction of employees of CH. Karnchang Public Company Limited. The relationship was moderate and the relationship was in the same direction. Health is associated with relatively low levels of satisfaction. For no recreation, it was related to satisfaction with employee.

## **5. Conclusion and Implications**

### *5.1 Conclusion*

Compensation management is an important factor in human resource management services. This is because compensation is the motivation for effective internal staffing. It is also a factor in creating a good membership behavior for the organization. Management should consider remuneration management with fairness and appropriateness. The environment is both internal and external to benefit both the organization and employees.

### *5.2 Implications*

1. Management should most concern on non-financial compensation from work since it does not increase any costs or any payments by organization and the most important thing is to have an impact on OCB i.e. interesting job, challenging job, responsibility, opportunity to get promote, admiration, recognition as well as receiving important tasks which require knowledge, ability and experiences to make ones pride of work etc.

2. Management should create work atmosphere, co-relation between employees and organization, ability to give an opinion in the meeting, suggestion of problem solving especially the issues related to employees' job, giving an opportunity for employees to participate in activities to create the feeling of the owner of organization. These are able to create the responsibility for employees which brings to work efficiency.

## **6. Future Research**

There should be a study of other variables which might have an impact on Organizational Commitment (i.e. work motivation and human resource management etc).

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**Quality of Work Life Affecting Performance Efficiency of Officers  
in Agricultural Research Development Agency (Public Organization)**

**RCGR<sup>2nd</sup>  
2018**

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# **Quality of Work Life Affecting Performance Efficiency of Officers in Agricultural Research Development Agency (Public Organization)**

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## **Abstract**

The research aimed to investigate the quality of work life affecting performance efficiency of officers in Agricultural Research Development Agency (Public Organization). The research methodology is the survey by using questionnaires to collect data. The population is the officers in Agricultural Research Development Agency (Public Organization). Accidental Sampling was applied in this research. The questionnaires were verified for content validity by expert and tried out the reliability. The statistical analyses were frequency, percentage, mean, standard deviation, and multiple regressions. The research result shows that quality of work life in term of development of human capacities relevance affecting performance efficiency of officers in Agricultural Research Development Agency (Public Organization).

**Keywords:** Quality of Work Life, Performance Efficiency

## **1. Introduction**

Quality of work life is an important tool in the human resource management, and ensures a balance between work life and personal life. The coordination between person and work harmoniously make the job satisfaction to live happily unit the efficiency of employees. Meanwhile, the author is an officer in Agricultural Research Development Agency (Public Organization). This co-ordination brings to the author interest to study about "Quality of work life affecting Performance efficiency of officers in Agricultural Research Development Agency (Public Organization).

## 2. Literature Review and Hypothesis

Quality of work life means that individuals satisfactions receiving from experience and environment of work responded to needs and desires of individuals in both physical and mental health aspects through organization process preparing to support wealthiness of employees including adequate and fair compensation, safety and healthy working conditions, development of human capacities, growth and security, social integration, constitutionalism, work-life balance and social relevance.

Adequate and fair compensation means that all from of reward in which staff in industry group to get away from work in the organization by getting enough to live by the standard of society. Fair compensation comparing to their positions and other positions have similar job characteristics. Safety and healthy working conditions means that staff in industry group should not be in the physical environment and the working environment in which contributes to poor health and should set standards regarding environment that promotes health including control over the sounds, smells and visual disturbance. Development of human capacities mean that providing opportunities for staff in industry group to use their skill and knowledge. As a result, staff in industry group have a sense that they have value and are felling challenged from their work.

Growth and security means that staff in industry group has a chance to advance to a higher position than ever as recognized by colleagues, relative and other in society as well as steady income for the position they do. Social integration means that staff in industry group feel that their valuable and successful. It affects staff in industry group in its freedom from bias and changing in the better way. Constitutionalism means that staff in industry group has the right to anything and how to defend their right. This would depend on the culture of their organization. That is how much respect the right to privacy and acceptance to the idea conflict the standards for fair returns to staff in industry group. Work-life balance refers to the work of staff in industry group should be balanced their personal life and family. This role is about dividing time, career and travel which has approximate proportion for the personal and family time including advance and get a better reward.

Social relevance refers to the activities of work units are involved in socially responsible production. Organization commitment means the desire of individual to maintain their organization members, the commitment towards the benefits receiving from organization, commitment and recognition of value towards organization, organizational loyalty, believe and acceptance of value consisting of Affective commitment, Continuance commitment and Normative commitment. Affective commitment refers to the desire of staff in industry group to be involved in the company. Staff in industry group is dedicated effort in working for the company. If staff in industry group has more affective commitment, it was better performance.

Continuance commitment refers to the behavior of staff in industry group expressed in the form of a continuous or consistent behavior in the workplace. Try to maintain to membership of their organization. Normative commitment mean that loyalty and willingness to contribute to the company which is the result of social norms and corporate ethics or conscience. Staff in organization will feel that they were a member of the organization and commit to the organization. Sompong Morarit (2014) conducted the research on quality of work life affecting organization commitment of health staff at health center region 10 of Chiang Mai province found out that quality of work life affecting organization commitment of health center region 10 of Chiang Mai province.



Petersen & Plowman (1953) said that the performance efficiency means the ability to produce the product or service in appropriate quantity and quality in needs, on time and with lowest cost which rely on the actual situation consisting of Quality, Quantity, Working time and Cost.

Quality of work means the qualifications of job / service. Able to meet the demands and generate satisfaction.

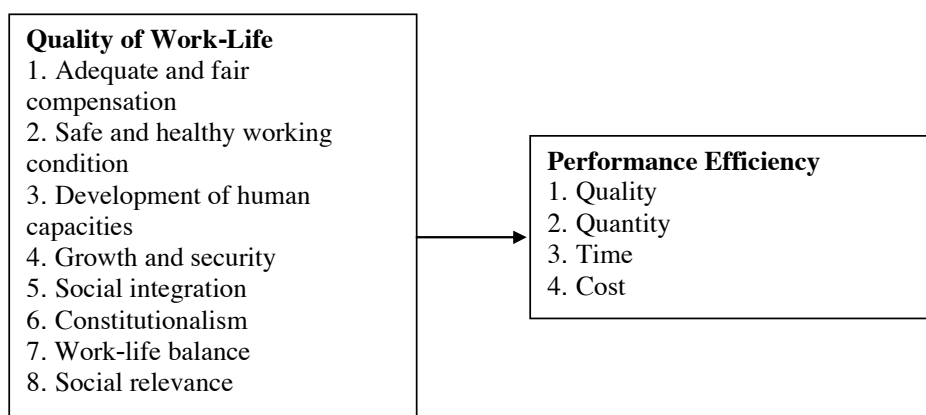
Quantity refers to the amount of work that must occur to meet expectations of the organization.

Working time means are speed and appropriate to the task. Work completed on time and on schedule.

Cost refers to the ability to reduce costs or use fewer resources that required by also get the desired results.

Ausuma Sakpaisan (2013) conducted the research Quality of work life affecting performance efficiency of staffs of Inter Realty Management Co., Ltd. (IRM). The purpose of this independent study was to study the personal factors and the quality of work life factors affecting work efficiency of staffs. The samples consisted of 180 staffs of Inter Realty Management Co., Ltd. (IRM).

Arnut Sangkamanee (2012) The study of operational efficiency of staff in warehouse packing department, TST Sunrise Service Co., Ltd. The purpose of this research was to study of operational efficiency of staff. The samples used in this study were 140 people found out that overall at moderate level. Individual factors was found that employees with different genders, age, marital status, educational level and the working period were found to difference in operational efficiency at the statistical significance level of .05.



**Figure 1** Conceptual Framework

### *Research Hypothesis*

Quality of work life has an effect toward Performance efficiency of officers in Agricultural Research Development Agency (Public Organization).

### 3. Research Methodology

The Methodology of this research is the quantitative and survey research. The population is officers in Agricultural Research Development Agency (Public Organization) of 110 people. (Source: Human Resource Department, October, 2018). The specified proper sample size by using the researcher used the table of Krejcie and Morgan (1970) so the sample size is 86 people. The questionnaires have the reliability value at the statistical significance level of .05.

The author designed the research tool from concepts, theories and related literature reviews to cover the studied point, specified objective and hypotheses for using to develop questionnaire by experts' opinions to examine content validity. The researcher was created from the study of research Quality of work life affecting organizational commitment and performance efficiency of officers in Agricultural Research Development Agency (Public Organization). The statistics using for data analysis are frequency and percentage to analyze general information of respondent. Mean ( $\bar{x}$ ) and Standard Deviation (S.D) are used for quality of work life and performance efficiency. Multiple Regression Analysis are used for quality of work life has an effect toward Performance efficiency of officers in Agricultural Research Development Agency (Public Organization).

### 4. Results and Discussion

There were 86 employees of sample size, who completed the questionnaire, responded the questionnaire. Most of the respondent is female or 70 or 81.4%. 40 employees or 46.5% are the age between 26 and less than 35 years old. 76 employees or 88.4% are single status. 47 employees or 54.7% graduated in the bachelor degree. 34 employees or 39.5% of most respondent have experienced in their current companies about 6-less than 10 years. 46 employees or 53.5% have the average income at THB 15,000-less than 20,000 in Agricultural Research Development Agency (Public Organization).

Table 1 represent Mean ( $\bar{x}$ ) and Standard Deviation (S.D) of the average of quality of work life and performance efficiency.

**Table 1** Mean ( $\bar{x}$ ) Standard Deviation (S.D) and interpretation of quality of work life and performance efficiency of officers

Quality of Work Life	$\bar{x}$	(S.D)	Interpretation
<b>1. You received all forms of adequate compensation in your company in order to pay cost of your living in the current economy.</b>	3.98	.613	High
<b>2. You received all forms of proper and fair compensation compared to other company in the same job and industry</b>	3.87	.647	High
<b>3. Your work has taken care of the environment in order to provide safety, clean no pollution and heathy working conditions always.</b>	3.98	.613	High
<b>4. Your workplace has the clear rules or the measure on the working condition, safety, accident prevention</b>	3.90	.595	High

Quality of Work Life	$\bar{x}$	(S.D)	Interpretation
<b>and environment to promote healthy.</b>			
<b>5. Your work is the interesting and challenging job give you the opportunity to develop the knowledge and skill to work.</b>	4.19	.543	High
<b>6. Your work can use your skills to work and feel challenged and valued in the work.</b>	4.09	.566	High
<b>7. You feel that your work, your company and your revenue are stable.</b>	4.19	.604	High
<b>8. You are supported from your supervisor to the progressive career.</b>	4.03	.641	High
<b>9. You have a good relationship with colleagues at all times.</b>	4.53	.525	Very High
<b>10. You can get help from your colleagues always.</b>	4.47	.588	High
<b>11. You feel that the evaluation of your performance related to the fair compensation.</b>	4.16	.666	High
<b>12. You think that promotion process of employees in your company is transparent and fair.</b>	3.92	.618	High
<b>13. You feel satisfied with your work time, personal and family time.</b>	4.00	.651	High
<b>14. Obligations on your work are not a barrier to your family life.</b>	3.93	.610	High
<b>15. You get a chance to participate in the activities of your company that are beneficial to your community or society.</b>	3.83	.689	High
<b>16. Your company made a part of social responsibility such as waste disposal or reduction or other relevant in your manufacturing.</b>	3.86	.617	High
Quality of Work Life	$\bar{x}$	(S.D)	Interpretation
<b>1. Adequate and fair compensation</b>	3.92	.550	High
<b>2. Safe and healthy working condition</b>	3.93	.501	High
<b>3. Development of human capacities</b>	4.13	.457	High
<b>4. Growth and security</b>	4.11	.539	High
<b>5. Social integration</b>	4.50	.453	Very High
<b>6. Constitutionalism</b>	4.04	.564	High
<b>7. Work-Life balance</b>	3.96	.541	High
<b>8. Social relevance</b>	3.84	.554	High
Quality of Work Life	<b>4.05</b>	<b>.426</b>	<b>High</b>

Performance Efficiency	$\bar{x}$	(S.D)	Interpretation
1. You can work exactly as assigned.	4.34	.476	High
2. You work well, can meet the needs and create satisfaction.	4.26	.465	High
3. You can work as expected by the agency.	4.35	.481	High
4. You can work a lot.	4.13	.504	High
5. You take the time to do the job assigned.	4.35	.479	High
6. You can work up to the time limit.	4.23	.452	High
7. You work with resources such as materials, equipment, appliances, economically.	4.13	.455	High
8. You are part of an agency that reduces the cost of working. They also get the desired results.	4.09	.476	High
Performance Efficiency	$\bar{x}$	(S.D)	Interpretation
1. Quality	4.29	.429	High
2. Quantity	4.23	.425	High
3. Time	4.29	.416	High
4. Cost	4.11	.401	High
Performance efficiency	<b>4.23</b>	<b>.383</b>	<b>High</b>

From Table 1, it was found out that the respondents have the opinion towards quality of work life at high level of the average  $\bar{x} = 4.05$ . When analyzing each aspect, it was found out that there are some aspect having very high level of the average, for example, Social integration has the maximum average at  $\bar{x} = 4.50$ , the second level is Development of human capacities at  $\bar{x} = 4.13$ , Growth and security are at  $\bar{x} = 4.11$ , Work-Life balance at  $\bar{x} = 3.96$  and Safe and healthy working condition at  $\bar{x} = 3.93$  accordingly.

**Table 2** Results of multiple regression analysis between quality of work life and performance efficiency

Variables	$\beta$	$p$
Constant	2.436	.000
Adequate and fair compensation	-.255	.125
Safe and healthy working condition	.139	.460
Growth and security	.018	.894
Development of human capacities	.342	.039*
Social integration	.013	.900
Constitutionalism	.069	.541
Work-Life balance	.032	.863
Social relevance	.077	.682
R	.514	
R Square	.264	
Adjusted R Square	.187	
F-value	3.451	

\* *Significant at the level 0.05*

As seen from Table 2, the coefficient of determination, Adjusted, accounted for 18.7% of performance efficiency, development of human capacities  $\beta = .342, p < .05$  have an effect towards performance efficiency with significantly at 0.05. If the executive focus on more development of human capacities the employees do more performance efficiency also. It conforms to the research study of Ausuma Sakpaisan (2013) Quality of work life affecting work efficiency of staffs of Inter Realty Management Co., Ltd. (IRM) the results showed that the quality of work life in the aspects of safe working condition and working democracy affected work efficiency in terms of work quality with the correlation coefficients of 0.00 and 0.20, respectively. Moreover, the quality of work life in the aspect of safe working condition affected work efficiency in terms of work quantity and fastness with the correlation coefficients of 0.00 at significant level of 0.05. and conforms to the research study of Arnut Sangkamanee (2012) The study of operational efficiency of staff in warehouse packing department, TST Sunrise Service Co.,Ltd. Found out that was found in overall at moderate level.

## 5. Conclusion and Implications

The executive should create policy or annual plans for development of human capacities of employees in order to increase the capacity of officers affecting performance efficiency. Training should be provided to officers. Organizing activities to create the relationship of officers to create organizational culture in the same direction. To be able to work in accordance with the same standard of organization.

## 6. Future Research

There should be a study of other variables which might have an impact on performance efficiency i.e. work motivation and human resource management etc.

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**Job Characteristics Affecting Organizational Citizenship  
Behavior of Golf Instructors in Bangkok Metropolitan Region**



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# **Job Characteristics Affecting Organizational Citizenship Behavior of Golf Instructors in Bangkok Metropolitan Region**

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## **Abstract**

The purpose of this research was to study about job characteristics affecting organizational citizenship behavior in golf instructors in Bangkok metropolitan region. Data was collected from sample size of 92 people by using questionnaires. The research results showed that job characteristic in term of feedback have an effect towards organizational citizenship behavior of golf instructors in Bangkok metropolitan region.

**Keywords:** Job Characteristic, Organizational Citizenship Behavior

## **1. Introduction**

In the competitive world of business, the organizations need every advantage they can get and efficient work from human resources can put them ahead of competition. Employees who are satisfied with their jobs tend to show a positive discretionary behavior in the workplace. Organizational citizenship behavior is one of the most important behaviors targeted by the organizations because of its importance in achieving organizational effectiveness and high competitiveness. If the organizations need to increase employee performance in the workplace, they need to enhance their job characteristics values. Researcher has focused the impact of job characteristics on OCB of golf instructors in Bangkok metropolitan region.

## **2. Literature Review and Hypotheses**

Hackman and Oldham (1980) indicated that job characteristics are the design of work which emphasize on the main characteristic of individual groups in industry bringing job value and inspiration, work satisfaction as well as work performance including Skill variety, Task identifying, Task significance, Autonomy and Feedback. Skill variety means that staff's various skill are able to work to be succeed in industry group. Task identify mean staff in industry group can work since start

until finish the process and create results. Task significance means that staffs in industry group do the job to affect the lives of both physically and mentally people, both inside and outside the organization. Autonomy means that the job opportunities for staff in industry group are free to use their own judgment. They are able to judge of themselves in the operation and set themselves work schedule. It adds a sense of personal responsibility for their performance. Feedback means that staff in industry group can know the data directly and clarity about the performance results to be efficiency or not from their supervisors, colleagues or other work units.

Organ (1988) mentioned that OCB mean the action over than task of staff in industry group willing to perform and create the benefit for organization. The activities that support the social relationship and cooperation in organization help support the success of organization including Altruism, Courtesy, Sportsmanship, Civic virtue and Conscientiousness.

Altruism means voluntary and willingness of staff in industry group to help work problems solving of colleagues or supervisors including advising new staff.

Courtesy means gestures of staff in industry group implies respect for others and humility with regard to others and to help problems preventing that may occur, compassion for others, interdependence one another, consultation with colleagues before you take any action on jobs.

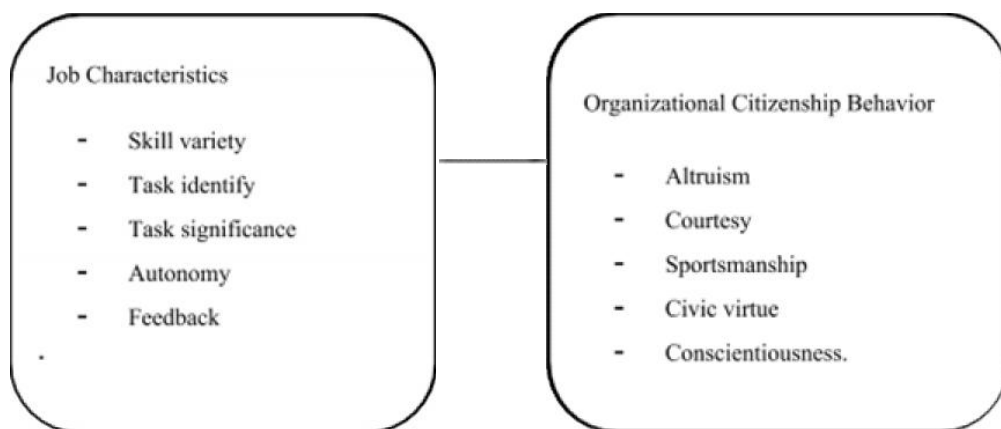
Sportsmanship means tolerance of staff in industry group and on what happened, whether grievance, discomfort or even stress. Sometimes, we have the right to express grievance that arise on the job. However, such a complaint may lead management to bear too much burden. Staff in industry group who know waiting for in style of sportsmanship.

Civic virtue refers to behavior of staff in industry group in term of participation in the processes within the organization, cooperation with the convention, well-kept secret, commenting at the appropriate time and in a formal consistent with the organization.

Conscientiousness refers to behavior that expresses acceptance rules and regulations of the organization by respect for the rules and regulations, on time, behave in rules, regard to organizational assets and do not take a job time to do anything other than work.

Chandhry, Iffat S., Jean G. Maurice & Mohamed Haneefuddin (2015) studied the impact of job characteristics on organizational success and its members' work attitudes and behaviors. Regression analysis of the survey data from 215 organizational members from private and public organization. The results show that the relationship s between the job characteristics and organizational citizenship behavior of the employees while at work in Pakistan, identified the significant impact of job autonomy, skill variety and task significant on citizenship work behavior.

Thipsukon Jongrak (2013) studied "Influence of job characteristics affecting organizational commitment, satisfaction in the job, and the organizational citizenship behavior" found that the level of feedback on the characteristics of job, organizational commitment, satisfaction in the job, and organizational citizenship behavior at the high level. Good organizational membership behavior was influenced by organizational commitment factors, followed by job characteristics statistically significant at 0.001.



**Figure 1** Conceptual Framework

### *Research Hypothesis*

Job characteristics have an effect on Organizational citizenship behavior of Golf Instructors in Bangkok Metropolitan Region.

### **3. Research Methodology**

The methodology of this research is the quantitative and survey research. The population is golf instructors in Bangkok Metropolitan Region of 120 people. The specified proper sample size by using the researcher used the table of Krejcie and Morgan (1970) so the sample size are 92 people. The questionnaires have the reliability value at the statistical significance level of .05.

The author designed the research tool from concepts theories, and related literature reviews to cover the studied points, specified objective and hypotheses for using to develop questionnaires by experts' opinions to examine content validity. The researcher was created from the study of research Job characteristics affecting the Organizational citizenship behavior of Golf Instructors in Bangkok Metropolitan Region.

The statistics using for data analysis are frequency and percentage to analyze general information of respondent. Mean ( $\bar{x}$ ) and Standard Deviation (S.D) are used for quality of work life and performance efficiency. Multiple Regression Analysis is used for job characteristics and OCB. Multiple Regression Analysis are used for job characteristics has an effect toward OCB of Golf Instructors in Bangkok Metropolitan Region

#### 4. Results & Discussion

There were 92 golf instructors of sample size, who completed the questionnaire, responded the questionnaire. Most of the respondents are male or 56 or 60.9%. 28 golf instructors or 30.4% are the age between 20 to 24 years old. 73 golf instructors or 79.3% are single status. 61 golf instructors or 66.3% graduated in the bachelor degree. 29 golf instructors or 31.5% have experienced in their current companies about 5-less than 10 years. 26 golf instructors or 28.3% have the average income at THB above 50,001 in golf instructors in Bangkok metropolitan region.

**Table 1** Mean ( $\bar{x}$ ) Standard Deviation (S.D) and interpretation of job characteristics and organizational citizenship behavior

Job Characteristics	( $\bar{x}$ )	(S.D.)	Interpretation
1. You always help and facilitate your colleagues, boss and new employees.	4.543	.5223	Very high
2. You concern and support your colleagues. Discuss with colleagues before taking any action.	4.185	.5533	High
3. You are tolerate the irritations of other as an unavoidable part of my organizational setting	4.022	.7556	High
4. You are a responsible person and participate in various processes within the organization.	4.098	.7272	High
5. You strictly act according to rule and regulation of company.	3.772	.7998	High
6. You are willing to help your colleagues, boss, and new employee when the problems related to the job.	4.489	.6021	High
7. You will always concern about the effect on others, think and prevent the problems which may occur after work was done.	4.141	.5258	High
8. You always tolerate minor and temporary personal inconveniences and imposition of work without grievances, complaints, appeals, accusations, or protest.	4.196	.5974	High
9. You are the one who cooperates with the meeting, keep the secret and comment in appropriate time.	4.152	.5729	High
10. You have never spent your work time for other things which does not relate to work	3.011	.8451	Medium
Job Characteristics	( $\bar{x}$ )	(S.D.)	Interpretation
1. Skill variety	3.657	.9028	High
2. Task identifying	4.445	.5888	High
3. Task significance	4.252	4.4319	High
4. Autonomy	4.521	0.5999	Very high
5. Feedback.	4.048	0.6971	High
Total Job Characteristics	4.184	1.4441	High

Organizational Citizenship Behavior	( $\bar{x}$ )	(S.D.)	Interpretation
1. Your job requires the knowledge, skills, and expertise to perform a variety of tasks.	4.152	.6451	High
2. Your job can be identified as a procedure until the result	4.402	.5941	High
3. Your work is beneficial to both internal and external organizations.	4.174	.6565	High
4. You can use your own judgment to solve problems arising from the operation immediately.	4.500	.6547	Very high
5. The supervisor regularly reports on the performance of the assessment criteria.	3.945	.8214	High
6. The tasks you assign each day are different.	3.163	1.1605	Medium
7. You know the purpose of every job to determine how to work properly.	4.489	.5836	High
8. Your job has benefit to the company.	4.330	.7754	High
9. You can plan your own schedule by yourself.	4.543	.5429	Very high
10. You know your own performance in terms of success and the mistake.	4.152	.5729	High
Organizational Citizenship Behavior	( $\bar{x}$ )	(S.D.)	Interpretation
1. Altruism	4.516	0.5622	Very high
2. Courtesy	4.163	0.5395	High
3. Sportsmanship	4.109	0.6765	High
4. Civic virtue	4.125	0.6500	High
5. Conscientiousness	3.391	0.8224	High
Total Organizational Citizenship Behavior	4.060	0.6501	High

From table 1, it was found out that the respondents have the opinion towards job characteristics at high level of the average = 4.060. When analyzing each aspect, it was found out that there are some aspect having very high level of the average, for example, Altruism has the maximum average at = 4.516, the second level is courtesy at = 4.163, Civic virtue is at = 4.125, Sportsmanship at = 4.109 and Conscientiousness at = 3.391 accordingly.

**Table 2** Results of multiple regression analysis between quality of work life and performance efficiency

Variables	$\beta$	$p$
Constant	.184	.000
Altruism	-.145	.080
Courtesy	-.195	.386
Sportsmanship	.081	.204
Civic virtue	.221	.630
Conscientiousness	.184	.025*
R	.528 <sup>a</sup>	
R Square	.279	
Adjusted R Square	.237	
F-value	6.656	

\*Significant at the level 0.05

As seen from Table 2, the coefficient of determination, Adjusted, accounted for 23.7% of OCB, Conscientiousness  $\beta = .184, p < 0.05$  have an effect towards OCB with significantly at 0.05. It conforms to the research study of Thipsukon Jongrak (2013) the results showed that the level of opinions on job characteristics was at a high level. This is because of the golf instructor's training. There will be a summary evaluation after each lesson. After completing the course, there is feedback from the students through the course. There is an evaluation of the entire month's performance from the supervisor. The feedbacks make the golf instructors realize their performance that there are advantages or mistakes to improve and modify the teaching in the future, planning the work. It is expressed through good membership behavior.

## **5. Conclusion and Implications**

The executives should focus on the characteristics of job feedback by adding an evaluation from the golf instructors together and from customers as well to recognize their advantage and mistake to develop and exchange of knowledge.

## **6. Future Research**

There should be a study of other variables instead of job characteristics which might have an impact on OCB i.e. work motivation and human resource management etc.

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**The Motivations in Working Performance;  
A Case Study on K-Bank Staff, Chaengwattana Headquarter**



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# **The Motivations in Working Performance; A Case Study on K-Bank Staff, Chaengwattana Headquarter**

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## **Abstract**

In this paper, it mainly aims to study about the motivations in K-Bank staff performance, Cheang Wattana Headquarter. In order that, the sample groups are 400 K-bank staffs, in Cheang Wattana Headquarter who responded on questionnaire about the motivate factors on their performances. The rating scales, in questionnaire, was clarified into 5 degrees which eventually was analyzed by Cronbach's alpha coefficient as 0.87 including with frequency, mean, percentage and standard deviation. The research results indicated that responsibility, achievements and interpersonal relations with peers was the highest influences while, recognition, work itself, advancement, salary, interpersonal relations with director, working tutorials and policy management was pointed in large degree. In case of that, these motivations had been significantly correlated with K-Bank staff performance.

**Keywords:** Motivation, Performance

## **1. Introduction**

### **1.1 Statement of Purpose**

Nowadays, the financial institution like Bank had much impactful on Thai economy which had been more and more developed their transaction activities or even reduced the interest rate comprising with customer demand. Each bank has to enhance the degree of performance in order to conserve the number of customers and also increase the amount of interest itself, at the same time. Within organization, staff would perform in different fields of position as driving each institution to meet their objectives by policy, planning or strategy in advanced. Thus, to generate the motivations, among staff, could preserve the qualified officers working for the organization. Particularly, the high competitive sphere in nowadays, the directors have to create the motivative environment for more and more sufficient qualification, within their organizations.

In motivate manners, it referred to the motivation or self desire generating good working behaviors comprised by the basic needs as achievement, environments, salary and benefits, advancement, interpersonal relationship among colleagues and directors and also stability. In other words, to motivate any staff and achieve the goal or reward reflected the importances of motivative influences in staff performances. If any staff lacked the motivations, the organization would lose the adequate ability leading to lower the quality itself. According to the slogan; “Towards Service Excellence”, it indicated to primary realization on customer services. Thus, the motivations among staff could strongly achieve the goals of K-Bank. In terms of that, it is important to motivate all staff because, everyone had the different desire such as salary or reward. On the other hand, some people might need the psychological rewards to work with other groups or even progressive positions. In this case, self desire are individually different. The motivative influences would force their performances leading organization more and more advanced efficiently.

Presently, the number of resigning is continually increasing which mostly moved to rival company, settle own business or even moved to work with other customers. The highest possibility, to resign, is people who had less than two years experiences. From previous research, surveying by calling with Banking staffs, the highest resigning rate is Krungsri (8.8%) followed by K-Bank (8.45%), SCB (7.02%), Bangkok (5%) and Krungthai (1.47%) respectively (source: www.posttoday.com). According to the previous survey, the authors selected the case study of K-Bank to study the motivative influences on officer’s satisfaction and preference impacting on working performance. The performance directly contributed to the organization potentials and reduced the number of resigning. This research aims to clarify the correlations of motivative influences and working performance.

### *1.1 Objectives*

1. To study the influential factors on working performance of K-Bank officers, Chaengwattana Headquarter.

2. To exemplify the motivative influences on working performance of K-Bank officers, Chaengwattana Headquarter.

### *1.2 Scope of Research*

This paper was scoped the influential factors among K-Bank officers within Chaengwattana Headquarter where have 4,200 staffs specifically, 400 sample people.

### *1.3 Hypotheses*

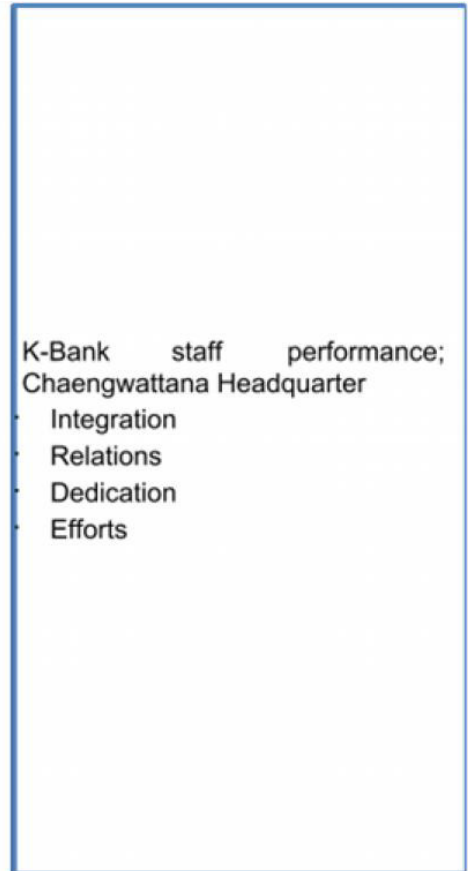
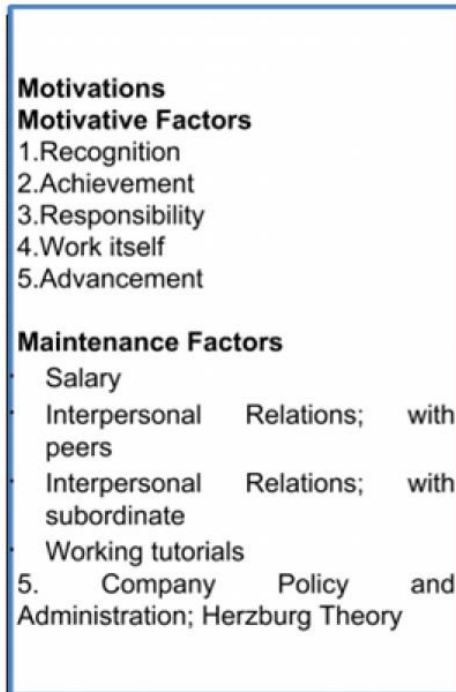
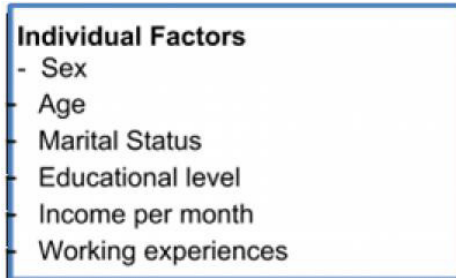
1. Individual factors had impacted on working performance differently.

2. Motivative influences correlated with working performance of K-Bank officers, Chaengwattana Headquarter.

## 1.4 Conceptual Framework

Independent Variables (x)

Dependent Variable (y)



## 2. Literature Review

To the definition of motivation, it was created by various factors mostly generated by self interested to drive themselves efficiently and achieve their goals.

Thitiya Pulpananang (B.E.2552) explained the root of motivation term that was referred from Latin word as “movere” meaning to active movement leading to other actions. In order that, those actions was contributed from self driving or motive by want, desire or wish to achieve the goals. The driving, motivation or desire bring about imbalanced physical conditions which directly stimulated self action to respond self desire. However, human desire was always changed by environment and particular time. In other words, the physical needed is psychological needed such as social recognition motivated self driving force.

The scholars had defined the term motivation differently.

(Beach)(Thanthip Makyai, B.E.2552) implied that the motivations means the willingness to dedicate to achieve particular goals. The motivation is human forces to gain the reward following their objectives.

(Taweewat Sasakul B.E.2550) explained the root of motivation term that was referred from Latin words “Movere” meaning to move which is the active action to generate thrive or want to achieve the goals. Sometime, those forces might be called as desire or wish that created imbalanced physical conditions motivated to do something to respond self desire in that particular time. Therefore, the want or need is the main forces required adaptability. For example, physical needed is psychological food like social recognition which created stressful and respondent behaviors at the same time.

(Baron and Partas)(Thanthip Makyai, B.E.2552) defined the terms ‘motivation’ as the process of generating forced to achieve the goals.

(Cribbin)(Thanthip Makyai, B.E.2552) referred that the motivations enhanced the worker performances to obtain psychic income from their achievement by self efforts and endeavors. If the motivation was reduced, the efforts would be lowered as well.

Jones (1955) implied that the motivations are behaviors created directional forces and drive.

Mc Clelland (1985) claimed that the motivation is the expression of individual characteristic responding to motive in order to achieve the goals. The satisfactory and unsatisfactory mood depended on self experiences, specifically.

Sprinthall (1991) implied that the motivation is driving forces or desire to express though specific directions. That motion shall be created in imbalanced conditions or the desire to direct particular goals or people.

Daft (2000) mentioned that the motivation is energy or driving force in both external and internal sphere to stimulate the active motion including with preservations of particular motive.

According to framework, it could be concluded that the motivation referred to driving force stimulating self efforts to achieve their goals. The motivation is the important forced that everyone should intake to gain all achievements.

## *Two Factors Theory by Herzburg*

Motivation factors reflected to potentials and efforts to work such as achievement, advancement, responsibility and progressive positions.

Maintenance Factors indirectly related to working performance. However, it correlated to working environment which reflected to satisfaction directed the level of motivations or preferences as well.

### *Related Framework*

Chamnun Bunsiri (B.E.2543 p.10) mentioned to working performance that the performance is the well preferences on various aspect which are contributed by perceptions and evaluations or self experiences stimulating their willingness and happiness to work. However, those performance could be changed unpredictably that might impact on internal factors.

1. Integration
2. Relationship
3. Dedication
4. Efforts.

Following above definitions, the working performance referred to respondent action to self physical and psychological desire that created enthusiastic mood to work willingly.

### **3. Research Methodology**

This study was mainly conducted by closed-ended Questionnaire by these following part.

**Part 1:** Questionnaire about individual factors among K-Bank staff in style of checklist comprised by 7 questions; sex, age, marital status, educational level, income per month, working experiences, position.

**Part 2:** Questionnaire about motivations in working performance of K-Bank staff, Chaengwattana Headquarter. In this part, rating scale was classified into 5 degrees included by 25 questions in 10 dimension; achievement, recognition, responsibility, work itself, Advancement, salary, Interpersonal Relations with directors and colleagues and Company policy and Administration.

**Part 3:** Questionnaire about K-Bank staff performance; Chaengwattana Headquarter classified rating scales into 5 degree included by 10 questions - 4 aspect; integration, relationship, dedication, efforts.

#### *3.1 Research Design*

The research methodology was framed to cover these following objectives.

1. To study previous research and documents in related fields comprehending in all informations to generate questionnaire.
2. To create impactful questionnaire about motivations on K-Bank staff performance, Chaengwattana Headquarter.

3. Presenting questionnaire to advisor to correct particular point and informations for more improvements.

4. Sampling used with 30 sample people

### 3.2 Data Collection

All data was collected from 16 October,2018 to 10 November, 2018. Those 400 questionnaires was handed out to sample group by simple random sampling methods.

### 3.3 Data Analysis

The concluded data would be analyzed in frame of descriptive statistics to clarify these factors.

1. Individual factors was analyzed by percentage and frequency.
2. The motivations of K-Bank staff performance was interpreted into frequency, mean and standard deviation
3. Staff working performance was interpreted into frequency, mean and standard deviation.
4. The hypotheses was proved by T-test analysis and One way Anova including Pearson Product Moment Correlation Coefficient.

## 4. Research Results

### Part 1: General informations

Most of respondents are female as 71.5% who aged at 20-29 years old as 45.8%. Most of them are single (73.5%) , graduated Bachelor degree (84%) earned 20,001 -30,000 baht per month (42.7%) with more then 7 years work experiences (30.5%) and being staff (88.2%)

**Part 2:** The informations about motivation factors of K-Bank staff, Chengwattana Headquarter

Most of respondent mentioned to motivations in high level as 3.88 ( $x^{[2]T^2}=3.88$ ). Considering in each dimension, it indicated that the highest level is responsibility ( $x^{[2]T^2}=4.11$ ) followed by achievement ( $x^{[2]T^2}=4.06$ ), interpersonal relation with colleagues ( $x^{[2]T^2}=4.02$ ), recognition ( $x^{[2]T^2}=3.98$ ), work itself ( $x^{[2]T^2}=3.93$ ), company policy and administration ( $x^{[2]T^2}=3.92$ ) interpersonal relations with director ( $x^{[2]T^2}=3.77$ ), advancement ( $x^{[2]T^2}=3.74$ ), work tutorials ( $x^{[2]T^2}=3.82$ ) and salary ( $x^{[2]T^2}=3.48$ ) respectively.

### Achievement

Most of them has paid the most attention to achievement which was counted as the highest point ( $x^{[2]T^2}=4.07$ ). In each aspect, it indicated that the highest average is the ability to work within due date ( $x^{[2]T^2}=4.18$ ) followed by self sense of pride when the directors given satisfactory mood ( $x^{[2]T^2}=4.06$ ) and lastly, the ability to resolve urgent case ( $x^{[2]T^2}=3.97$ ).

## Recognition

The respondents had much concerned about social recognition ( $x^{[T]}=3.97$ ). In each aspect, the highest point is the trustworthiness to manage problems ( $x^{[T]}=4.00$ ) followed by open minded colleagues ( $x^{[T]}=3.98$ ) and confidential sphere, by the directors ( $x^{[T]}=3.94$ ).

## Responsibility

The respondent concerned about responsibility in high degree ( $x^{[T]}=4.11$ ). Considering each dimension, it indicated that the highest conditions is the ability to work ( $x^{[T]}=4.24$ ) followed by enthusiastic mood ( $x^{[T]}=4.13$ ) and the ability to do overtime working ( $x^{[T]}=3.97$ ).

## Work Itself

Most of them had concerned with work itself in high degree ( $x^{[T]}=3.93$ ). To evaluate each aspect, it indicated that the highest point is the ability to work following their self ability ( $x^{[T]}=4.04$ ) followed by the clear definitions of working responsibility ( $x^{[T]}=4.01$ ), the importance of work - contributed benefits to the organization- ( $x^{[T]}=3.89$ ) and lastly, self satisfaction on current position ( $x^{[T]}=3.68$ ).

## Advancement

Most respondent had much concerned about their advancement ( $x^{[T]}=3.74$ ). To clarify each aspect, it reflected that the highest concerned is educational supporting ( $x^{[T]}=3.80$ ) and working seminar or tutorials to improve their skills as ( $x^{[T]}=3.68$ ).

## Salary

The respondents had concerned about salary as ( $x^{[T]}=3.48$ ). Considering in each dimension, it emphasized that the highest concern is welfare and special salary ( $x^{[T]}=3.56$ ) followed by salary correlated with education level ( $x^{[T]}=3.40$ ).

## Interpersonal Relations with directors

Most respondent had much concerned about interpersonal relations with directors as ( $x^{[T]}=3.77$ ). Considering in each aspect, it indicated that the directors has much potentials in their position ( $x^{[T]}=3.89$ ) followed by good suggestion from directors ( $x^{[T]}=3.81$ ) and lastly, the equal assignment ( $x^{[T]}=3.61$ ).

## Interpersonal Relations with peers

Most respondent had much concerned about the interpersonal relations with peers as ( $x^{[T]}=4.02$ ). To evaluate in each aspect, it indicated that the highest point is dependent relations ( $x^{[T]}=4.13$ ) next to team working with happiness as ( $x^{[T]}=3.91$ ).

## Working Tutorials

Most of them paid attention to working tutorials as ( $x^{[T]}=3.82$ ). The largest average is confidential with directors as ( $x^{[T]}=3.92$ ) followed by direct and appropriated assignment from directors as ( $x^{[T]}=3.71$ ).

## Company Policy and Administration

Most of them had also much concerned with policy and administration at ( $x^{[T]}=3.92$ ). The most concerning goes to the perception and comprehension to organizational policy, itself at ( $x^{[T]}=3.95$ ) followed by conforming with all policy pathways at ( $x^{[T]}=3.89$ ).

### Part 3: Motivations in staff performance; case study on K-Bank staff, Chaengwattana Headquater

The sample groups had much concerned about staff performance as about ( $x^{[T]}=3.71$ ). The highest average is integration ( $x^{[T]}=3.96$ ) followed by relationship ( $x^{[T]}=3.84$ ), dedication ( $x^{[T]}=3.63$ ) and efforts ( $x^{[T]}=3.44$ ) respectively.

#### Integration

Most of them checked on integration issues as about ( $x^{[T]}=3.96$ ). The highest concerning is the willingness to work ( $x^{[T]}=4.04$ ) next to, raising opinion and comments as about( $x^{[T]}=3.87$ ).

#### Relationship

Most respondent had much caring of relationship among themselves as about ( $x^{[T]}=3.84$ ). The highest point is worrisome about organizational reputation as ( $x^{[T]}=3.99$ ) followed by the pride to work within this organization as ( $x^{[T]}=3.93$ ) and lastly, the feeling like second home ( $x^{[T]}=3.61$ ).

#### Dedication

Most respondent had much dedication counted as ( $x^{[T]}=3.63$ ). The highest average is enthusiastic manner to work as ( $x^{[T]}=3.79$ ) followed by overtime working, even if there is no overtime recompense as about ( $x^{[T]}=3.47$ ).

#### Efforts

Most of them had much efforts counted as ( $x^{[T]}=3.44$ ). The highest point is completing all assignment ( $x^{[T]}=3.96$ ) followed by passionate with new challenges ( $x^{[T]}=3.82$ ) and positive perspectives with any problems ( $x^{[T]}=2.54$ ).

## Part 4: Hypotheses Testing

The first hypotheses mentioned assumed that the individual factors impacted on motivations differently.

1.1 According to results comparison, different sexes had not different significantly as 0.05( $t=1.930$  , sig.=0.055). It indicated that the different sex did not impact on integration 0.05( $t=0.560$  , sig.=0.577) , relationship 0.05( $t=3.015$  , sig.=0.003) , dedication 0.05( $t=0.526$  , sig.=0.599) significantly. While, they had different level of effort as 0.05( $t=3.008$  , sig.=0.003) significances.

1.2 Results comparison reflected that the different age had the different point of view especially, in terms of integration, relationship and effort as 0.05 significances.

1.3 From comparative view, the K-Bank staff marital status impacted on working attitude as 0.05 significance excluding the efforts counted as 0.05 significances.



1.4 To compare the differences of working performance, the educational level did not contribute the different level of working performance as 0.05 significances.

1.5 From comparative study among K-Bank staff, it indicated that the different amount of salary correlated to different working performance as 0.05 significances. It reflected that the salary impacted on different level of integration, relationship, dedication and efforts as 0.05 significances.

1.6 The comparative study also emphasized that the differences of working experiences contributed the differences of performances as 0.05 significance. It illustrated the different degrees of integration, relationship, dedication and effort at 0.05 significance.

1.7 In comparative view, the results indicated that differences of position led to the different degree of performances as 0.05 significance. It demonstrated that each position had different level of integration, relationship, dedication and effort as 0.05 significance.

1.8 The second hypotheses referred that the motivation had correlated in the way of positive performance. The results indicated that the motivation impacted on working performance correlatively as significances.

## **5. Discussion**

1. The research results indicated that the motivations on K-Bank staff, Chaengwattana Headquarter had much rating scales. The highest scale was the responsibility followed by achievement, interpersonal relations with peers, recognition, advancement, working tutorials and salary respectively. In case of that, it emphasized that K-Bank staff of Chaengwattana Headquarter had motivations to work. For instance, staff had motivative manner to complete assignment, though it was overtime working which reflected the correlation between working environments and motivations.

2. The research results illustrated that the working performance of K-Bank staff pointed in high degree. The highest point is integration followed by relationship, dedication and efforts respectively. In order that, the results demonstrated that K-Bank staff had the most level of integration by willingness to work, raising the new ideas. At the same time, it manifested that the directors also paid attention on giving assignment and open minded with all staff ideas generating the new pathways of K-Bank. In case of that the highest level of working performance was integration.

3. The hypotheses testing by the comparative study among K-Bank officers indicated that the differences of individual factors impacted on the difference of integration, dedication, relationship and efforts as 0.05 significances. Thus, the individual factors like sex, age, marital status, educational level, income, working experiences clearly affected on working performance.

4. From hypotheses testing, the motivations correlatively affected on working performance as the higher motivative manner was the higher working performance, consistently.

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## **Sripatum University, Thailand**

Sripatum University is one of the oldest and most prestigious private universities in Bangkok, Thailand. Dr. Sook Pookayaporn established the university in 1970 under the name of "Thai Suriya College" in order to create opportunities for Thai youths to develop their potential. In 1987, the college was promoted to university status by the Ministry of University Affairs, and has since been known as Sripatum University. "Sripatum" means the "Source of Knowledge Blooming Like a Lotus" and was graciously conferred on the college by Her Royal Highness, the late Princess Mother Srinagarindra (Somdet Phra Srinagarindra Baromarajajanan). She presided over the official opening ceremony of SPU and awarded vocational certificates to the first three graduating classes. Sripatum University is therefore one of the first five private universities of Thailand. The university's main goal is to create well-rounded students who can develop themselves to their chosen fields of study and to instill students with correct attitudes towards education so that they are enthusiastic in their pursuit of knowledge and self-development. This will provide students with a firm foundation for the future after graduation. The university's philosophy is "Education develops human resources who enrich the nation" which focuses on characteristics of Wisdom, Skills, Cheerfulness and Morality.

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The University of Cyprus was established in 1989 and admitted its first students in 1992. It was founded in response to the growing intellectual needs of the Cypriot people, and is well placed to fulfill several aspirations of the country. The University is a vigorous community of scholars engaged in the generation and diffusion of knowledge. Despite its brief history, the University of Cyprus has earned the appreciation of Cypriot society. Admission for the majority of undergraduate students is by entrance examinations organized by the Ministry of Education and Culture of the Republic of Cyprus.

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The University of Wollongong in Dubai, abbreviated as UOWD, is a private university located in Dubai, United Arab Emirates. The University is one of the UAE's oldest universities, having been founded in 1993. The Campus has over 3,500 students from more than 108 countries. UOWD is one of the UAE's oldest and most prestigious universities. Established in 1993 by the University of Wollongong in Australia - currently ranked in the top 2% of universities in the world (QS World University Rankings 2018) – UOW in Dubai represents a pioneering Australian initiative in the Gulf region.

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