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Contact (Whatsapp): +971-56-2448120

Email: info@anissh.com

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I would like to thank our honorable scientific and review committee for giving their precious time to the review process covering the papers presented in this conference. I am also highly obliged to the participants for being a part of our efforts to promote knowledge sharing and learning. We as scholars make an integral part of the leading educated class of the society that is responsible for benefitting the society with their knowledge. Let's get over all sorts of discrimination and take a look at the wider picture. Let's work together for the welfare of humanity for making the world a harmonious place to live and making it flourish in every aspect. Stay blessed.

Thank you.

Dr. Vincent

Conference Chair

Email: conference.chair@anissh.com

The Study of Nakornchaiburin, Surin Province, Thailand Traveling Routes.

^{1*}Parichart Veereprasit, ²Chitpong Ayasanond, ³Natpatsaya Sethachotsombut

^{1,2,3}College of Logistics and Supply chain Suansunandha Rajabhat University 1 U-thong Nok Road, Dusit, Bangkok 10300 Thailand
parichatmildwave@gmail.com.

Abstract The objectives of this study were 1) to study the traveling routes of Nakornchaiburin; 2) to study the Nakornchaiburin traveling routes' problems; 3) to find the solutions of Nakornchaiburin traveling routes' problems. The population was 917,578 Thai tourists based on 400 questionnaires were collected, analyze data and summarize with statistics, frequency, percentage, mean and standard deviation. Found that the Nakornchaiburin, Surin Province, Thailand traveling routes has 80 travel destinations. The overall traveling routes' problem was at the medium level with a mean of 3.23 and a standard deviation of 0.23. For internal traveling routes' problems was at a high level with a mean of 3.85 and a standard deviation of 0.05. These are three main internal concerned topics, 1) the traveling routes' security with the mean of 4.13 and a standard deviation of 0.32; 2) the traveling routes' disconnecting information with the mean of 4.00 and a standard deviation of 0.24; 3) the traveling routes' distance information with the mean of 3.98 and a standard deviation of 0.44. For external traveling routes' problems was at the medium level with a mean of 3.50 and a standard deviation of 0.21. These are three main external concerned topics, 1) the traveling routes' access information with the mean of 3.42 and standard deviation of 0.43; 2) the traveling routes' visiting or searching information with the mean of 3.41 and a standard deviation of 0.86; 3) the traveling routes' tourist guide with the mean of 3.39 and a standard deviation of 0.58, respectively.

Keywords: Nakornchaiburin, Thailand, Traveling Routes

INTRODUCTION

During 2012-2016, Thailand has adopted the first National Tourism Development Plan as the direction and the master plan to develop the tourism of Thailand; for the five-year duration, to become quality tourist attractions, to create competitive advantages against the globe, to generate and distribute income regarding morality, stability, and sustainability. The sustainable management and administration of Nakhonchaiburin composes of (1) The accessibility of tourist attractions (2) The value of tourist attractions (3) The public relation of tourist attractions (4) The potentiality and the availability of areas (5) The safety (6) The facilities and (7) The preparedness of people in the community in terms of tourism. All stakeholders must have a proper consideration for the adoption in accordance with the purposes and the objectives. The action must be consistent with the current situation in order to enhance the efficiency in terms of the benefits and welfare of citizens, society, and the nation. (Kanokkklao Keawkla, 2016, pp. 91-93)

For the road safety of Thailand, international, and ASEAN, it is obvious that the globe has significant concerns about the road and vehicle safety as the certain issues cause damages to lives and properties of the global citizens. In Thailand, the issue of road safety has been aimed to decrease; at 50%, by 2020. In addition, the member of ASEAN has agreed to proceed by raising road safety as the "national agenda" in order to drive each country to "the Decade of Action for Road Safety". For the policies of Thailand, 2011-2020 is stated to be the Decade of Action for Road Safety (Department of Land Transport, 2016, p. 1).

Accident Prevention Network (2561, p. 2) concluded the data during the New Year festival of 2017 as follows: (1) There were 3,919 accidents, in total, which resulted in 478 killed and 4,128 admitted (2) Most casualties were drivers and local citizens (district/sub-district) (3) Causes of accidents were, mostly, improper behaviors of the drivers; for example, driving under the influence, driving exceed the speed limit, violating laws and regulations, and lack of safe driving principles (4) Motorbike was reported the highest number of vehicle-related to accidents (5) The national highway was reported to be the place where accidents occurred at the highest number.

The principles and causes above showed that it is necessary, for Thailand, to utilize the revenue derived from tourism business and tourists as much as possible. Surin is one of the unique provinces in Nakhonchaiburin. It is considered a province rich with historical tourist attractions; for example, the ancient stone castle of Khom, Elephant village, and interesting cultural environment. The development of tourism, here, was consistent with the governmental policies which encouraging the idea of developing concrete tourism logistics. The researcher was, therefore, interested in the study of travel routes around Nakhonchaiburin, Surin

OBJECTIVES

1. To study the traveling routes of Nakornchaiburin
2. To study the Nakornchaiburin traveling routes' problems
3. To find the solutions of Nakornchaiburin traveling routes' problems.

LITERATURE REVIEW

Definition of Terminologies

Travel routes refer to the road connected with the tourist attractions. It can be under the supervision of both private and public agencies. This research focuses on beneficial routes which are connected with the tourist attractions, timesaving, worthy, impressive. All these factors can lead to the extension and connection of tourist attractions. This research focuses on the attributes of the routes which are physicality, direction, traffic signs, and safety. These attributes are considered crucial and facilitating tourism are as follows: Physicality refers to the general appearances of constructed, developed, and improved routes for serving tourism. The information about directions to the attractions; for example, open-closed time, duration, application accessibility, and on the way access points should be provided completely. Routes refer to the appearance of the route which is able to serve and facilitate the journey. It is also the factors supporting safe driving; for example, traffic lights, a speed bump in the community area, zigzag route, congestion, and warning signs along the route. Traffic signs refer to traffic signs or symbols, in accordance with the regulation of laws, which are appeared along the travel routes. These signs help tourists with their decision making. The sign must be able to be seen from the distance. The typography must be explicit and reflected the light with the right fluorescent color. Traffic sign must be placed in a proper distance which facilitating the human sight.

Safety refers to the attributes reinforcing the safety of life and properties of travelers which are factors that determine if the tourists would visit the attraction or not. The crucial factors are; for example, facilitator, rest area, the availability of CCTV on significant intersections, routes information, rescue system from nearby hospitals Nakhonchaiburin refers to 4 provinces in the Northeastern of Thailand which are Nakorn (Nakhon Ratchasima), Chai (Chaiyaphum), Bu (Buriram), and Rin (Surin). These provinces are the ally collaborating under the same economic zone development strategies. This research emphasizes the study of the travel routes of Surin. Surin refers to the area of Surin province which is one of four provinces in the bottom part of Northeastern of Thailand. Well-known tourist attractions are, for example, Elephant fare, Elephant village, the ancient stone castle of Khom, Tor Pa Mai (silk weaving) village, Chaksan Waii (rattan weaving) village, Silverware village, cultural traditions of 3 native groups which are Cambodian, Kui and Laos. The folk plays, natural resources, and other factors attract the tourists to visit Surin province.

The concept of Logistics

Logistics Management is one of the supply chain process which is to manage the processes of dislocating, storing or preserving goods and materials, relevant information service from the origin to the final consumer, including a proper planning for the locations of resources in order to be consistent with time and to support the control and the flow of goods efficiently, in accordance with the demands of customers. (Kumnai Apiprachayakul, 2007) Logistics management refers to the processes related to the operation planning, the controlling of materials/goods/services, including the information to ensure the effectiveness and efficiency of the flow.

Concept of tourism

Tourism is one of the recreational activities involved with the journey which is to travel from one place to another. It is about alternating one's atmosphere or environment and, without other purposes, it causes happiness. There are 4 aspects that may need to be considered.

1. A tourist refers to an individual who makes a journey to tourist attractions with certain intentions. These intentions determine one's activities and destinations.
2. An entrepreneur of tourism business refers to an entrepreneur who produces goods or services to serve the desires or purposes of the tourists.
3. Governmental agencies refer to the public agencies which are responsible for managing and taking care of tourism in accordance with the enforced policies. In many countries place importance on tourism since it can create a huge amount of revenue in the form of international currencies which are derived from the businesses in the tourism industry that provide goods or services to the tourists.
4. Local citizens refer to individuals who reside within the tourism areas. They have direct interacted with the tourists; for example, to welcome and to be decent hosts. In addition, they have job opportunities to be employed in the tourism industries.

Concept of Tourism Logistics

The logistics system is relevant to tourism and the development of the crucial system is focused on the transportation system. The guidance for important transportation systems; according to the Office of the National Economic and Social Development Vol. 12, 2017, p. 3-4, is concluded as follows:

1. Railway Transportation - The rail size has been developed to be 1 meter. It is considered the main transportation and distribution network of the nation with dual construction in 500 kilometers radius from Bangkok. Also, there has been a development of the new route railway which connects countries in ASEAN. In addition, 1,435-meter rail of the high-speed rail has been developing to distribute the civilization from Bangkok to the main cities of each region.
2. Public Transportation in urban areas - By developing eco-friendly public transportation under the principle of designing for everyone and placing importance on developing the cities and nearby areas in order to enhance the proportion of public transportation and non-engine transportation.
3. Road Transportation - By enhancing the safety of transporting and developing the network of the expressway and express highway between cities in order to serve the demand of transporting which is forecasted to be increased due to the

beginning of ASEAN economic community. In addition, intelligent transport and traffic systems have been adopted to enhance the effectiveness of traffic administration, management, and data collection.

4. Air Transportation - By developing the staffs, equipment, administration and management system, emergency protocols in accordance with international standard, the utilization of existing airports to its max potential, including the development of airspace coherently.

5. Water Transportation – By encouraging people to utilize existing regional harbors to its max potential, to support the constant transportation of diverse goods, and to develop Laem Chabang as a regional leading harbor under the foundation of involvement from the citizens.

Therefore, the regulation of strategies for setting up the logistics system in order to serve the national economic growth has been contained in volume 12 of the National Economic and Social Development Plan. The concept Thailand 4.0 by Dr. Suvit Maesincee, Deputy Minister of Commerce, has been adapted to integrate with the foundation of Thai society. It resulted in the mainstream development of logistics systems in Thailand by the aim to be adaptable with all activities in Thai economic zone, including the economic zone of multiple provinces in the bottom part of Northeastern of Thailand.

Concept of Road Safety

Surapol Pyomyam (1998, p. 286) stated that safety in the work environment refers to the circumstance where the staff is able to operate without any obstacles. The mentioned obstacles can be categorized into 2 types which are presumable obstacles, according to the existing information, and unexpected/out of control obstacles or so-called “accident”. Chockchai Busamer (1999, p. 3) stated that safety refers to the circumstance which is free from danger, injury, risk, or damage. Witoon Simachokdee and Weerapong Chalermjirat (2004, p. 19) defined the term “Safety” as the condition which is free from danger. Practically, it is not possible to get rid of all types of danger. Safety, therefore, includes the circumstance which is free from possible danger in terms of safety engineering. Besides the given definitions, it also refers to the incident that resulted in the delay in production and manufacturing, even though the certain incident did not cause injuries or disabilities. According to the definitions mentioned above, safety can be concluded to be the circumstance which is free from danger, injuries, risk, and damage.

RESEARCH METHODOLOGY

The researcher has set the scope of research as follows:

1. Population and sample scope was 917,579 tourists according to the informational statistics, in 2016, of the tourist attractions. The researcher used the method Probability Sampling by Stratified Random Sampling by randomly stratifying and setting the scope of 400 samples using the formula of Taro Yamane (1973, p. 125).
2. Content scope; The researcher has studied of travel routes around Nakhonchaiburin, Surin; in terms of the administration and management of travel routes, and other relevant researches from documents, articles, and research report in order to come up with the solutions for the issues
3. Variable scope; the researcher has studied the following variables.
 - 3.1 Independent Variables were physicality, routes, and traffic signs.
 - 3.2 Dependent variables were the safety of travel routes around Nakhonchaiburin, Surin.
4. Location scope; the researcher has studied, only, the case study of Surin’s tourist attractions.
5. Duration scope; 1st November 2018 – 30th March 2019

This research has been conducted in the form of Quantitative Research and Questionnaire. The samples were using simple random sampling which was 400 individuals who were using travel routes around Nakhonchaiburin, Surin. This research has adopted the instant table of Taro Yamane using the following formula.

$$n = N / (1+N (e) ^2)$$

n = the size of samples

N = the size of the population
e = Probability of errors 0.05

Research Instrument

The research instrument is a questionnaire which composes of 3 parts as follows:

Part I – Personal Information consists of five questions which are sex, age, occupation, educational status, average income. The questionnaire type is a checklist in which requires the participants to choose the answer in accordance with their actual personal information.

Part II – Thai travelers’ issues in terms of travel routes, within the tourist attractions, in Surin province consist of 20 questions which are constructed in the form of Likert’s Rating Scale which requires the participant to answer in accordance with the level of issues.

Part III – Additional feedback towards the use of travel routes in Surin province.

The research instrument has been conducted by these following procedures

1. Studying of concept, theory, and the principle of tourism logistics travel routes around Nakhonchaiburin. The literature review process has been conducted by using documents, articles, and relevant or similar research in order to utilize the data derived from different sources as guidance to conduct the questionnaire.
2. Analyzing the purpose, content, and research framework in order to set the direction and scope of the questionnaire.
3. Creating the questionnaire in accordance with the research framework by setting aspects and scope of questions consistently with the research purpose.

4. Handing the advisor a draft version of the questionnaire in order to examine, edit, and improve. The questionnaire will be; afterwards, submitted to 3 experts of the field logistics, supply chain, and tourism in order to examine the validity of content, to gain additional advice in terms of comprehension and the appropriateness of language, and to score the result of decision making in order to discover the Index of Item Objective Congruence: IOC.

5. The researcher improved and edited the questionnaire accordingly with the suggestions from 3 experts. The complete version of the questionnaire is conducted, afterward, to use in the data collection process.

The Effectiveness Assessment

The following procedures are conducted to assess the effectiveness of the questionnaire by testing validity and reliability.

1. Validity Test for the questionnaire – After an examination of the Index of Item Objective Congruence: IOC, the researcher discovered the value between 0.6-1.0. (Thanin Silpjaru, 2012) The researcher proposed the questionnaire to the experts in order to examine the validity and consistency between questions and the research purpose.

Nevertheless, the researcher chose questions which are valued more than 0.6 as the main questions for the research. The questionnaire was improved and edited accordingly with the advice to be explicit and inclusive with the research purpose.

2. Pre-Test for Reliability of the questionnaire – The researcher edited the questionnaire accordingly with the suggestions from the experts. This Try-Out version was used in the experiment with the population which is not the samples used in this research. The trial was conducted in a single time and the 30 samples, similar attributes to the actual samples in this research. The questionnaire reliability was tested using Cronbach's Alpha Coefficient. The reliability was at 0.792 which is acceptable since the reliability value should not be lower than 0.70 (Waro Pengsawat, 2008, p. 253).

3. The questionnaire was improved and edited to be completed before using in the data collection process with the actual samples.

Data Collection

In this research, the researcher gathers information from the following sources.

1. Primary Data; Derived from field surveys, the questionnaire was distributed to the staffs who were relevant to the tourist attractions, and the tourists who were traveling within Surin.

2. Secondary Data; Derived from the study of documents, research journal, and relevant articles from public agencies in terms of tourism statistics and information related to the travel routes of tourist attractions, including information from other related websites.

Data Analysis

The researcher analyzed and come up with statistics using computer software by recording the information derived from the gathered questionnaire and analyzing the data, respectively, as follows:

1. The analysis of participant's personal information, which was in the form of Check-List, was conducted with Descriptive Statistics by statistically analyzing the gathered data with frequency and concluding the data as a percentage (Thanin Silpjaru, 2012).

2. The analysis of the data regarding functional issues of travel routes in Surin province and participants' satisfaction, which were in the form of 5 levels Rating Scale, was conducted with Descriptive Statistics by statistically analyzing the gathered data. The certain statistics compose of Mean and Standard Deviation.

RESEARCH RESULT

The study of travel routes around Nakhonchaiburin, Surin can be concluded as follows:

1. For participants' personal information, it was discovered that

1.1 Most samples were male, 31-40-year-old, Bachelor's Degree educational status, and earning 10,001-20,000 Baht per month.

2. For Thai tourists' functional issues towards travel routes in Surin province, the level overall of issues for four aspects were at medium level. The level of the issue for each aspect was at the medium level. The order, max to min, can be formed as follows: 1) route 2) safety 3) physicality 4) traffic sign. The information in detail will be described below.

2.1 Physicality – It was discovered that the overall issues were at the medium level. The level of the issue for each aspect was at the medium level. The order, max to min, can be formed as follows: 1) the completeness of information to navigate the traveler to the attractions 2) the completeness of information in terms of duration between each journey 3) the completeness of information, along the route, indicating access points 4) the completeness of proper time to make a journey 4) the completeness of information for application accessibility and communication devices

2.2 Routes – It was discovered that the overall issues were at the medium level. The issue of the zigzag route is scored at a high level. The level of the issue for other aspect was at the medium level. The order, max to min, can be formed as follows: 1) congestion 2) the availability of warning signs along the route 3) the availability of traffic light 4) the availability of speed bumps in the community area.

2.3 Traffic signs – It was discovered that the overall issues were at the medium level. The level of the issue for each aspect was at the medium level. The order, max to min, can be formed as follows: 1) the capability to be seen from the distance 2) the correctness of fluorescent color 3) the appropriate distance.

2.4 Safety – It was discovered that the overall issues were at the medium level. The issue of the availability of staffs to provide guidance within the tourist attractions is scored at a high level. The level of the issue for other aspect was at the medium level. The order, max to min, can be formed as follows: 1) the availability of signs indicating the connection of each route 2) the availability of rescue system provided by the hospitals nearby 3) the availability of rest area 4) the availability of CCTV on significant intersections.

DISCUSSION

According to the result from the study of travel routes around Nakhonchaiburin in Surin province, it can be discussed; based on the importance of each issue, respectively as follows:

1. Physicality – The overall issues were at the medium level. The level of the issue for each aspect was at the medium level. The order, max to min, can be formed as follows: 1) the completeness of information to navigate the traveler to the attractions 2) the completeness of information in terms of duration between each journey 3) the completeness of information, along the route, indicating access points 4) the completeness of proper time to make a journey 4) the completeness of information for application accessibility and communication devices. According to the suggestions from the tourists, the frequent construction caused obstacles in their journey. To see waterlogged in the construction area was ruining their mood. In addition, long-term construction is the cause of dirtiness. These endless constructions were also the cause of congestion.

2. Routes – The overall issues were at the medium level. The issue of the zigzag route is scored at a high level. The level of the issue for other aspect was at the medium level. The order, max to min, can be formed as follows: 1) congestion 2) the availability of warning signs along the route 3) the availability of traffic light 4) the availability of speed bumps in the community area. According to the regulation of the distance available along the route, the duration signs were available only on the main routes. The signs indicating the duration were rarely to be seen on the sides of local roads. The local agencies were not interested in developing or doing public relation to tourism. Therefore, it was not common to see symbols or information on the travel routes as much as it should be. Also, the routes within the tourist attractions were not explored to create the navigation signs. Therefore, the information for some tourist attractions was not available.

3. Traffic signs – The overall issues were at the medium level. The level of the issue for each aspect was at the medium level. The order, max to min, can be formed as follows: 1) the capability to be seen from the distance 2) the correctness of fluorescent color 3) the appropriate distance. It is difficult to see the traffic signs at night. Some traffic signs were placed and not being followed up. Plants and weeds, therefore, obscured these traffic signs. Some traffic signs were broken and lack of light sources.

4. Safety – The overall issues were at the medium level. The issue of the availability of staffs to provide guidance within the tourist attractions is scored at a high level. The level of the issue for other aspect was at the medium level. The order, max to min, can be formed as follows: 1) the availability of signs indicating the connection of each route 2) the availability of rescue system provided by the hospitals nearby 3) the availability of rest area 4) the availability of CCTV on significant intersections. Since some tourist attractions were very broad, lack of staffs to provide knowledge and warning for tourists. For example, there was a detention zone for the elephants in musth; yet, there was no warning sign for the tourists. Another example was the unavailability of security staffs at the dangerous point of the water body.

CONCLUSION AND RECOMMENDATION

The study of travel routes around Nakhonchaiburin, Surin province has discovered that there was safety in physicality and routes. The traffic signs in Surin province was required a lot, more development as discovered to have a medium level of issues. The crucial issues which received scores at a high level were the zigzag routes and the availability of staffs to facilitate the tourists. Both issues reflected the safety problems of the travel routes in Surin province. For further research according to the suggestions for this research, there were two significant problems as follows: 1) the physicality of the zigzag routes 2) the lack of safety since due to the unavailability of staffs to facilitate the visitors. It is recommended to study these two aspects in further research.

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Rail Transport Management to Increase Service Efficiency; In Bangkok - Chiang Mai Route.

^{1*}Jurairat Wongduen, ²Chitpong Ayasanond, ³Tanasarn Panichayakorn

^{1,2,3}College of Logistics and Supply chain Suansunandha Rajabhat University 1 U-thong Nok Road, Dusit, Bangkok 10300 Thailand
mama_mai2518@hotmail.com.

Abstract: The objectives of this research were: 1) to study the level of the opinion about information flow, physical flow, cost, and safety management 2) to analyze the service efficiency in the process, service, fast and punctuality and 3) to propose guidelines for rail transport management to increase service efficiency in Bangkok-Chiang Mai route. From the users of the State Railway of Thailand service, the Bangkok-Chiang Mai-Bangkok Uratawithi procession consisted of 400 people. By using multiple regression analysis found that (1) Rail transport management to increase service efficiency in Bangkok-Chiang Mai route was in the overall level, the opinion level was at a moderate level in all aspects, including safety (= 3.39, SD = 0.84), physical flow (= 3.35, SD = 0.84), information flow (= 3.34, SD = 0.85) and cost management (= 3.33, SD = 0.85) respectively (2) Service efficiency in Bangkok-Chiang Mai route was overall in the high level, including the service was at the high level (= 3.45, S.D. = 0.85), fast and punctuality was at the high level (= 3.43, S.D. = 0.86) and the process was at a moderate level (= 3.37, S.D. = 0.86). (3) Rail transport management in cost and safety will result in increased service efficiency

Keywords: Rail Transport Management, Service Efficiency, Bangkok-Chiang Mai Route

INTRODUCTION

Tourism is an industry that plays a huge role in the country's economy. Can grow continuously Even though Thailand has faced ongoing political instability in the latter but domestic tourism has grown satisfactorily as well. In terms of the potential of the tourism market of Thailand, achieved world-class success and has won many international travel awards and has a good image in the eyes of foreign tourists. Although there are many potentials waiting for development in terms of tourist behavior, there is a positive change in the overall picture. Both increased individual spending and increased market potential for tourists. And generate more income for Thailand (Ministry of Tourism and Sports, 2017)

Based on the data from the Chiang Mai Provincial Statistical Office, it was found that in 2014, both Thai and foreign tourists, in 2014, there were 8,665,502 tourists. In 2015, there were 9,286,307 tourists. Thailand's tourism market in 2018 which is expected to expand by 7.0 percent from 2017 or about 37.8 million, which factors that drive the growth of foreign tourists, such as the expansion of international aviation business routes, etc., while the number of Thai tourists traveling in the country is approximately 165.4 million people/time, while the revenue is expected to be approximately 9.9 Hundred thousand million baht (Kasikorn Research Center, 2018) can be seen that during the 3 year period, the number of tourists is likely to increase

Chiang Mai is the center of northern Thailand. Is a large and important cultural city in this region Which Chiang Mai is located on the Mae Rim Ping valley Among the highest mountains in Thailand Thus causing the winter temperature to drop very low Compared to other regions of Thailand Abundance of natural resources Causing many beautiful sights Along with the identity of various indigenous cultures And local traditions that reflect the regional charm Whether it is language, food, crafts, and beautiful architecture Which people who visit here will never be bored because there are many activities to enjoy always, whether it is touching the arts, culture, and traditions By historical tourism Arts and culture and various temples. Food is a local food with a unique identity. As well as accommodation with a variety of simple, resort-to-5 star hotels

Traveling in Chiang Mai can travel in many ways. Either by plane, train, bus or personal car But it would be impossible to say that the most charming journey would not be possible by train. Because passengers have time to see the beautiful scenery along the way if traveling at night, will arrive at Khun Than Cave in the morning. Is a winding line along with the hillside Beautiful landscapes, In addition, Chiang Mai is considered the last point of the northern railway line which tourism by train is extremely charming.

The State Railway of Thailand, therefore, opened the Uratawithi Express Bus Service to start the journey in the Bangkok-Chiang Mai route on November 11, 2016, to meet the market demand. Increase efficiency and potential in providing commercial passenger transportation services especially middle and upper-class passengers with purchasing power and want to travel comfortably. Thus making the new model of the passenger car ready with facilities, there is a security system as well as standards and supports the travel of disabled and elderly passengers as well. Therefore, the railway is aware of the importance of creating satisfaction for passengers and efficient management. (State Railway of Thailand, 2016), which has since opened the expressway service Bangkok - Chiang Mai the State Railway of Thailand has the largest number of tourists during January, which is the winter season of Thailand. Therefore, during this period, more tourists use the service the revenue generated during October 2017 - May 2018, which has the highest revenue from the expressway service, Bangkok-Chiang Mai, during the month of January, amounted to 11,708,379 baht Chiang Mai - Bangkok, the highest in January, amount 11,674,336 baht.

Rail transport management to increase service efficiency in Bangkok-Chiang Mai route need to be continued as a chain for efficiency both in time cost and maximum satisfaction. The research indicates that tourism management needs to be holistic. There is an integration in which the logistics management of tourism is different from logistics in other industries (Mings and Faculty,

2008). Logistics management for tourism will cover from passenger transportation. Providing information, news, expenses, time, services, safety, concerns to ensure maximum passenger satisfaction.

OBJECTIVES

1. To study the level of the opinion about information flow, physical flow, cost, and safety management
2. To analyze the service efficiency in the process, service, fast and punctuality
3. To propose guidelines for rail transport management to increase service efficiency in Bangkok-Chiang Mai route

LITERATURE REVIEW

For rail transport management to increase service efficiency in Bangkok-Chiang Mai route. Elements in various aspects that are important will affect many factors every aspect of the work process which will be able to use the information from the reference source for the best benefit of management to help increase the overall performance of the image appropriately. Piyanan Namwong (2008) said that rail transportation is the most important transport route in Thailand. That is operated by the State Railway of Thailand Which rail transport is suitable for transporting large quantities of goods including passenger transport with an affordable service rate and have a clear time of destination as for the Secretariat of the House of Representatives (2014), which has prepared the rail transport reform plan said that the current railway route responsible by the State Railway of Thailand there is a network or route of the rail system distributed to various regions across the country, a total of approximately 4,035 kilometers, of which domestic rail freight is only 1.4% of total transportation. And the cost of rail transportation, an average of 0.93 baht/ton - kilometers it can be seen that the amount of freight in Thailand has to rely on very little rail transportation.

And the main problem of rail transport is the delay caused by the current rail system that is a single rail system long service life of railway tracks there is a continuous loss situation. Including some limitations of the goods transporting that can only be accessed through the area of the train which at some point could not be reached. (Pramut Suthi Jaruwatana 2016) has proposed the concept of development of the rail transportation industry through the development of an appropriate strategy for asset management and using the operation and maintenance as an element. Important to consider and plan to support each other as for the Office of the National Economic and Social Development Board (2017), has developed a guideline for the development of the logistics system in the last 5 years (2017-2021) that focuses on upgrading the management system standard. Country logistics By elevating the potential of cargo transportation both by land Water and air In order to connect important commercial doors that Can efficiently transport goods through and out Which guidelines for the development of rail transportation systems to develop a 1 meter railway to be the country's main transportation and cargo network to spread prosperity from Bangkok to major cities in the region of Thailand.

Lumsdon, L., & Page, S.J. (2004) discusses the transportation of goods that can be applied to the transportation of tourists. (Availability) access (Accessibility) information (Information) time (Customer Care), comfort, safety, environment-friendly (Environmental Friendliness), which the logistics management of tourism will coordinate transportation activities. And various activities for tourists to be able to travel to destinations safely happy and must emphasize the convenience in each step in order to make tourists feel good and be impressed with the service. Asaya Chotiphanich (2012) said that service means helping Or taking action for the benefit of others Good service Impressed by Sawai Chai Bunruang (2012), said that the service Means operations to meet the needs of those who use the service perfectly Which will emphasize the convenience, speed, and safety in order for the users to use the service to be satisfied and impressed to use the service. Resulting in the highest satisfaction that the service received, while Chutima Klangsang (2014) has meant that the service means one of the activities to meet the needs of other people and cause satisfaction the level of importance of service, Chittinan Nantapiboon (2008). The level of service importance has 2 levels:

1. The importance that has to the client. Enabling customers to receive good service to make customers happy Joyful and have a memory of the next service request

2. The importance of service providers enabling the business to retain existing customers and can also add new customers from telling to suggest Service providers must do everything possible for more customers. The service provider must try to do all the way to add new customers because it creates prosperity for the organization. Which the number of new customers will increase as an indicator of the organization, In conclusion, the service means something that helps Fully facilitated and willing to provide services To be able to meet the needs of and create the best satisfaction of the users Until the users come back to use the service again the next time.

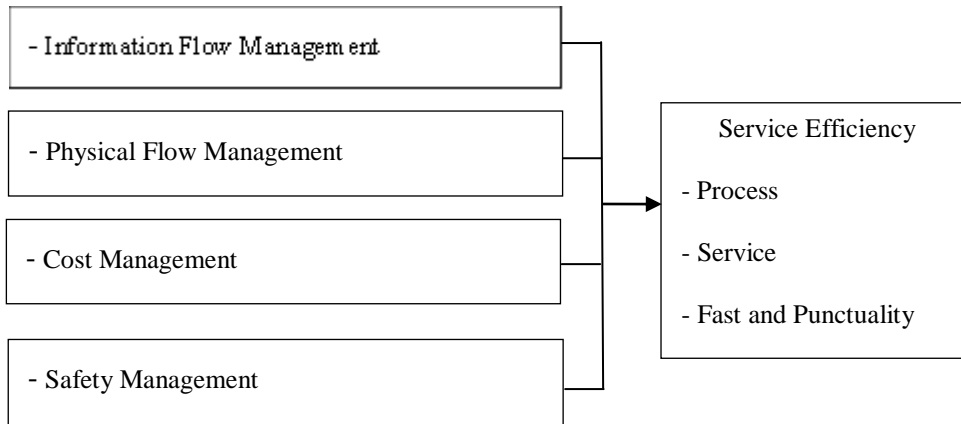
However, the logistics management for tourism is also an activity for tourists to travel to destinations In order to be satisfied, Phairat Phibunrunroj (2009) said that the logistics management for tourism Is a coordination between various activities to allow travelers to travel from the source to the destination Without mistakes and also making tourists get the most satisfaction Move passengers who are tourists from the beginning to return. And the concept of Amarinrat Sribuayang (2016) said that tourism logistics management is a travel service system that focuses on management. Tourist circulation Circulation of tourist information And managing the flow of money at the same time, which can serve tourists to destinations Flow) Information Flow and Financial Flow The concept of Milsap Khao San and the Faculty (2008) proposed the conceptual framework of the logistic system Aromatics for tourism that will contribute to the propulsion system, logistics system to be perfect.

From the meaning of tourism, many people have given definitions, such as Chalong Sripimol Sompong (2007), said that tourism will bring about economic, social and public development in the country. Including providing information on various places to tourists for attracting tourists to access the cultural traditions it also helps to relax and having fun in doing activities or traveling to another place, Saranya Lertmonphairot (2007) said that tourism is an activity that involves the movement of a person's journey. From permanent residence to various travel destinations for the purpose of leisure activities, while Sutee Seritsri (2014) said that

tourism is an industry with management by relying on the connection of many administrative tasks together to make tourists satisfied.

Tourist behavior is also the same. Most often it is the act of thinking. And seek what they want With many scholars defined by Sirirat Naktan (2012), tourist behavior is the behavior of people who are tourists who seek tourist attractions Procurement of goods, services, tourism And evaluating tourism services products that are expected to be able to meet that person's needs While Supalak Angkhangkun (2012) said that tourism behavior is a behavior of tourists who express themselves while traveling. Maybe an act Based on individual needs Also, Panasaya Sirarungrojkanok (2016) said that it was something that tourists expressed in the body, thoughts, and respond to travel, such as fellow travelers travel style number of travel days.

CONCEPTUAL FRAMEWORK



METHODOLOGY

This research was the correlation study by using the questionnaires. Examples used in this research was the user of Uratawithi service, Bangkok - Chiang Mai - Bangkok Use the calculation of W.G.cochran (1953) by determining the confidence level at 95 percent and the level of error at the level of 5 percent as the formula below

$$n = \frac{P(1-P)Z^2}{d^2}$$

n = the number of samples needed
 P = the proportion of the population who want to be random (Generally, use 45% or 0.45 proportion) therefore, P = 0.45
 Z = the confidence that the researcher determined at the significant level Statistical 0.05 is equal to 1.96 (95% confidence)
 d = the proportion of tolerances that can occur by setting the error value = 0.05 the proportion of the population is 0.5.95% confidence and 5% tolerance from substituting values in formula

$$= \frac{(0.45)(1-0.45)(1.96)^2}{(0.05)^2}$$

$$= 380.32 \sim 400$$

This study is correlation research, use questionnaires as a research tool. The researcher created a questionnaire based on research from books, documents, journals, texts, concepts, theories, and related researches. This set of questionnaires has arranged the content to cover the information that needs to be divided into 4 parts as follows:

- Part 1 Questionnaire for personal data
- Part 2 Questionnaire on information flow, physical flow, cost and safety management
- Part 3 Questionnaire on process, service, fast and punctuality performance
- Part 4 Open-ended

RESULT AND DISCUSSION

For information flow management overall are at a moderate level, as shown in Table 1.

Table 1: Information Flow Management

Information Flow Management	\bar{X}	S.D.	Level
1. Complete of information on tourist and railways attractions	3.35	0.84	Moderate
2. Complete of bus schedule information	3.35	0.84	Moderate
3. Show the service rate on website	3.35	0.84	Moderate
4. Complete of the online booking process	3.33	0.86	Moderate
5. Show complete information of travel time	3.32	0.85	Moderate
Total	3.34	0.85	Moderate

For physical flow management overall are at a moderate level, as shown in Table 2.

Table 2: Physical Flow Management

Physical Flow Management	\bar{X}	S.D.	Level
1. Having a lady compartment on the train	3.37	0.84	Moderate
2. There have various clearly signs on the train	3.35	0.83	Moderate
3. There has a disabled passenger compartment with lift	3.35	0.85	Moderate
4. The train is clean.	3.35	0.84	Moderate
5. Having the modern equipment according to international standards	3.34	0.84	Moderate
Total	3.35	0.84	Moderate

For cost management overall are at a moderate level, as shown in Table 3.

Table 3: Cost Management

Cost Management	\bar{X}	S.D.	Level
1. The exceed baggage charge is appropriate	3.34	0.83	Moderate
2. It is convenient to pay bills through debit cards	3.34	0.83	Moderate
3. There are seasonal discounts	3.33	0.88	Moderate
4. The price of the ticket price is appropriate	3.32	0.84	Moderate
5. Prices and fees in case of changing tickets are appropriate	3.32	0.86	Moderate
Total	3.33	0.85	Moderate

For safety management overall are at a moderate level, as shown in Table 4.

Table 4: Safety Management

Safety Management	\bar{X}	S.D.	Level
1. There are security officers on the train	3.39	0.84	Moderate
2. There is a CCTV camera installed on the train	3.39	0.84	Moderate
3. There is a fire tank installed on the train	3.39	0.85	Moderate
4. Automatic notification system when the door is not completely closed	3.39	0.84	Moderate
5. There is staff at the sleeper compartment on the train	3.38	0.85	Moderate
Total	3.39	0.84	Moderate

For process, overall are at a moderate level, as shown in Table 5.

Table 5: Process

Process	\bar{X}	S.D.	Level
1. Notification procedures for changing travel are appropriate	3.38	0.86	Moderate
2. The process of informing about the bus operation is appropriate	3.38	0.87	Moderate
3. The procedure notification of train delay is appropriate	3.37	0.87	Moderate
4. The staff's working process is convenient for services providing	3.37	0.87	Moderate
5. The booking ticket process can be carried out conveniently	3.35	0.86	Moderate
Total	3.37	0.86	Moderate

For service, overall are at a high level, as shown in Table 6.

Table 6: Service

Service	\bar{X}	S.D.	Level
1. The staff have a good personality, dress modestly	3.46	0.86	High
2. The staff is enthusiastic about services providing	3.46	0.86	High
3. The staff has the knowledge and ability to provide services	3.45	0.84	High
4. The staff has human relations and good-natured	3.45	0.85	High
5. The staff has the process of providing services with flexibility and not complicated	3.43	0.86	High
Total	3.45	0.85	High

For fast and punctuality, overall are at a high level, as shown in Table 7.

Table 7: Fast and Punctuality

Fast and Punctuality	\bar{X}	S.D.	Level
1. Can check the bus schedule from the website quickly	3.45	0.85	High
2. The train departs from the station at the scheduled time	3.44	0.86	High
3. Travel by train is safe and fast	3.43	0.88	High
4. The train stops at each station according to the schedule	3.42	0.86	High
5. Arriving at the destination station on schedule	3.41	0.85	High
Total	3.43	0.86	High

DISCUSSIONS

The overall safety factor was at a moderate level showed that the security officers on the train were not enough to meet the number of trains. There was no security staff in the second-floor type of bedroom, only in the 1st-floor type that showed the unequal service (Kham Nai Apipattthakasak, 2007). The overall physical flow factors were at a moderate level showed that the facilities that were not covered in every bedroom. For example, the internet signal is only available on the 1st floor not in the 2nd-floor bedroom (Waraporn Sain-in-moon, 2017).

For the information flow factors overall were at a moderate level, showed that providing information to tourists about attractions, railways were not complete enough. Causing the tourists could not get inaccurate information and could not book tickets online since the online ticketing system has not yet been developed. Therefore, the logistics management approach for tourism should be applied in the operations to help increase operational efficiency and reduce problems that may arise (Chitsakon Tanglamai (2005). The efficiency of information flow management process should be parallel with the flow of information that will happen together of the various activities of the logistics system to ensure that work is appropriately and served the tourist need and demand (OA Rudkivskyi, 2018).

The overall cost factor was at a moderate level show that the price for the 1st-floor bedroom had a high price level compared to other forms of travel. In addition, the price of baggage charges was quite high, which allows tourists to change the way of transporting luggage in other forms with a cheaper cost and use shorter travel times (Panasira Sirarungrojkanok, 2016).

SUGGESTIONS

To increase service efficiency, the tourist logistics management system should be applied to the operation and should adopt modern information technology systems to reduce errors and problems. Should install and add internet signals thoroughly, improve the label with clearly visible all day and night. There are fire extinguishers installed on the sideways walk on the train path and have the visible sign for the disabled passenger also the CCTV should be installed. For the cost management, should add a channel of online banking payment and having a low season promotion ticket fair to encourage the passengers' demand. The further research may be studied for comparison in popular routes such as Bangkok to Hat Yai or Bangkok to Udon Thani.

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Efficiency of Product Demand Forecasting In Nava Nakorn Industrial; Case ABC (Thailand) Company.

^{1*}Phawida Seeon, ²Chitpong Ayasanond

College of Logistics and Supply chain Suansunandha Rajabhat University 1 U-thong Nok Road, Dusit, Bangkok 10300
phawida.a@gmail.com.

Abstract The objectives of this research were 1) to study the level of product forecasting efficiency enhancement 2) to study the influence of logistics management and planning that affects adequate optimization. The instrument used in this research was a questionnaire with 400 samples from the employee of ABC (Thailand) Company in Nava Nakorn Industrial. For data analysis, descriptive statistics include Percentage, Mean, Standard Deviation and Multiple Regression analysis by determining the confidence level at 95 percent were applied. Found that the overall logistics management factor was at a high level. When considering each aspect, it was found that controlling was at a high level. Data collection had the highest mean value followed by data management and planning implementation. The efficiency of product demand forecasting overall was at a high level. When considering each aspect, it was found that time and cost was in the high level. And logistics management and planning had direct effects on the efficiency of product demand forecasting.

Keywords: Efficiency, Demand Forecasting, Nava Nakorn

INTRODUCTION

At present, various business operations there are a serious business competition. From the fast-changing era Which many organizations need to find principles or how to manage the organization in the organization to survive in the business can reduce costs while able to create strengths and increase competitiveness to be superior to competitors but still taking into account the profits and the highest satisfaction of customers is important forecasting technique is one method that uses mathematical principles. And statistics applied for planning and decision making in both short and long term operations, forecasting is also one of the tools to help you get information for the production or sales of the future. Forecasting plays an important role in both the public and private sectors. The calculation of each method of forecasting will be effective, considering the minimum error of forecasting, which the selection of appropriate forecasting methods should be considered from many factors, namely the forecasting range that requires time to forecast such as time series data and serial size characteristics, etc. Forecasting methods of time series that are commonly used is many methods, namely simple average method. Exponential Method Regression analysis and methods of Box Jenkins, for example, but due to the collection of time series data from past data may get incomplete information uncertain information or information is ambiguous, which results in high forecast errors

OBJECTIVES OF THE RESEARCH

1. To study the level of product forecasting efficiency enhancement.
2. To study the influence of logistics management and planning that affects adequate optimization.

SCOPES OF THE RESEARCH

The study of the efficiency of product demand forecasting in the Nava Nakorn Industrial Estate Case study ABC (Thailand) Company is quantitative research by determining the scope of the study as follows;

1. Scope of variables; the variables used in the research are divided into 2 variables as follows;
 - 1.1 Independent variables are logistics management factors and planning factors.
 - 1.2 Follow-up variables are the efficiency of product demand forecasting in Nava Nakorn Industrial Estate Case study ABC (Thailand) Company consists of A. Time efficiency and B. Cost efficiency.
2. Scope of area; the area used in the study, the study of the efficiency of product demand forecasting of factories in Nava Nakorn Industrial Estate Case study of ABC (Thailand) Company located in Nava Nakorn Industrial Estate which is in the group of manufacturers of aluminum window door products with the highest sales in Japan.
3. Time scope; October 2017 to May 2018.
4. Demographic and sample boundaries; the population of this study is employees of ABC (Thailand) Company Limited, which has a population of 7,532 peoples. Therefore, the sample is calculated from the sample size formula of Yamane (1973) which determines the confidence value at 95 percent estimation not more than 5 percent. The sample of this study is 400 samples.

BENEFITS FROM RESEARCH

1. Able to plan product requirements as close to the actual needs of customers
2. Increase the efficiency of warehouse utilization
3. Reduce inventory costs and freight charges
4. Increasing sales opportunities and can increase sales for the company

LITERATURE REVIEW

Logistics is the process of managing, planning, organizing and controlling activities both in the moving and non-moving areas to facilitate the flow of goods from the beginning of the procurement of raw materials to the point where with the consumption of general business, entrepreneurs will primarily consider the production cost and will find ways to reduce production costs low to fight with other competitors in the market, besides the cost of raw materials and labor, logistics costs are considered to be one that has a relatively high proportion and affects the price of products and logistics services.

Forecasting is a qualitative and quantitative method to anticipate the demand for products and services in the future of customers in the short, medium and long term periods, where demand forecasting is useful in planning and making decisions for many departments of the organization, including 1) The financial department is the demand that is estimated to be the basic information for the preparation. Sales budget which will be the starting point for budgeting to allocate resources to all parts of the organization thoroughly and appropriately. 2) The marketing department is the estimated demand that will be used to determine the sales amount of the salesperson or be created as sales and target for each product for use in the control of the sales and marketing departments. 3) The production department is the demand that is estimated to be used as information in various operations in the production department (Kamnai Apipatchayasakul, 2004).

The planning process is the responsibility of all levels of executives that must be planned to be used as the operational norm. And as a guideline for future success How much or how successful is the performance? Depends on planning and if planning well, it is equal to performing more than half the success. Planning is to find the best option in the operation. By using various factors And there is a reason to make the operation in the future as neat and efficient as possible Is a delicate process of thinking and decision making And must complete Before the activity.

The importance of planning is; to reduce the loss of redundant work; make certain boundaries in the work and has a clear policy; helping executives to prepare for uncertain situations and the difficulties that may arise in the future as well as preventing conflicts that may occur in the organization. Planning is an administrative tool of executives in order to achieve effective, fast, time and resource operations. Planning will help to create coordination within the organization, making the operation smooth and able to check the success of the target, the quality of the plan will be more or less Based on the analysis of the accuracy of the follows; 1) Knowing how much or how much of the actual resources are available 2) Knowing where the business is now standing at what point the business has been, how the business has been successful or failed and why? 3) Knowing what the future of the business needs, such as reputation, growth and being a business leader, etc. 4) know the situation around you while planning that there is a condition how do businesses have weaknesses? How will the external situation have a negative effect on the business? 5) Can accurately predict the future situation or how close or true (Thanyachanok Srithiprat, 2014).

The results of operations that have been assigned to achieve the objectives of the policy to achieve the minimum resource utilization And operate economically, whether it is time, labor resources, as well as the things that must be used in that job To be successful and accurate And in this research, the researcher Has determined the operational efficiency variables as the research framework as follows; 1) Effective use of the budget is to manage, use the budget and use resources in the existing units to maximize benefits. By saving and use what is needed to reuse old resources. 2) Working correctly and quickly is the best time not working late can be completed in time according to the time set forth to achieve the policy objective and error in the job as well as the accuracy in the rules. 3) The short management process is the administration with the order process a short, fast operation that comes from applying various techniques to help reduce the workflow. More convenient Can work with speed and management will save time in the administration (Na Ong Saengkaew, 2007).

From the survey of entrepreneur data and conducting an assessment analysis, selecting the performance indicators with the highest data integrity of 9 indicators, classified according to the dimension of the entire 3-dimensional performance measure, namely, dimension, cost, 3 dimension indicators, time 3 Indicators and reliability dimensions 3 Indicators to establish pilot logistics performance indicators of the target industry, which these indicators must be appropriate and can be used as a true performance indicator Along with analyzing the comparison with foreign indicators criteria. Cost performance indicators consist of inventory holding costs warehouse management costs and the cost of transporting goods. The cost of these 3 indicators is a component of the calculation of logistics costs per gross domestic product of Thailand. Prepared by the Office of the National Economic and Social Development Board (NESDB) every year by studying the database development project for the overview of cost and value-added logistics industry, Phase 1 of the Office of the National Economic and Social Development Board (NESDB), which has defined various costs as follows; (Pornsaran Rungcharoenkitkul, 2005).

1. The cost of warehouse management is the cost incurred from the operation of service activities within the warehouse storage factory and warehouse location selection.
2. Inventory storage cost is the cost of holding the product or the opportunity cost of capital to sink in the product.
3. The cost of transportation is the cost that the owner of the product pays to the transport operator or is the expense of the owner of the operation to transport products from the production source to the final destination or consumer.

Management costs consist of customer service costs. Cost of receiving customer orders and cost of order quantity, which uses the calculation method of the United States of America and the project to develop an overview of the cost and value-added logistics industry, Phase 1 of the Office of the National Economic and Social Development Board (NESDB), which uses a proportion of 10 percent Of the total logistics costs for transportation activities Warehouse management And holding products.

Time performance indicators that include the average duration of responses from customers the average duration of shipping by the transportation department and the average duration of the collection of finished products adequately to meet the needs of customers by other time performance indicators will have less data integrity and conducting an assessment analysis

selection of indicators with the highest data integrity in order to formulate performance indicators pilot logistics of the target industry for the time dimension, it consists of

1. The average time to respond to orders from customers is a measure used to measure the time to respond to orders from customers since the company confirms the purchase order from the customer until the product is delivered to the customer. According to the study of Towel, Denis R., Mason-Jones, Rachel (1999), "Total Cycle Time Compression and the Agile Supply Chain" indicates that reducing the flow of information and raw materials will be able to generate profits and opportunities for organizations in markets that are constantly changing.

2. The average time to store the finished product adequately to meet the needs of customers is an indicator that measures the average time that a company makes a reservation or stores a finished product with sufficient quantity to meet the needs of customers. Simulation of oil inventory management at an uncertain price Case study of port business who has developed a simulation model to find ways to reduce inventory costs by considering the order size And the number of days to store inventory the result can reduce the average total cost of inventory to 7.55 percent.

3. The average delivery time is a measure used to measure the time of delivery of products to customers, from the delivery of goods to the car and transport the goods to the customer's location until the customer receives the product According to a study by Donald L. Deckard, ET. Al. (2003), comparing the delivery efficiency using Delivery Cycle Time is a measure of efficiency. And used for cost-profit analysis for further investment.

RESEARCH METHODOLOGY

By studying the various theories and research concepts associated to determine personal factors and various factors which deal with the problems affecting the efficiency improvement of product demand forecasts in the Nava Nakorn Industrial Estate Case Study ABC (Thailand) Company. This research is a quantitative research by using questionnaires with 400 samples from the employee of ABC (Thailand) Company in Nava Nakorn Industrial.

This research was quantitative research and data collection by questionnaires. The distribution of paper based on 400 questionnaires was a convenience sample among the employee of ABC (Thailand) Company in Nava Nakorn Industrial by using Taro Yamane's prepared table according to the recipe with the likelihood of error tolerance 0.05 The researcher had defined the characteristics of the tools used to collect data and construct the tools used in this research. Questionnaires had been developed based on objectives to study the level of product forecasting efficiency enhancement and the influence of logistics management and planning that affects adequate optimization in ABC (Thailand) Company.

The research instruments were both open and close-ended questions. The questionnaire was divided into 3 parts, 1) The customer data 2) The opinion about the product forecasting efficiency enhancement and the influence of logistics management and planning that affects adequate optimization and 3) Problems and Suggestions.

The researcher had created tools to collect data. The steps were as follows

- Study concepts and theories from academic papers, textbooks, websites, and related research of similar nature to bring information from various sources as a guideline to create a questionnaire.
- Analyze the objectives, content, and structure of the research to determine the guidelines and scope of the questionnaire.
- Create a draft questionnaire, by defining the scope and scope of the question in accordance with the objectives of the research.
- Bring the draft questionnaire to the advisor for review, consideration, and correction, and provide the experts with knowledge and experience in the application of information system program and air transportation service. By statistics research and consider the questionnaire for 3 persons to review and make further recommendations as well as content validity in understanding and using the language to evaluate the results of the decision to find the Index of Item Objective Congruence (IOC).
- Complete a complete questionnaire for use in the research sample.

The researcher selected the questions with the IOC value of over 0.6 as a question. As well as improving the questionnaire was clear and comprehensive for the purpose of this research. The researcher used a questionnaire that was subjected to expert review and tried out the sample with the similarity to the sample with similar characteristics.

For data analysis, descriptive statistics include Percentage, Mean, Standard Deviation and Multiple Regression analysis by determining the confidence level at 95 percent were applied. Found that the overall logistics management factor was at a high level. When considering each aspect, it was found that controlling was at a high level. Data collection had the highest mean value followed by data management and planning implementation. The efficiency of product demand forecasting overall was at a high level. When considering each aspect, it was found that time and cost was in the high level. And logistics management and planning had direct effects on the efficiency of product demand forecasting.

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Tourism Logistics Management; of The Phenomenon of Naga Fireballs in Phon Phisai District, Nong Khai Province.

^{1*}Ronnarong Kenraksa, ²Preecha Wararatchai, ³Chitpong Ayasanond

College of Logistics and Supply Chain Suansunandha Rajabhat University 1 U-thong Nok Road, Dusit, Bangkok 10300 Thailand
S60467808003@ssru.ac.th.

Abstract The objectives of this study were: 1) Study the level of opinions of tourists/entrepreneurs/ community leaders in tourist attractions regarding logistics management, tourism of phenomena, Naga fireballs Phon Phisai District Nong Khai Province, 2) Comparing the level of opinions of tourists/entrepreneurs/ community leaders in tourist attractions about logistics management, tourism of phenomena, Naga fireballs. Phon Phisai District Nong Khai Province, 382 questionnaires were used in the research, were the tourists, entrepreneurs, community leaders in tourist attractions. The statistics used for data analysis were frequency distribution, percentage, mean, standard deviation, T-test, F-test, and comparison of the differences between double mean values with Fisher's least significant difference (LSD). Most respondents were male with 50 years of age and over, lower than a bachelor's degree with general employment. The average monthly income between 10,001-15,000 baht the period of living in the community from 10-14 years, the level of opinions on logistics management overall in the level most agree (= 4.45, S.D. = 0.77). When considering each aspect, it was found that the average score was at the highest level in all nine areas, in the following order, information flow (= 4.53, S.D. = 0.70), followed by service (= 4.52, S.D. = 0.71), effective operation (= 4.51, S.D. = 0.61), logistics management readiness (= 4.50, S.D. = 0.67), personnel (= 4.48, S.D. = 0.82), physical flow (= 4.46, S.D. = 0.71), repetition indicators (= 4.42, S.D. = 0.75), marketing promotion (= 4.30, S.D. = 0.95) and the result of being a tourist attraction (= 4.28, S.D. = 0.94).

Keywords: Tourism, Logistics, Naga Fireballs, Phon Phisai District, Nong Khai Province

INTRODUCTION

Many countries around the world nowadays prioritize tourism because tourism is the world's largest industry and moreover it rapidly grows. The tourism is the industry relating to the other business, such as the business about hotels, accommodations, restaurants, transportations, souvenirs as well as the business about public services. These not also make the economy prosperous in having foreign currency in order to get more employment and spread all incomes into upcountry but also arouse the national economy to grow continuously. Therefore, governmental agencies in other countries are more interested in the tourism industry. World Tourism Organization predicted the situation about tourism around the world within 2020 will increase more than \$50 trillion dollars and there will have 1,600 million of tourists spreading in every nook and cranny around the world. A group of Southeast Asian countries will be destinations of new tourist places that tend to increase up to 10%. Tourism, (Phimchanok Moonmit, 2008, p. 1) is one of Thailand economy strategy. Throughout the past period, it had intensely and continuously campaigned on tourism marketing which started from the project of traveling in Thailand (Amazing Thailand) to Thailand to Indochina (Unseen Thailand).

The logistics administration for tourism (Tourism Supply Chain) is the process management in any services both about time and funds consistently and effectively and it makes the most satisfactory. The research's findings evidently show that tourism administration needs integration with enterprise groups which there have been a set chain of values being logistics administration. The logistics administration is different from the logistics of other industries. In the past (Mingsab Kaowsa-ad, 2008) about Pak Huay Luang city located in Phon Phisai district, the ancient city according to Lan Xang chronicle which was called Pak Huay Luang, King Fa Ngum, the Great found the kingdom of Lan Xang, around 1358, defeated this city and simultaneously established as the capital city, sending a prince in the dynasty to reign the city of Huay Pak Luang.

Phon Phisai district, Nong Khai province's area, in the North, borders Borikhamxay province (Lao People's Democratic Republic) and Rattanawapi district. In the East, it borders the Fao Rai district. In the South, it borders Ban Dung district, Sang Khom district, and Phen district (Udon Thani province). And in the West, it borders Muang district of Nong Khai province, and Vientiane (Lao People's Democratic Republic). The slogan of the Phon Phisai district is Luang Po Phra Siang (the Buddha image) with the city and the Naga phenomenon. The district's area has 642.7 square kilometers, 96,622 of populations, and density with 150.33 each person per square kilometer. All Naga (Phon Phisai district's Museum: the Chronicle of Phon Phisai district, Nong Khai province, 2009) evidently appeared in history. The people who lived in Mekong River bank believed that the Mekong River happened from Naga's creeping, including the belief of Naga fireballs. Historically, at the end of Buddhist lent day, which was a Buddha time coming down from Tāvatiṃsa heaven. The Nagas (Serpents) were very happy and pleased, so they lit fireballs for the Buddha' coming. It became an annual tradition of Naga fireballs until now.

From the phenomenon of Naga fireballs often appeared on social media, it annually occurred at the end of Buddhist lent day, which had a relationship between the Naga fireballs and belief in Buddhism according to passage. It was said that once upon a time in the past, the Buddha went to teach his mother in the Tāvatiṃsa heaven and he stayed there for three months, then coming back to the earth on the 15th day of the 11th month's full moon, which was Buddhist lent day (Wichian Namakarn, 2011), being a key point of sale on tourism in every year, and being the phenomenon attracted so many tourists from both local and international levels. They could learn and absorb the culture along the Mekong River bank, which is the strategic area for borderland tourism being historical and culturally important for a long period of time (Wattanapan Kruttasen, 2014).

From all reasons above, they made the researcher interested in doing research on logistics administration for tourism purposes: a case study of Naga fireballs' phenomenon in Phon Phisai district, Nong Khai province in order to study and compare the opinion levels of logistics administration for tourism purposes: a case study of Naga fireballs' phenomenon in Phon Phisai district, Nong Khai province, which would appropriately be useful in developing, extending, supporting tourism changes of other related agencies, including developing mass media to support tourism during the festival. Moreover, the research findings could be efficiently done to promote tourism in supporting cultural tourism in Phon Phisai district, and it would extend the accomplishment to Nong Khai province.

RESEARCH OBJECTIVES

- 1) Study the level of opinions of tourists/entrepreneurs/ community leaders in tourist attractions regarding logistics management, tourism of phenomena, Naga fireballs Phon Phisai District Nong Khai Province
- 2) Comparing the level of opinions of tourists/entrepreneurs/ community leaders in tourist attractions about logistics management, tourism of phenomena, Naga fireballs. Phon Phisai District Nong Khai Province

SCOPES OF THE RESEARCH

The Population; The researcher collected data from the questionnaire by randomizing samples as the method of Taro Yamane, and from samples of tourists, entrepreneurs, and the community's heads. Using the accidental sampling from 382 of the population by probability sampling, simple random, and set a sample group with the formula of Krejcie and Morgan, and finally get more than 150 of the population (Krejcie and Morgan, 1970, pp. 608-610).

The Variables; Independent variables consist of personal data of tourists, such as sex, age, education, average monthly incomes, and duration of living in the community.

Dependent variables consist of services for tourists, logistics for tourism, such as physical flowing, the flowing of information, services, efficient procedures, logistics management readiness, personal information with the index of returning to the same places, marketing promotion, and the effect of tourist attraction

Time; From October 2018 to November 2018

The researcher studied concepts, theories, documents, and related theses to be guidelines in doing research, which 1) were theoretical concepts on logistics management, 2) concepts of administration for tourism, 3) concepts and theories on services, 4) contexts of Phon Phisai district and 5) related these.

RESEARCH METHODOLOGY

The researcher got permission in collecting data from graduate school, Suansunandha Rajabhat University in order to be enclosed with the questionnaire given to the sample group as well as checked the accuracy and completeness of documents. The researcher took a questionnaire to fieldwork by coordinating on the telephone and went to the fieldwork to collect data, as well as described the questionnaire to the tourists, entrepreneurs, and community's heads and accurately reported data relating to the situation.

The researcher expressed appreciation to the tourists, entrepreneurs, and community's heads for their kindness and help in giving the researcher an opportunity then coded the data after collection, recorded the data into a computer program and analyzed the data from the questionnaire in the first part, the second part, third part, and forth part respectively. For data analysis, the researcher analyzed and calculated statistic values in computer program taken from the questionnaire, recording data in order to analyze them in a step by step as following; Then analysis personal data from a questionnaire by descriptive statistics, the frequency and finally summarized as a percentage (Thanin Siljaru, 2009).

For Data analysis of opinion concepts towards logistics administration for tourism: a case study of the phenomenon of Naga fireballs in Phon Phisai district, Nong Khai province, which were the question as Rating Scale with five levels of choices and described with descriptive statistics, as well as calculated the collected data into statistic values, which consisted of Mean, Standard Deviation. All of these were presented with graphs along with describing, summarizing results of the research, and set criteria in giving scores for questionnaire and set translating of the questionnaire by calculating scores into statistic values and using criteria in analyzing (Thanin Siljaru, 2009).

The analysis of T-test and One-Way ANOVA to examine the hypothesis of the tourists, entrepreneurs, and community's heads towards the opinion concepts of logistics administration for tourism; a case study of the phenomenon of Naga fireballs in Phon Phisai district, Nong Khai province.

RESEARCH RESULT

The physical flowing was overall at the highest level, and when it was considered in each aspect, it had average scores at the highest levels in all 5 aspects, which there were safety in tourist places, registration, visiting tourist places, readiness of tourist agencies, tourism packets, security in communities, and easily getting food and beverage.

The flowing of information was overall at the highest level, and when it was considered in each aspect, it had average scores at the highest levels in all 5 aspects, which there were information in website being accurate for tourists' need, tourist places'

information having interesting history, the information on transportations from start points to tourist places, the information with accurate details, and the information on food and beverage services in tourist places.

The services was overall at the highest level, and when it was considered in each aspect, it had average scores at the highest levels in all 4 aspects, which there were the tourist places having facilities and without any chaos, having enough food and beverage shops, safety in tourist places, and cleanness in the tourist places.

The marketing promotion was overall at the highest level, and when it was considered in each aspect, it had average scores at the highest levels in all 2 aspects, which there were verbal public relation, and brochure public relation.

The personnel were overall at the highest level, and when it was considered in each aspect, it had average scores at the highest levels in all 5 aspects, which there were officials and local people providing services politely and friendly, officials and local people giving suggestions or answering any questions with accuracy, officials and local people rapidly providing services, officials and local people taking good care, being enthusiastic and wholehearted in providing services, officials and local people serviced tourists honestly.

The efficient services were overall at the highest level, and when it was considered in each aspect, it had average scores at the highest levels in all 5 aspects, which there were the responsible agency prepared helping equipment when various incidents occurred, giving tourists the instrument suggestions before departure, the responsible agency was professional, being able to give polite, accurate, clear, thorough and reliable information, the responsible agency provided services with politeness, hospitality, the responsible agency had documents to suggest places to visit at various points, and the responsible agency organized public relations for tourists who visited the phenomena sequentially.

The index of returning to same places was overall at the highest level, and when it was considered in each aspect, it had average scores at the highest levels in all 4 aspects, which there were planning the tourist program to visit Naga fireballs' phenomenon in Phon Phisai district, Nong Khai province more than other tourist places, wishing to support this kind of tourism forever, wishing to come back again, and suggesting others to visit here.

The effect of tourist attraction was overall at the highest level, and when it was considered in each aspect, it had average scores at the highest levels in all 4 aspects, which there were local people participated in improving the landscape in the tourist area, tourism made the community to improve route signs clearly, tourism made the community developed and livable, tourism made local people get more news and information.

The logistics management's readiness was overall at the highest level, and when it was considered in each aspect, it had average scores at the highest levels in all 4 aspects, which there were organizing training seminar for local communities regarding guidelines on development, rehabilitation and conservation of local culture, promoting cooperation in tourism management as a network in nearby areas, the local people received training seminar and more information about their own communities, and they collaborated in disseminating information about their own community.

The results from comparing the opinion levels towards logistics administration for tourism; a case study of the phenomenon of Naga fireballs in Phon Phisai district, Nong Khai province were as following; The tourists, entrepreneurs, and community's heads who had different sex, age, education, average monthly incomes, and duration of living in the community had same opinions towards logistics administration for tourism in Phon Phisai district, Nong Khai province, and about the physical flowing, the flowing of information, services, efficient procedures, logistics management's readiness, personnel, the index of returning to same places, marketing promotion, and the effect of tourist attraction had same levels of significant difference at 0.5 and overall having no significant difference at 0.5.

DISCUSSION

For opinion levels towards logistics administration for tourism; a case study of the phenomenon of Naga fireballs in Phon Phisai district, Nong Khai province, there were found that the physical flowing, the flowing of information, personnel, efficient procedures overall were agreed the most and at the highest level, which related to theses of Yaowaluck Laorit (2015), Thanatwan Kunsri (2016), Thalengsak Chaichan (2012), and Supawan Chareonchaisombat (2011).

For comparing the opinion levels towards logistics administration for tourism; a case study of the phenomenon of Naga fireballs in Phon Phisai district, Nong Khai province, there were found that the tourists, entrepreneurs, and community's heads who had different sex, age, education, average monthly incomes, and duration of living in the community had same opinions towards logistics administration for tourism in Phon Phisai district, Nong Khai province, and about the physical flowing, the flowing of information, services, efficient procedures, logistics management's readiness, personnel, the index of returning to same places, marketing promotion, and the effect of tourist attraction had same levels of significant difference at 0.5 and overall having no significant difference at 0.5.

SUGGESTIONS

The physical flowing should increase food and drink shops to easily access more than usual. The flowing of information should add information about tourist attractions and details correctly and clearly. Services should increase staff to clean up the tourist attractions more than usual. Marketing promotion should train and develop personnel, staff skills about public relations on television, radio to give them information thoroughly. Personnel should have a developmental seminar, and local people should take good care of tourists, be enthusiastic and wholehearted in providing services. For the efficient procedures, the responsible agencies should have documents to suggest places to visit at various points. The index of returning to the same places, there should have

encouragement to others to travel frequently. For the effect of tourist attraction, there should be increased the budget for tourism. The logistics management's readiness, the local people lacked participation in the dissemination of information about communities' tourist places.

This study just focused on the opinions of tourists, entrepreneurs, and the community's heads; a case study of the phenomenon of Naga fireballs in Phon Phisai district, Nong Khai province. In fact, there were many phenomena in other districts of Nong Khai, Bueng Kan province. Therefore, it should more extensively study samples in other districts and provinces which also have Naga fireballs' phenomena. The public relation should be extended to tourists who want to visit Naga fireball's phenomena in order to support incomes of the province, region, and nation for more tourists in the future.

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Factors Affecting to Safety Behavior of Passenger Transport Driver: A Case Study of Transport Company Limited, Bangkok – Udon Thani Route.

^{1*}Rewat Jaresitthikunchai, ²Chitpong Ayasanond

College of Logistics and Supply chain-Suansunandha Rajabhat University 1 U-thong Nok Road, Dusit, Bangkok 10300 Thailand
rewajare@gmail.com.

Abstract This research was to study the influence of safety behavior and various factors, including personals characteristic, information literacy, knowledge and attitudes toward behavior-based safety promotion program which affect to safety behavior of passenger transport driver, Bangkok – Udon Thani route. The samples of this research were 130 employees who work in Transport Company Limited. Questionnaires were used for data collection and analyze results using a statistical program by defining the significance level at 0.05. Expected benefits are 1) to know the safety behavior and factors that affect the safety behavior of the passenger transport driver 2) the results of the study can be used as a guideline for developing methods for carrying out activities, promoting the behavior of safety of the passenger transport driver and 3) the results of the study can be used as a guideline for those interested in studying about the workplace safety behavior in the organization.

Keywords: Safety Behavior, Passenger Transport Driver, Bangkok – Udon Thani Route

INTRODUCTION

Country development causes agricultural growth. Commerce and Industry coupled with the expansion of urban areas which led to increased immigration of the population into the city the public and private sectors have constructed roads and developed transportation systems to support the expansion of the city, making travel more convenient. Fast and safe People, therefore, use more private cars. Affecting various problems such as traffic jams Wasteful energy consumption and road accident problems which is a major cause of loss and has a huge impact on the life and property of the people as well as the property of the government

At present, Thailand has been classified as the second highest death rate in the world with a mortality rate of 39.2 (in the original report, which is 39.1 and the third in the world), which Libya has the highest death rate in the world at 63.4, while the ranking country 3 - 5 is Malawi Liberia and Iran, with a death rate of 35.0, 33.6 and 32.1 respectively, compared to ASEAN countries (Vietnam 24.5 Malaysia 24.0 Myanmar 20.3 Cambodia 16 4 Timor, 16.6 Indonesia, 15.3 Laos, 14.3 Philippines, 10.5 Singapore, 3.6) and Thailand are still classified as dangerous countries with the highest death toll in the world.

The statistics of road accidents in Thailand 2017 are 85,949 times, increasing from the year 2016 1.65%, 8,746 deaths, an increase from 4.01% in 2016, 3,785 people were injured, a decrease of 62.78% from 2016 In the responsibility of the Ministry of Transport, 2017, there are 18,729 times more likely from the year. 2016 5.12 percent, but 2,769 deaths were reduced from 2.12 percent in 2016 and 17,156 people were injured, a decrease of 2.59 percent from 2016, as shown in Figure 1.

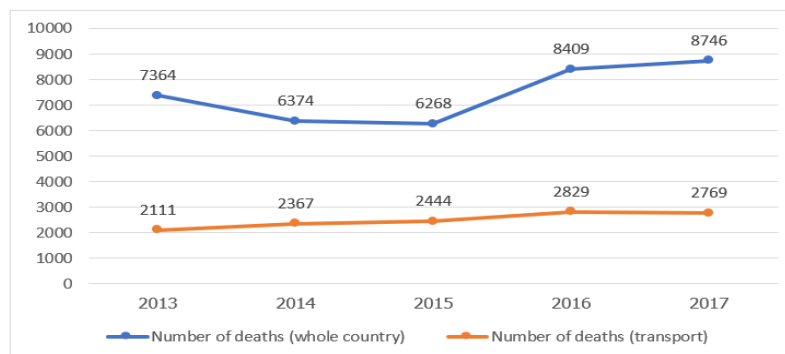


Figure1: The statistics of road accidents in Thailand 2017

The occurrence of a public bus accident in 2017 found that there were 515 accidents, 229 deaths, and 1,882 injured, mainly due to driving speed over 57 times or 11.07 percent. Therefore The Department of Land Transport, therefore, has set measures to control the speed of public bus drivers. With the installation of the Global Positioning System or GPS, the front camera and the speedometer to show the speed of the passenger from 25 January 2016, which can control the speed and reduce the intensity of Accidents from public buses By causing the public bus accident statistics in 2017, with the number of 229 deaths, decreasing from the year 2016, 95 persons, accounting for 29.32 percent and the number of injured 1,882 people decreased from the year 2016, 846 people, representing 31.01 percent, as shown in Figure 2.

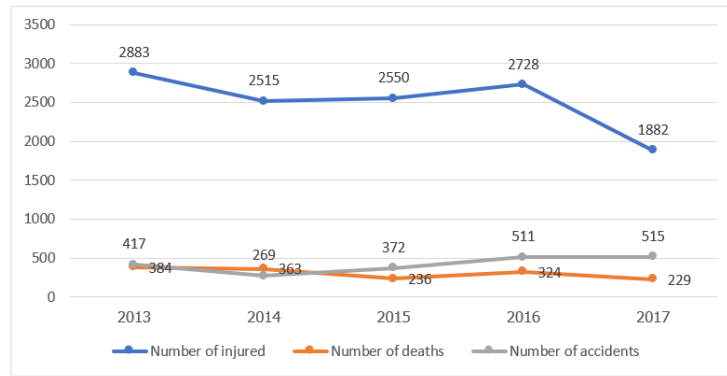


Figure2: The occurrence of a public bus accident in 2017

However, knowledge from this research can be used to change the risk behavior of the driver of the bus driver between provinces to reduce losses to life and property throughout the participants use the road in the same path. It is also a guideline for other transport operators in the management of drivers to reduce the risk of accidents, and increase the work efficiency of employees in the organization, organization management, personnel building create a corporate culture with social responsibility according to the national strategy 20 years.

From road traffic accidents a major problem that results in the loss of both life and property of the people and the image of the country especially in the case of public bus accident, there are many deaths and injuries. The researcher, therefore, has an interest in studying for the behavior of bus drivers. To improve the development of personnel to have the potential for driving skills to be safe for people who use the service.

RESEARCH OBJECTIVES

- 1) To know the safety behavior and factors that affect the safety behavior of the passenger transport driver
- 2) The results of the study can be used as a guideline for developing methods for carrying out activities, promoting the behavior of safety of the passenger transport driver.
- 3) The results of the study can be used as a guideline for those interested in studying about the workplace safety behavior in the organization..

LITERATURE REVIEW

In this research, the researcher presented the content, Domino's theory of accidents (Domino Theory) Pejman Ghasemi Poor Sabet, Hamid Aadal, Mir Hadi Moazen jamshidi, Kiyanoosh Golchin Rad. (2013), theories of the bias in accidents (Accident-Proneness Theory). The Swiss Cheese Model The Imbalance Cause Theory and The Human Factor Theory for analyzing the similarities and differences of concepts, and used to adjust the behavior of driving between provinces that affect accidents.

Domino Theory

Domino Theory (1941) of accidents can be linked to the safety philosophy of H.W. Heinrich about the cause of the accident. Domino's theory states that injuries and damages is a direct consequence of accidents and accidents resulting from unsafe actions or unsafe conditions, which are comparable to the 5 domino's that are close to each other when the first one collapses, the five dominoes are (Mark and James, p. 91).

Domino Theory of accidents can be linked to the safety philosophy of H.W. Heinrich about the cause

1. The environment or background of a person
2. Defects of Person
3. Unsafe Acts / Unsafe conditions
4. Accident
5. Injury or damage

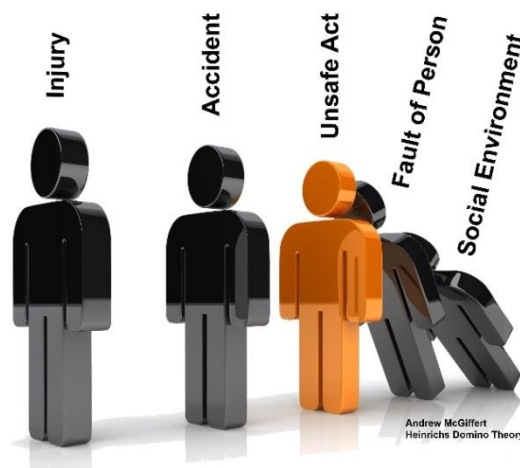


Figure3: Domino Theory, Heinrich, H.W. (1941)

That is, the environment of any society or background of one person, such as family condition, living status, education, training, causing a deficiency of that person's disorder bad attitudes towards safety, risk aversion, causing unsafe actions or unsafe conditions which will cause accidents and cause injury or subsequent losses. This domino theory is a new name called "Accident Chain" (National Safety Council, Chicago, IL, 1976).

Accident prevention according to the domino theory

According to the domino theory or chain of accidents when the first domino falls, the next fall, therefore, if the fourth domino does not fall (not causing an accident), the third domino must be removed (eliminating unsafe actions or conditions), injury or damage will not occur or an accident chain is the accidental chain cut by eliminating unsafe actions or conditions, accidents do not occur to correct. The first domino defense (social environment or person's background) or 2nd person (defect disorder of a person is more difficult to solve. Because it is what happens and is cultivated as personal property.

Accident-Proneness Theory

The theory of the inclination of accidents occurred by two British researchers, Major Greenwood and Hilda M. Woods, who had studied the birth. Accident of workers in England by describing the occurrence of a recurring accident is that some people have an accident more than the others, but the inclination to cause an accident explains that "why is that person causing more accidents than others" (Taylor, G., K. Easter, and R., 2004)

The inclination to cause an accident is a forecast. In advance which each person has the same chance of an accident

The inclination to cause an accident

1. The tendency to have an accident is due to a short period of time, resulting in a critical period in stressful individuals but when those crisis periods were gone the person will be able to adapt in the same condition but under the pressure of feeling the inclination can cause an accident, such as a person who is in the recovery stage, will have exhaustion, which this exhaustion will cause an accident.

2. The inclination to cause an accident of an individual, there is a big cause from the internal sources that consist of personality, mental state, and physical condition.

Swiss Cheese Model Theory

The Swiss Cheese Model is used for risk analysis and risk management, often used in high-risk businesses such as Aviation, Engineering and Medical (Healthcare). Each human being Like each piece of cheese sheet that has a porous top, which is the weak point Or personal error Each of the actions of each human being is the same as sliding left, right, top, the bottom of the cheese plate. If there is a mistake (Hazards) combined, then the red arrow is the one that happens. Can penetrate from one sheet to another sheet, it can eventually cause damage (losses) (Vincoli, J.W., 1994).

Therefore, accidents can occur when there is a danger occurring at the same time that there are various mistakes occurring at the same time (Hamid, A., et al., 2008). For example, in the flight system, the aircraft will be able to fly safely, arriving at the destination safely. Consists of many factors Starting from aircraft design assembly equipment Aviation engineers, technicians, flight attendants, flight attendants, ground staff, air traffic control officers (ATC), passengers, as well as weather conditions, there are many more factors that may cause failure. However, the Swiss Cheese Model is just a theory that explains the mistakes or risks that occur or may occur and after this, the duty to issue regulations safe in each step. The process is extremely important in order to prevent the occurrence of mistakes or tragedies.

Imbalance Cause Theory

Is the theory mentioned injuries or accidents caused by a short deficit between the people behavior with the work system that the person is doing (Zajonc, Robert B., 1960).

Accidents are caused by unsafe practices, approximately 88 percent.

Caused by unsafe conditions, about 10 percent

The other 2 percent are caused by unavoidable causes.

There are three reasons for supporting the accident.

1. Impairment in operation
2. The mental state of the worker
3. The physical condition of

Preventing deficits by altering the behavior of people or altering the working system or altering the behavior of people and the system works concurrently

The Human Factor Theory

Human factor theory (Jamshidi, M.H.M., et al., 2012) explains the cause of the accident that will occur in an accident. Chain characteristics of events caused by lack of negligence and the lack of care or lack of human attention (Reason, J., 1990)

Causes of human accidents

1. Overload work
2. Inappropriate response
3. Inappropriate activities

Overload work

Is the main factor that makes the operator lack the balance between the ability of self and workload responsibility or the duties assigned to it, which can occur from many sub-factors (Sobia Ali1 and Yasir Aftab Farooqi., 2014), including

- Environmental factors include noise, light, heat

- Internal factors are internal factors of the worker, which can occur both physically, including fatigue, weakness and mental stress and anxiety, all of which is a personal problem (Bashir, U., & Ramay, M. I., 2010).

- Other situation factors (Ashfaq, S., Mahmood, Z., & Ahmad, M., 2013)

Inappropriate response

Often accidents are caused by negligence and negligence of workers and establishments or neglecting "environmental factors or situations that result in insecurity (Katsakiori, P., G. Sakellaropoulos, and E. Manatakis, 2009). And any part of the work system that is a weakness "which causes recurring and causes similar accidents

When the executive The supervisor or the person concerned finds that the equipment, equipment or machinery that is in an incomplete condition or have signs of damaged but neglected and not rushed to repair, improve or fix, allowing the operator to not wear equipment or tools that prevent danger in the work without warning or prohibiting

Inappropriate activities

Most accidents are caused by unsafe practices of people and unsafe practices caused by individual internal elements (Schwartz, G. T., 1991)

- Inappropriate working behavior
- Have an attitude or behavior that is not correct
- The practitioner has insufficient skills, lack of expertise or ability to perform work
- Improper working behavior, such as having insufficient or incorrect knowledge or understanding of the work not keeping up with the progress of technology and without knowledge about safety
- having an attitude or behavior that is not correct, such as negligence, lack of prudence, laziness, stubbornness, non-compliance
- Inadequate skills lack expertise or ability to perform tasks such as working while the body is weak, intoxicated or abnormal emotions, especially drinking alcohol, pickled items, etc.

RESEARCH METHODOLOGY

This research used quantitative research techniques. Subject: Affecting to Passenger Transport Driver: A Case Study of Transport Company Limited, Bangkok - Udon Thani Route. Collect data using questionnaires. The population used in this research is 130 Bangkok-Udon Thani bus drivers. The tools used for collecting data and analyzing the results using statistical programs are determined at the significance level of 0.05. The researcher has determined the characteristics of the tools in Research. And create research tools as follows:

Part 1 is a questionnaire about the personal status of the respondents as a checklist item.

Part 2 is a questionnaire about the working conditions of the respondents as a checklist item.

Part 3 is a questionnaire about factors that affect risk behavior as an estimation scale. Set the assessment value to 5 levels according to Likert's method;

Part 4 is a questionnaire about comments and suggestions. Query style is open end

The researcher has created a questionnaire divided into 8 steps as follows:

1. Study the principles of questionnaire construction and determine the conceptual framework for research.
2. Study information from books, documents, articles and related research results as a guideline for creating the question of the questionnaire.
3. Determine the issues and scope of questions in accordance with the objectives and benefits of research.
4. Perform query creation
5. Bring the draft questionnaire created with assessment form to experts with knowledge and experience. Consider the questionnaire for 5 persons.
6. The researcher used a questionnaire that had been modified by experts and then used to experiment with the population.
7. Calculate the power, discrimination and confidence values of the questionnaire.
8. Improve the questionnaire according to the results of the discriminant power analysis and the confidence of the questionnaire before being used.

This research analyzes statistical data by using the ready-made program by bringing the data from the collected questionnaires to be transformed into numeric codes and then recorded into the program to perform descriptive statistical analysis.

This research analyzes statistical data by using the ready-made program by bringing the data from the collected questionnaires to be transformed into numeric codes and then recorded into the program to perform descriptive statistical data analysis to consist of frequency values, percentage values, mean, standard deviation Chi Square and ANOVA.

EXPECTED BENEFITS

In order to change the risk of the bus driver behavior between provinces to reduce losses, life, and property throughout the participants use the road in the same path. It is also a guideline for other transport operators in the management of drivers to reduce the risk of accidents and increase the work efficiency of employees in the organization management personnel building create a corporate culture with social responsibility according to the national strategy 20 years.

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Tourism Logistics Management for Floating Market; The Case of Lam Phaya Temple, Lam Phaya Subdistrict, Bang Len District, Nakhon Pathom, Thailand

^{1*}Tunyaporn Minaboon, ²Chitpong Ayasanond, ³Wiriya Boonmalert

College of Logistics and Supply chain Suansunandha Rajabhat University 1 U-thong Nok Road, Dusit, Bangkok 10300 Thailand
tanyapornminaboon@gmail.com

Abstract The objectives of this research are 1) to study tourism logistics management for the floating market in the case of Lam Phaya Temple, Lam Phaya Subdistrict, Bang Len District Nakhon Pathom, Thailand; 2) to study the opinions of tourists about tourism logistics management for the floating market the case of Lam Phaya Temple, Lam Phaya Subdistrict, Bang Len District, Nakhon Pathom, Thailand. The research instrument are 340 questionnaires; 300 tourists, 40 communities and entrepreneurs. The issues in the questionnaire are 1) the opinions of tourists about tourism logistics management for the floating market the case of Lam Phaya Temple, Lam Phaya Subdistrict, Bang Len District Nakhon Pathom, Thailand; 2) the opinions about the readiness of communities and entrepreneurs in the event of problems and resolve in an emergency, which may cause danger in the floating market the case of Lam Phaya Temple, Lam Phaya Subdistrict, Bang Len District Nakhon Pathom, Thailand; and 3) the opinions about the development of tourism logistics management for the floating market in the case of Lam Phaya Temple, Lam Phaya Subdistrict, Bang Len District Nakhon Pathom, Thailand. The researcher will analyze the data and conclude with statistics, frequency, percentage, mean and standard deviation.

Keywords: Tourism, Logistics, Floating Market, Lam Phaya, Bang Len District, Nakhon Pathom

INTRODUCTION

Tourism plays an important role in facilitating the country development and the quality of life of people across all regions of Thailand. It is also an important tool in driving the economy, contributing to job creation, Increasing revenue for the country, and growing country sustainably. Nowadays, the popularity of the travel of people around the world has changed. Tourists increasingly care for eco-tourism or sustainable tourism by experiencing nature and learning the local culture including lifestyle of rural people. Those attractions can display rural life, tradition, and culture evidently. Tourism is also an industry that brings culture to the point of sale to attract foreign tourists, especially American and European tourists who are interested in learning culture and historical legacy, visiting architecture, and perceiving the lifestyle or wellbeing of people in the specific countries, especially in Asian and African countries, Including buying souvenirs that are handicrafts and crafts made by the wisdom of people in the local area as well.

For traveling in the country of Thai (2017), there is still a good trend. Although there is still no clarification on the renewal of tourism stimulus measures in the country, but under the circumstances that is still conducive to travel, whether it is the main support that still comes from the intense marketing of tourism business operators directly like hotels and airlines or an indirect business that has organized promotions to stimulate the market continues throughout the year along with the other side's motivation also comes from marketing, public relations of tourist attractions of related agencies and the private sector through social networking channels. Which affects the behavior and decision making of tourists which is reflected in the survey of the travel behavior of Kasikorn Research Center (2017) that the marketing campaign and the promotion of business sectors have an influence on the decision to plan the first travel plan, while other factors such as influence from see places of travel through online media organizing travel fairs etc. Tourism logistics management is the management of various steps. For providing services that must be continuous in a chain for efficiency, time, cost, high satisfaction. The research results indicate that tourism management is essential for the whole body. Value in logistics management tourism is different from the logistics of other industries. Tourism logistics management for the floating market is another case study, able to apply the theory of logistics management, tourism in the perspective of related parties, logistics management, water tourism, and logistics problems. At present, the issue of development of management standards and services has been upgraded to be a standard that is accepted by tourists. The study of tourism logistics management for floating market is a way to develop tourism logistics systems in tourism programs. Cause development promotes sustainable water tourism (Suriya Komsan, 2008).

Life in lower Central Thailand, the heart of Old Siam, was in the past tied to water, to such an extent that the Thai architect saw it as a prototype of what he called an "aquatic society," in which human settlements functioned as "amphibious communities," their houses often floating on water, or built on stilts, not to be inundated during the rainy season. Their principal products, rice, vegetables and fruits, depended on rain and irrigation from rivers and the ever denser web of canals, whose construction was intensified by the mid-nineteenth century. The canals have distributed water from the main rivers of the Central region, Chao Phraya, Mae Klong, Ta Chin and Bang Pakong, to the rice fields in their basins. The rivers and canals were a main source of food, fish; they were also the principal routes of communication. Boats, kept by households, served as the chief means of travel and trade along these waterways. Thai peasant women plied the waterways selling fresh produce, and stores were put up by Chinese traders on their banks to buy rice and other produce from the local farmers, while supplying them with basic necessities. On the larger rivers and canals those stores nucleated into waterfront market places (Talaad Nam, literally "markets on water"), consisting of land-based Chinese shop-houses and Thai farmers floating on boats. Such markets over time became the core of small towns and nodes of the waterborne traffic.

This waterways-based transportation system had reached the high point of expansion in the early Twentieth century, and remained fairly intact until approximately the mid-century. In 1961, the first National Economic Development Plan (1961-1966) stipulated, as part of an effort to develop the country, the creation of a road system throughout the Central region. With the construction of major highways, and an increasingly ramified system of roads, a transition from water-bound to land-based motorized transportation took place, accompanied by the creation of marketing facilities along its routes; this undermined the old waterborne travel and marketing systems, and led to their deterioration. The trade in the markets along rivers and canals declined and in many cases eventually died down, leaving the riverside towns to wither away, even as the settlements on the new roads thrived (Silapacharanan 2013; Sriwichien, Kiratiboarana and Soungsaweng 2014; Wattanacharoensil and Sakdiyakorn 2015; Yodsurang, Hiromi and Yasumufi 2016). The rapid economic development penetrating the countryside along the new lines of transportation rendered the stagnating water-bound communities virtually invisible.

It was only towards the end of the last century that a turning point emerged: under the impact of the tensions, frictions, crowding and pollution engendered by a rapidly expanding and modernizing Bangkok metropolis, the new urban Thai middle classes felt a nostalgic longing for a romanticized, quieter and simpler life of Old Siam. The marginalized, stagnating old riverside communities were suddenly rediscovered and rapidly became popular attractions of domestic tourism. With growing automobilization, the volume of week-end excursions into the “recreation belt” (Wu and Cai 2006) around the metropolis, extending into the countryside for several hundred kilometers, increased exponentially. Talaad Nam, the “markets on water,” became highly popular attractions of domestic excursionists; rendered in English as “floating markets,” they also attracted foreign tourists.

“Floating markets” can also be found in some other, less developed mainland Southeast Asian countries, such as Vietnam (CBS.news 2015; Huynh 2011; Nahi 2008) and Cambodia (Cornell University Blog Service 2011), where they still play an active role in the distribution of agricultural produce, and are visited by some tourists. But they did not attain the touristic significance of the “floating markets” in Thailand, where their number has proliferated in the last two decades, though they had largely lost their local role.

Contemporary “Floating Markets”: An Overview

In its narrow, literal, sense, the term “floating markets” refers, as one blogger simply put it, to a “market where goods are sold from boats.” While both sellers and buyers might be waterborne, as they apparently still are in the Mekong Delta in Vietnam, in Thailand’s past Talaad Nam referred to both, boats plying rivers and canals selling agricultural produce, and river- or canal-bank markets. The English term “floating markets,” an euphonic, but somewhat inaccurate translation of Talaad Nam, thus similarly refers to both, and covers even water-side markets where no floating boats are found. However, in the contemporary touristic image of the “floating market,” the floating boat is the stressed component, the water-bank market houses the un-stressed one. Its iconic representation is a woman with a Central Thai style hat, paddling a boat laden with fruits and vegetables.

The boundaries of the term “floating markets” are vague; it is not an official designation. Moreover, since it became a catchword appealing to visitors, some establishments adopted it, even if they have little in common with mainstream “floating markets,” and are included in lists of such markets produced by tourist establishments.

“Floating Markets:” A Sequential Typology for present purposes it is helpful to order the contemporary “floating markets” into a sequential typology, consisting of four principal types:

1. Continuously active “floating markets.”
2. Revived “floating markets.”
3. New, neo-traditional “floating markets.”
4. New, innovative “floating market

OBJECTIVES OF THE RESEARCH

- 1) To study tourism logistics management for the floating market in the case of Lam Phaya Temple, Lam Phaya Subdistrict, Bang Len District Nakhon Pathom, Thailand
- 2) To study the opinions of tourists about tourism logistics management for the floating market the case of Lam Phaya Temple, Lam Phaya Subdistrict, Bang Len District. Nakhon Pathom, Thailand

LITERATURE & THEORY

As a relatively young field of study, tourism has received criticisms by scholars over its legitimacy and disciplinary status. In these terms, tourism is criticized for lacking concise definition, or its own unique theories, and being a by-product of other disciplines. Moreover, the field is criticized for focusing too heavily on theoretical academic research and lacking practical application in the world of business (Jenkins, 1999).

Other scholars have different perspectives. Franklin and Crang (2001) characterized tourism research as prioritizing industry-led tourism management perspectives at the expense of theoretical knowledge. Abram (2010) argued that theoretical academic research need not necessarily be defined as the opposite of practical knowledge. More recently, McKercher and Prideaux (2014) argued that “rather than writing that tourism lacks theory, one could even more meaningfully argue that tourism has too many different ‘theories’.

Tourism is defined as “the temporary movement to destination outside the normal home and workplace, the activities undertaken during the stay, and the facilities created to cater for the needs of tourists”. Although there is no consensus on the definition of tourism among the researchers and lack of theories in tourism (Franklin and Crang 2001), the conceptualization of tourism as a discipline leads to the emergence of conceptual and theoretical approaches which contributes to the tourism literature. There are few types of theoretical models of tourism; descriptive models, explanatory models and predictive models. A descriptive model depicts the tourism system while explanatory model illustrates how the system and subsystem function. The predictive model is developed based on causal relationship which allows prediction.

The sociological and anthropological literature on the role of local markets in tourism is remarkably limited. There are several studies of night markets, particularly in Taiwan (e.g. Hsieh and Chang 2006; Tsai 2013), a growing number of studies of “farmers’ markets,” an innovative form of agricultural products marketing in developed Western countries (e.g. Aucoin and Fry 2015; Farmer et al 2011; Hall 2013; Smithers 2013), and some studies of food markets and the consumption of local foods in rural areas by tourists, but there have not found any studies of the permutations of local markets under the influence of tourism, even though, according to my own observations, such markets are a magnet for both, domestic and foreign tourists, particularly in the emergent regions of the world.

The considerable body of sociological and anthropological research on tourism in Thailand (Walter 2015) has neglected the study of “floating markets” as a tourist attraction. However, these markets have in the last few years attracted the attention of mainly Thai researchers from other fields.

A comprehensive geographical study of waterfront communities in the Chao Phraya river basin by Yodsurang, Hiromi and Yasufumi (2016, p. 64) has analytically distinguished seven “clusters,” or types of communities, among them “waterfront markets,” in which in the past “housing combined a shop house and residential unit, connected to the agricultural landscape and product suppliers in the rear”; but the authors do not discuss the present status of these communities. Silapacharanan (2013) has studied the characteristics of water based communities along the Mae Klong and Bang Pakong rivers in Central Thailand, and their transformation into land-based settlements under the influence of infrastructural developments. Though this author did not discuss specifically the “floating markets,” his work provides information on the context of their decline in the early twentieth century. Sriwichien, Kiratiboorana and Soungsaweng (2014) have studied the history of “community bazaars” along the Tha Chin River, which had in the past “functioned as merchandise exchanges for local agricultural products and consumer goods”.

Several studies deal with particular “floating markets”. The most detailed work is Buasorn’s (2010, 2011) study of four of the best known “floating markets” in Thailand Sam Chuk, Amphawa, Taling Chan and Damnoen Saduak, which will also be discussed in this article. Others studied the “floating markets” of Amphawa (Vajirakachorn and Nepal 2014), Bang Noi (Srikos, Phukamchannoad and Yordchim 2014), and several markets in Nakhon Pathom province (Wattanacharoensil and Sakdiyakorn 2015). However, most of these studies focused on specific, mostly practical, issues, such as the markets’ role in local community development or visitors’ satisfaction from market excursions, rather than on the trajectories of change of the “floating markets,” as discussed in the present study.

SCOPES OF RESEARCH

Study the tourism logistics management for floating market starting from upstream to downstream. By studying what management style in order to be the most effective, and there may be related theories such as the flow of raw materials starting from the manufacturer, changing the condition continuously until it is a service and sent to the customer in Lam Phaya Temple, Lam Phaya Subdistrict, Bang Len District, Nakhon Pathom, Thailand, from June 2019- September 2019.]

This article examines the potential of floating market in the of Lam Phaya Temple, Lam Phaya Subdistrict, Bang Len District, Nakhon Pathom, Thailand as a creative tourism destination by performing a two-stage qualitative study. It explores in particular the perceptions of community leaders toward the possibility for established floating markets to become creative tourism destinations and the current and future constraints in such development. In the first stage, an environmental scanning is performed using readiness indices for tourism destination, which are adopted from two sources. In the second stage, the perceptions of community leaders toward floating markets are examined through in-depth, semi-structured interviews. These investigations reveal the significant role of community leaders and their perspectives toward the direction and development of their communities. The investigations also identify the factors that promote and obstruct creative tourism in a particular floating market destination.

RESEARCH METHODOLOGY

The research instrument are 340 questionnaires; 300 tourists, 40 communities and entrepreneurs. The issues in the questionnaire are

- 1) The opinions of tourists about tourism logistics management for the floating market the case of Lam Phaya Temple, Lam Phaya Subdistrict, Bang Len District Nakhon Pathom, Thailand
- 2) The opinions about the readiness of communities and entrepreneurs in the event of problems and resolve in an emergency, which may cause danger in the floating market the case of Lam Phaya Temple, Lam Phaya Subdistrict, Bang Len District Nakhon Pathom, Thailand
- 3) The opinions about the development of tourism logistics management for the floating market in the case of Lam Phaya Temple, Lam Phaya Subdistrict, Bang Len District Nakhon Pathom, Thailand.

The researcher had created tools to collect data. The steps were as follows

- Study concepts and theories from academic papers, textbooks, websites, and related research of similar nature to bring information from various sources as a guideline to create a questionnaire.
- Analyze the objectives, content, and structure of the research to determine the guidelines and scope of the questionnaire.
- Create a draft questionnaire, by defining the scope and scope of the question in accordance with the objectives of the research.
- Bring the draft questionnaire to the advisor for review, consideration, and correction, and provide the experts with knowledge and experience in the application of information system program and air transportation service. By statistics research and consider the questionnaire for 3 persons to review and make further recommendations as well as content validity in understanding and using the language to evaluate the results of the decision to find the Index of Item Objective Congruence (IOC).
- Complete a complete questionnaire for use in the research sample.

The researcher selected the questions with the IOC value of over 0.6 as a question. As well as improving the questionnaire was clear and comprehensive for the purpose of this research. The researcher used a questionnaire that was subjected to expert review and tried out the sample with the similarity to the sample with similar characteristics.

The researcher will analyze the data and conclude with statistics, frequency, percentage, mean and standard deviation.

BENEFITS FROM RESEARCH

1. Understanding the nature and the characteristics of floating market in the of Lam Phaya Temple, Lam Phaya Subdistrict, Bang Len District, Nakhon Pathom, Thailand
2. Enable to know the potentials and constraints in developing the floating Market for creative tourism
3. Enable to know the potential and challenges for the creative tourism and community tourism development

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The Study of the Distribution Center Form: A Case Study of FBR Logistics Co., Ltd.

^{1*}Sujin Thongsroy, ²Chattarat Hotrawaisaya, ³Komson Sommanawat

College of Logistics and Supply Chain Suansunandha Rajabhat University 1 U-thong Nok Road, Dusit, Bangkok 10300 Thailand
Sujin_thongsroy@bevchain.co.th.

Abstract The research studied the distribution center of the beverage category. The objectives were (1) to study the operating conditions of the distribution center (2) to study the appropriate form of distribution center activities. The data was collected from 124 employees in the company. The research instruments were questionnaires that used the descriptive statistics by analyzing the frequency distribution, percentage, mean and standard deviation. The hypothesis of this research was defined as the significance level at .05. The result found that the appropriate warehouse model of FBR Logistics Company Limited should have 2 stores types of products. The first was the automatic storage of products on the shelves and the second should use the WMS system in management. The process in this warehouse was concluded. All goods receipt activities with the appointment plan to send products from the factory and supplier with the appointment department (appointment) which will schedule appointments to be consistent. The capability in each period In the receiving process, the product will be processed according to the work method. The products will be stored as ASRS and on floor divided by product type. Picking the product according to the planned workload will be the pre-picking (pre-pick) by the shipping department. It will be the collector order from the SAP system to make a planned workload by prioritizing the order of every customer group, which will give priority to the table of customers in the modern trade group. The information will be sent to the operation department to pick up the goods in advance respectively. It uses RFID scanner and product release from ASRS under the WMS system. The completed products are stored in locations, according to the delivery door payment, the operation department will pay the goods in the order that the delivery department has arranged according to the schedule by using the forklifts in the product.

Keywords: Distribution Center, Receiving goods, AS/RS

INTRODUCTION

At present, warehouse management is a major activity that is very important. One activity of the logistics system by warehouse operations will help support production, transportation, and customer service. Businesses focus on responding. Various customer needs under the constraints of the organization. The warehouse is, therefore, a strategic connection point between producers and consumers Effective warehouse management is an important factor that can increase the opportunity to compete in the market. Warehouse management (Zijm, W.H.M. and Van den Berg, J.P., 1999) aims to increase the efficiency and effectiveness of processes and activities that occur in the warehouse.

This research studied the distribution center model of FBR Logistics Co., Ltd., which occurred in 2018 from the joint venture of a manufacturer and distributor of beverages. With experience in transporting goods and services for 85 years, covering from upstream to downstream reach out to customers from retail stores, grocery stores, convenience stores. Supermarket Large retail store (Modern Trade) and agent system in every province expanding into more than 200 district levels throughout over 200,000 sub-stores across the country. There are many affiliated products for the company. Types of beverages, such as water, soda, beer and also have 14 food companies in the group. Join 50: 50 joint venture with multinational companies from Australia. With experience in warehouse and transportation management (Sobanski, E.B., 2009) is a large private logistics service company in the Asia Pacific region. The company's operations will focus on providing the same standard services in Australia. With the main goal of providing financial management services and shipping services by penetrating the main target group, the beverage business customers Fast Moving Consumer Goods (FMCG) business to satisfy the highest satisfaction of the target customers (last mile). Effective management will help reduce costs and increase competitiveness in the market create future business growth with customers.

The importance of the company's problems who want to conduct research related to the company's distribution center model according to the operation of warehouse management of FBR Logistics Company Limited, it was found that the problems in the operation of various activities within the warehouse in 2018 occurred in many main activities, including the activity of receiving goods into the warehouse. Encountered problems in the delay of receiving goods damage the importance of the company's problems who want to conduct research related to the company's distribution center model according to the operation of warehouse management of FBR Logistics Company Limited, it was found that the problems in the operation of various activities within the warehouse in 2018 occurred in many main activities, including the activity of receiving goods into the warehouse. Encountered problems in the delay of receiving goods damage error from receiving goods such as not clearly separating the type and date of production not separating products that are damaged the amount of work beyond appointments is large.

Invalid product receipt information, inventory storage activities related to inventory storage of products into the specified location by separating the storage of the type of beer-type drinking water products to be collected up to 12-storey storage rack controlled by the storage system and automatic product recall (AS / RS) (De Koster, R., T. Le-Duc, and Y. Yu. 2008) which will find problems in the feed in, often delays and bottlenecks for canned products soda water type and the rice will be stored in the on floor location. In this section, there is a problem with the putaway, the product is not complete, according to the system, the problem of placing products, switching locations. Including insufficient storage locations And also found damage from placing the product in unsettled locations make products especially soda type often falling apart preparation activities related to picking out goods from the warehouse. The goods are not picked up according to the planned payment cycle due to the excess workload

capability. The problem of insufficient space for pre-arranged work (pre pick) (Petersen, C. G. and Aase, G. (2004), the problem of picking up the wrong amount in the whole amount and product age terms system problems such as non-interface of ECS data with WMS (Vaughan, T. S. 1999) and non-update of product data wifi signal problem and incomplete barcode scanning device.

Including some products, in the location not enough to withdraw goods payment activities regarding product dispatch according to the daily plan, encountered over capacity problems at certain times, especially during the period of modern trade products. Time of transportation not in time to make an appointment with the customer problems of checkers, payers, lack of goods/excess not according to the conditions problems with delays due to insufficient MHE problems, truck size.

Does not fit the number of products from the above problems, it affects 3 main things, which is the goal of operation: 1) Accuracy is the accuracy of the inventory. Which will find a lot of missing/overloaded products, problems with products, alternating locations 2) Cost, expenses that should not be incurred, such as fines from lost products late fees from customers product costs in damaged (unnecessary) overtime, unnecessary overtime wear and tear of machinery, equipment and unnecessary fuel costs 3) Service, customer confidence in all channels may be reduced when delivery delays occur problems with receiving the product, incomplete condition or not having the product age according to the desired condition and that means reduced competitiveness

For this reason, the researcher is therefore interested in studying the operational image, the current problems and the performance of the warehouse (Bhavin Shah and Vivek Khanzode, 2017) of FBR Logistics Company Limited in order to understand the conditions of The actual work that is currently happening and the results from the study this time, make plans to improve and work development such as reducing unnecessary activities reduce the total time of work in order to reduce errors or losses in the processor suggestions that make work more efficient.

RESEARCH OBJECTIVES

1. to study the operating conditions of the distribution center
2. to study the appropriate form of distribution center activities.

SCOPE OF RESEARCH

In this research, the researcher wanted to study the management problem in the warehouse. Guidelines for warehouse management of FBR Logistics Co., Ltd. by focusing on specific activities within the warehouse including product receipt activities storage activities product preparation activities and goods payment activities by using the warehouse management concept of Olarn Kitti Theerapornchai (2018). The population used in the research is employees who are involved in the warehouse operations of FBR Logistics Company Limited, totaling 128.

The initial variable is the problem of warehouse management problems. And guidelines for managing warehouses of FBR Logistics Company Limited. The variables based on product receipt process Product storage process Product preparation process and product distribution process it is reliable. The time spent on researching is May to July 2019.

LITERATURE REVIEW

Logistics Management

Khamnai Apiphatyasakul (2004) discusses the meaning of logistics management as follows: Logistics management is part of the supply chain to assist in the planning of effective and efficient flow control support and storage of goods service with relevant information from the beginning to the end to meet the needs of customers.

From the definition given above in conclusion, logistics is a process of management-related activities, move storage and delivery of all status of manufactured products with service and information management is a supporting factor for achieving goals effectively.

In addition, increasing the efficiency of the logistics system of the organization in the industrial age 4.0 with the introduction of information technology systems in logistics management to be applied in combination with industrial technology in the business system of the current business is very useful to the business because logistics needs speed in transportation accurately to exchange information at all times and accurate and timely information will help businesses reduce inventory levels, increase utilization rates in warehouses, reduce labor costs in logistics management Help increase service efficiency for customers, increase the competitiveness of the organization.

Warehouse Management

Thaweesak Theppitak (2007) mentioned that "Warehouse Management" means warehouse management in order to achieve the cost of the system to be worth the investment, control the quality of storage, picking, prevention, reduce losses from operations to provide the lowest operating costs and full utilization of the area .

Wichai Chai Mi (2008) gave the meaning of the warehouse that is the process of planning the needs of the products within the company warehouse by using the planning method for product distribution (Distribution Requirement Planning) or Warehouse Replenishment by using the method of controlling the planning of orders from the central warehouse planning or planning the purchase of goods from the warehouse (Decentralized Planning).

Waste Reduction

Eliminating waste reduction according to the concept, therefore, the main objectives are as follows

1. Aiming to produce or provide services that customers want

2. Focus on responding by delivering words to customers within a short time.
3. Production of products and services with excellent quality
4. Production with the shortest lead time to meet the needs
5. Produce products that are in line with the various needs of customers
6. Aiming to reduce all types of waste from production activities or operations that occur in the organization to create maximum image production
7. Aim to produce according to the appropriate method which is developed from the workers or the personnel of the organization

Principle of Waste Reduction With ECRS

Wasteland means something that happens but does not add value to the product. There are 7 wastes, 1) too much production (Overproduction) 2) Waiting 3) Unnecessary movement (Transporting) 4) Unprofitable work (Inappropriate processing) 5) Storage of large products Too (Unnecessary Inventory) 6) Unnecessary Motion and 7) Defects. These 7 wastes (Diana Chroner & Peter Wallstrom Exploring, 2016) are unnecessary and cannot be In addition to improving productivity and increasing productivity also reducing the costs incurred in the company as well (Unnecessary Inventory)

The principle of ECRS is a principle that consists of elimination (Eliminate), Combine, Rearrange and Simplify, which is a simple principle that can be used to initiate a MUDA reduction (Pavnaskar, S. J., Gershenson, J. K., & Jambekar, A. B., 2003)

- Eliminate refers to the consideration of the current work and eliminating the seven wastes found in the production, which are excessive production, waiting for movement / unnecessary movement. Unprofitable work too much storage unnecessary moving and waste

- Combine can reduce unnecessary work by considering whether or not the work process can be included, for example, from the previous 5 steps, including some steps, making the steps to be reduced from the original Production can be done faster and also reduces movement between steps. Because if there are steps together The movement between steps is reduced

- Rearrange is to rearrange the production process to reduce unnecessary movement or waiting, such as in the production process if switching steps 2 and 3 by doing step 3 before 2 will cause Reduced mobile distance, etc

- Simplify means simplifying and simplifying work. Which may be sprinkled (jig) or fixture to help work to make work easier and more accurate which can reduce waste Thus reducing unnecessary movement and reducing unnecessary work

If able to reduce all 7 wastes that occur will make the plant have better production efficiency, reduce the hassle and chaos in production, which will result in lower production costs (Womack, J., & Jones, D. T., 1996).

RESEARCH METHODOLOGY

The population used in the research is employees who are involved in the warehouse operations of FBR Logistics Company Limited, totaling 128. By tudy the theory and research related to warehouse operations, improvement of warehouse efficiency, collect data on the steps of the company warehouse activities and analyze the process of operating the warehouse activities of the company, case studies and create a questionnaire set for research and testing the accuracy of the questionnaire (IOC).

The duration time was carried out in June 2019, by taking the questionnaire that had been collected and analyze the results. Then summary the results and recommendations for the development of the company warehouse model.

The tools used for data collection in this research was the questionnaire by the following this steps;

1. Study how to create questionnaires that are used to collect data from relevant documents and texts as a guideline for determining the conceptual framework of the query

2. Study the theory concepts and related research papers by considering various details in order to cover the objectives of the research set, for the question set derived from the synthesis of concepts relating to the development of work efficiency improvement by the questionnaire used in the collection, this research data consists of various types of questions which can be divided into 4 parts with the following details:

Part 1 Questionnaire divided into 2 parts:

1. Information about the general status of respondents

2. Questions about the general status of the respondents as a check list

Part 2 Questionnaire on opinions about the warehouse model of FBR Logistics Company Limited is a check list and open-ended question which consists of questions about

- 13 procedures for receiving goods

- The process of carrying out the storage activities of 8 items

- Procedures for the implementation of product preparation activities in 7 items

- Procedures for the operation of product dispensing activities in 8 items

Part 3 Questionnaire for comments about warehouse efficiency of FBR Logistics Co., Ltd. is a rating scale, Likert's method, and determines the level of feedback about efficiency into 5 levels. The number of questions 26 questions. Consisting of trade, asking about

- The efficiency of the operation of receiving goods activities in 6 items

- The efficiency of the operation of product preparation activities for 7 items

- Operational efficiency 7 items of payment activity

Part 4 Query about suggestions with open-ended style

This research has determined the method of checking the tools used for collecting data as follows.

1. Bring the questionnaire to the advisor to make suggestions to improve

2. The questionnaire that has been modified and proposed to the experts or experts in logistics and experts in statistics and research, number 3, to verify the accuracy (IOC) of the questionnaire.

3. Apply the questionnaire that has passed the validation and then used to collect data from the sample group.

Research on topics Warehouse layout study Case study: FBR Logistics Company Limited is survey research which aims to study the operating conditions and problems within the warehouse. Form of warehouse and find the efficiency of the warehouse operation of FBR Logistics Company Limited. Details of the method of research are as follows.

The sample used in the research is employees who are involved in the warehouse operations of FBR Logistics Company Limited, totaling 128. The researcher issued data collected by themselves by handing out the questionnaires to the sample, ask for cooperation from the sample group in answering the questionnaire. The researcher will explain and clarify the details of the objectives of the questionnaire on an individual basis and get a query back by themselves, checking the questionnaire whether the sample responded to the complete and complete questionnaire or not.

To analyze data using statistical software as follows;

The questionnaire Part 1: Analyze data with general conditions of respondents and overall operating conditions of the warehouse of FBR Logistics Company Limited with frequency (N), percentage (%)

The questionnaire Part 2: Analyze the opinions about the warehouse model of FBR Logistics Co., Ltd. with the frequency (N), percentage (%)

The questionnaire Part 3: Analyzing opinions about warehouse efficiency of FBR Logistics Company Limited with average statistics, mean and standard Deviation

The questionnaire Part 4: is an open-ended question, analyzing the content by capturing content that has similar issues in the same group

The researcher uses descriptive statistics to analyze data, consisting of percentage (%), mean, standard deviation and chi-square value.

EXPECTED BENEFITS

1. Obtain information about the problems of warehouse management of FBR Logistics Co., Ltd.
2. Able to analyze the causes of the logistics process problems of the warehouse
3. Able to propose a way to manage the warehouse to increase efficiency
4. Able to propose guidelines for developing a warehouse operating manual

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Logistics Service Quality of Public Land Transport Service by P-TRANSQUAL Model A Case Study Nakhon Ratchasima – Bangkok.

^{1*}Worawit Seyangnok, ²Chattrarat Hotrawaisaya, ³Komson Sommanawat

College of Logistics and Supply Chain Suansunandha Rajabhat University 1 U-thong Nok Road, Dusit, Bangkok 10300
wit0421@hotmail.com.

Abstract This research aimed to study the Logistics Service Quality of Public Land Transport Service by P-TRANSQUAL model a Case Study Nakhon Ratchasima – Bangkok. The purposes of this study were (1) to study the quality of logistics services of public buses Between Nakhon Ratchasima - Bangkok (2) to study the expectations of service quality of public bus service providers between Nakhon Ratchasima - Bangkok (3) to study the perception of service quality of public bus service providers between Nakhon Ratchasima - Bangkok. The quality measurement model P-TRANSQUAL performs the study in 4 dimensions, including (1) Comfort (2) Tangible (3) Personal and (4) Reliability. The sample was selected from 425 cases of public bus users to or from Nakhon Ratchasima - Bangkok. This research is quantitative research. Using a survey study method Data were collected using a closed-ended questionnaire. Statistics are used in data analysis were frequency distribution tables, percentage, mean and standard deviation. Conclusions found that most respondents were female, aged between 22 and 36 years old, with a bachelor's degree, employees in the private, average monthly income between 15,000 - 25,000 baht. The service quality of the bus can be rated at a moderate level ($\bar{x}=3.29$, S.D. = 0.23). The average value in each dimension is moderate as follows. Physical ($\bar{x}=3.42$, S.D. = 0.43), Reliability ($\bar{x}=3.41$, S.D.= 0.86), Personal ($\bar{x}=3.39$, S.D.=0.58) and Comfort ($\bar{x}=4.13$, S.D.=0.32)..

Keywords: Service Quality, Logistics Service Provider.

INTRODUCTION

The public transport system that plays an important role in Thailand is the road transport system. Because there are many forms of service and transportation vehicles, and can be accessed on all routes As well as having a limited number of services continuous road transportation system development by using various innovations is a mechanism to drive to raise the whole road transport standard provide quality and safety emphasizing the same standard across the country and accelerate the implementation of the project to be concrete. In order to set up a land transportation system to support the growth of society that requires a safe public transport system, fast, save travel expenses. Punctual or can set precise travel time moreover, the number of vehicles must be sufficient to meet the needs of every route in order for people to turn to use public transportation more. Which will affect the reduction of fuel consumption can reduce traffic congestion in the whole country.

From the statistical report on the use of passenger stations at the Department of Land Transport, nationwide supervision, the fiscal year 2017 found that the number of trips using the passenger terminal decreased by 3.27 percent, thus directly affecting the number of passengers and the number of service fees to use the station. also Which the number of passengers decreased by 7.49 percent and the amount of access to the station services decreased by 0.23 percent, respectively, partly due to the fact that people changed the form of traveling from public cars to other forms such as private cars, trains, and planes Which is a fast, convenient journey, In addition, various airlines. There are also promotions for cheap air tickets to take advantage of the market advantage as well (Department of Land Transport, 2018).

Nakhon Ratchasima Province is the gateway to Isan, considered to be the transportation hub of the northeastern region, with routes connected to various provinces conveniently. The route of the train has a train through both the up-leg downstream by car, there is a national highway. Provincial Highway and various roads Help people travel within the province between provinces easily as well as more than 127 public bus routes connecting to Bangkok including various regions of Thailand and the air of Nakhon Ratchasima, with one commercial airport.

From the tourism statistics of the province, it was found that the number of visitors has increased since 2014 onwards. In 2014, there were 7,063,059 visitors, 2015, number of 7,879,571 people and year In 2016, 8,321,239 people, which is likely to increase continuously, because the province has developed in many ways side to make it a center point and a connection point for various aspects of the northeast which travel for visitors to Nakhon Ratchasima province in most cases, use a private car followed by public buses and trains.

RESEARCH OBJECTIVE

1. To study the quality of logistics services of public buses Between Nakhon Ratchasima - Bangkok
2. To study the expectations of service quality of public bus service providers between Nakhon Ratchasima - Bangkok
3. To study the perception of service quality of public bus service providers between Nakhon Ratchasima – Bangkok

LITERATURE REVIEW

The Research Measurement of quality of logistic services by P-TRANSQUAL method a case study of public transport routes Nakhon Ratchasima – Bangkok, the researcher studied the concepts, theories and related research papers to be a guideline for determining the concept of research

1. Service Quality Concept

In 1985, Parasuraman, Zeithaml and Berry (1988) developed a service quality measurement tool by determining service quality factors and gaps (Fiorenzo Franceschini and Luca Mastrogiacomo., 2018) between expectations and perceptions of services that make the service do not meet customer expectations and call this service quality measure as SERVQUAL (Finn, D. and Lamb, C., 1991; C.N. Krishna Naik Swapna, Bhargavi Gantasala and Gantasala V. Prabhakar, 2010) which factors that customers use to judge the quality of the service provider consists of 5 dimensions as follows (Carman, J.M., 1990; Carrillat, F.A., Jaramillo, F. and Mulki, J.P., 2007).

1) Physical characteristics (Tangibles) are physical characteristics that can be seen, such as various facilities equipment corporate communication tools Personnel and locations of service providers which users can see before using the service

2) Service reliability (Reliability) is to create confidence for users such as service with accuracy

3) Responses (Responsiveness) is a willing and fast response and commitment.

4) Assurance in the service (Assurance) is to create confidence for users in various areas such as employees with knowledge, manners and professionalism.

5) Empathy is a show of concern interested in the needs of each user which is specific

The comparison of expectation and perception of the service user reflects the service quality by the gap between the expectation and service recognition. There are 5 gaps (Bitner et al., 2010) as follows.

Gap 1 is the gap between the expectation of the service user and the service provider's awareness. The second gap is the gap between the service provider's perception of service and the determination of service quality characteristics. Is the gap between the services provided by the service provider and the service quality (Ismail, Azman et al., 2009). The fourth space is the gap between the services provided by the service provider and communications Provider and the gap 5 is the gap between the perception of the service and the expectations of the users

2.P-TRANSQUAL Model

I Gede Mahatma and the Faculty (2015) have developed a model for measuring the quality of service for land transport systems. By calling this type of P-TRANSQUAL consists of a 4 dimensional quality measure consisting of Comfort, Physical, Personnel and Reliability.

In this research, the study of passengers between cities in Indonesia Analysis on the basis of 880 qualified respondents People questioning the 7 scale rating scale (Rating Scale) according to Likert's Scale in 23 dimensions in 4 dimensions. From the experiment, it was found that there were 5 indicators that were not used due to the value 4 indicators below the number of communalities and 1 indicator with a factor loading value of less than 0.5. This research has been tested to believe that this model can be used to measure service quality. (Stable validity and reliability) in which the 4 dimensional quality indicators are detailed as follows (Babakus, E. and Mangold, W.G., 1992)

1) Comfort is a dimension of service quality that demonstrates the efficiency of public transport systems in providing convenient services and safety conditions for passengers. Comfort and safety are two separate areas of service and connected. Passengers will not feel comfortable if they still feel unsafe while using public transport or in other words. Safety is a must to have before making passengers feel comfortable using public transportation. Therefore, it can be said that the conditions of safety and comfort are two aspects of the service with the same structure.

2) Tangible demonstrates the efficiency of the public transportation system in terms of physical facilities that can be perceived and touched. This physical dimension includes the condition of the interior. External and transportation facilities In addition, it also plays a role in supporting other dimensions. For example, the dimension of travel convenience occurs when passengers feel clear when the condition of the bus is clean both from outside and inside. In addition, the condition of the engine can lead to the comfort of passengers because of the good engine condition can reduce the impact of noise that will interfere with the passenger and prevent the occurrence of force majeure from the engine. In addition, the condition of the engine can also be a part of the measurement of service quality in terms of reliability.

3) Demonstrate Personnel, the performance of public transport systems related to personnel providing services to passengers, including manners, willingness to help and understand the needs of passengers. In the human services sector is important for improving the quality of service. Because the service cannot be separated from the collaboration between the service provider and the service provider, which occurs in the context of the public transport service by land when passengers want to use public transport services by land Passengers need to communicate with the driver and service personnel. For example Passengers inform the destination of the trip or report problems

4) Reliability is a dimension that demonstrates how to build trust from passengers in the way of providing public transport services to deliver passengers to destinations safely. The important part to consider in a reliable dimension, such as the number of public buses Bus waiting time, travel time and consistency in passenger delivery services to destinations

RESEARCH METHODOLOGY

Research methods

This research is quantitative research by using a survey research method and using close-ended questionnaire. The respondents are the ones who fill out the questionnaire by themselves.

Population and sample used in research

The population used in this research is the public bus service to or from Nakhon Ratchasima - Bangkok. By bus Nakhon Ratchasima - Bangkok

Sample

The sample group in this research is the public bus service to or from Nakhon Ratchasima - Bangkok. With a sample size calculation which uses a formula to calculate samples that do not know the exact population or the population that is high by using Daniel's formula and using the estimate of the proportion of people who use public buses to or back to Nakhon Ratchasima - Bangkok by using 95 percent confidence

This research has increased the sample size from 10% formula to replace incomplete questionnaires or lost data therefore, the sample group in this research was 425 people.

Research tools

The tools used to collect data in this research. The researcher used to answer the questionnaire from the study and research in various data together with the theoretical concept. As well as other research Related to study to be a guideline for solving and improving the creation of this research tool

Tool quality inspection

Check the content validity of the questionnaire by 3 advisors and expert instructors. Check the content and accuracy. After that, the researcher will apply for improvement according to the advice of the advisor and expert professor.

Data analysis

The researcher collected data from the sample group and related agencies, both government and private agencies. The researcher examined the completeness and accuracy of the information obtained. Data were analyzed by using statistical package program for data analysis. By determining the confidence level with statistical significance 0.05

Statistics used in research

Descriptive statistics

Presentation of personal characteristics of the sample group, including gender, age, status, education level, occupation, income, recognition of logistics service quality data was analyzed by using statistical package program for data analysis. By using the Frequency Distribution Table, Percentage, Mean and Standard Deviation

Inferential Statistics

Analyzing the relationship between personal characteristics and perceived quality of logistics services and expectations received from the service of public transport routes Nakhon Ratchasima - Bangkok By using multiple logistic regression analysis

Determine the significant values used in the analysis at the level of $P < 0.05$.

EXPECTED BENEFITS

1. Be aware of the quality of logistics services of public buses. Between Nakhon Ratchasima - Bangkok
2. Know the expectations of service quality of public bus service providers between Nakhon Ratchasima - Bangkok
3. Be aware of service quality awareness of public bus service providers between Nakhon Ratchasima – Bangkok

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The Development of Transport Resource Database Management System: A Case Study of Transport Go Company.

^{1*}Chanicha Moryadee, ²Kiatkulchai Jitt-Aer

¹College of Logistics and Supply chain Suansunandha Rajabhat University 1 U-thong Nok Road, Dusit, Bangkok 10300 Thailand,

²The Navaminda Kasatriyadhiraj Royal Thai Air Force Academy 171/1 Klongthanon Saimai Bangkok 10220
chanicha.mo@ssru.ac.th.

Abstract The aim of this research was to develop computer programming for transport resource database management system (DBMS). A case study of Transport Go Company effectively illustrates the proposed DBMS. This research encompassed three main phases. Firstly, the old work of resource manipulation in the company was studied via observation and interview approach. Secondly, the computer system was developed to replace the old work processes. In this stage, each old work process and its conditions were logically developed as flow chart before coding in the Visual Studio platform. Lastly, the developed system was tested and assessed by the users. By demonstrating the proposed application, the information input to the database were obtained from the transportation department. The proposed system enables database users to exploit resource management, which consists of creating, editing, deleting, searching and displaying the resource information. The computer software was developed with very intuitive use by using Visual Basic programming language. The computer system was implemented in the transportation department in order to test and assess its efficiency and effectiveness in comparison with the old system, which was manually operated mostly by paper work. The results showed that the DBMS can shorten working time with less operational cost. Subsequently, the excessive processes of paper work can be reduced and therefore the mistakes caused by such processes would be eliminated. Furthermore, by implementing the proposed DBMS, the company would obtain competitive advantage in the industry.

Keywords: Database management system, Transportation, Resource management, Visual Basic

INTRODUCTION

In the past decades, technology has played an important role in improving work efficiency. Most technologies has been accompanied by computer system for replacing human activities in workplaces locally to globally. Especially, computer programs and its components are very vital in the era of operating big data. As a result, there is a significant increase in managing dataset using computer software rather than manual operations among modern organizations. By this sense, in any organization, it requires accurate and reliable data for better decision making, ensuring privacy of data and controlling data efficiently.

A database management system (DBMS) is a collection of interrelated data and a set of programs to access those data. This is a collection related data with an implicit meaning and hence a database. The collection of data, usually referred to as the database, contains information relevant to an enterprise. DBMS deals the knowledge of how data stored and managed on a computerized information system. Without DBMS, people working in an organization may find difficulties in several aspects i.e. data redundancy and inconsistency, difficulty in accessing data and concurrent access, data isolation, and security problems. Such problems may hinder the organization goals. Therefore, the data must be well organized by DBMS.

Transport Go Company is a company supplying vehicles to any individual or organization who requires a car-rent service. The company has several sections each of which has its own responsibility to serve the company. One of those who is in charge of storing the vehicle fleet is the transport department. Ayasanond C. (2018) studies the concept of logistics management to link and applying with enhancing service quality of outsourcing motorbike delivery service in Bangkok metropolitan areas (Pathumwan, Bangrak and Sathon) by adopted 7R in logistics management that include: Right Product, Right Quantity, Right Place, Right Time, Right Cost, Right Condition and Right Customer, in the view of enhancing service quality of outsourcing motorbike delivery service in Bangkok metropolitan areas. In addition to hold the vehicles, the other responsibilities are to collect information regarding vehicle models, pick-and-return schedule, maintenance history, vehicle exchange part, and drivers.

With this large data, the department found difficulties managing those functions by using paper work without computer aid equipment. By doing this, several mistakes have been occurring during the operations. This could lead to work inefficiency and resulting in delays receiving and supplying vehicles from and to customers, that later the company would be lessen its competitive edge among the business rivals. From this point of view, the transport section of Transport Go Company is interested in obtaining a DBMS software to facilitate decision makings and decrease work defects while increase the efficiency of managing the vehicles and the relevant processes. This research, therefore, was to develop computer programming by using Visual Basic (VB) programming language for transport resource database management system for Transport Go Company. In order that the transport department can manage the data efficiently and effectively. The remaining sections of this paper are organized as follows. Section 2 describes the methodology of developing the DBMS. Section 3 illustrates the workflow of vehicle, followed by section 4 in which the components of the DBMS development is described. Finally, section 4 provides the conclusions and suggestions.

RESEARCH METHODOLOGY

This paper describes a software development of DBMS for the transport division of Transport Go Company. The methodologies of software development go through a series of stages to obtain a final product. However, the process of building computer software and information system has been always dictated by different development methodologies. In this paper, the proposed methodology follows the

Software Development Life Cycle (SDLC)'s Dave (2018). According to Dave, the SDLC is a terminology used to explain how software is delivered to a customer in a series of steps. In addition, this paper proposes the waterfall approach, which was first proposed by Royce (1970), for the software development process because it is easy to manage due to the rigidity of the model and also easy to explain the user (Lakshay, 2016; Mohamed, 2012). The processes in this DBMS development research consist of 7 stages, as shown in Figure 1, each of which is explained as follows.

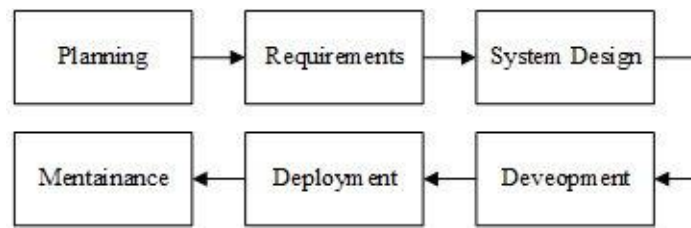


Figure 1 Waterfall model of DBMS development.

1.1 Planning

The planning stage involves designing the project plan starting from defining user requirements to system implement. This project was planned with the manager of the transport department in order that the development team and the users gain a mutual understanding of cost and time constraints. The last stage of the plan was to allocate a role to each team member including team leader, program developer, and coordinator.

1.2 Requirements

In this phase, the research members made some communicates with the users to obtain their requirements for the DBMS development. More specifically, this stage involved understanding what needs to design and what is functions, purpose, and other aspects. To sum up, in this stage, the specifications of the input and output or the final product are studied and noted for designing the system in the next step.

1.3 System design

Once the requirements were received, the programmer started to design the software. The design process used established patterns for application architecture and software development. Then, the program developer solved algorithmic problems in accordance with the design patterns. After system designing, the software code written using VB is described in the next phase.

1.4 Software development

This stage produced the DBMS software under development. As mentioned earlier, this phase was conducted by using VB studio platform. However, the system contains several small units, each of which operates a specific function. After finishing the units, they were integrated as a whole system connected with the designed database. Also, the graphic user interface (GUIs) were designed and created with easy use in this phase.

1.5 System testing

All the units developed in the development phase were integrated and followed by testing. Testing the software allowed the developer to find out if there any flaw or errors. Testing is done so that the users do not face any problem during the installation and utilization of the software.

1.6 Deployment of system

Once the functional and non-functional testing was done, the software was deployed in the transport department. In this stage, it is necessary that the computer platform for installation has enough specifications to operate the developed software efficiently.

1.7 Maintenance

This final phase involves making modifications to the system or an individual component to alter attributes or improve performance. In this stage, some modifications could be arose due to change requests initiated by the stakeholders of the company.

Vehicle Rent Workflow

In order to develop the DBMS software, the research team studied the workflow of vehicle renting on which the operations of the transport department must rely. This help the developer designed the software pattern effectively. The processes of the vehicle hiring is shown in Figure 2.

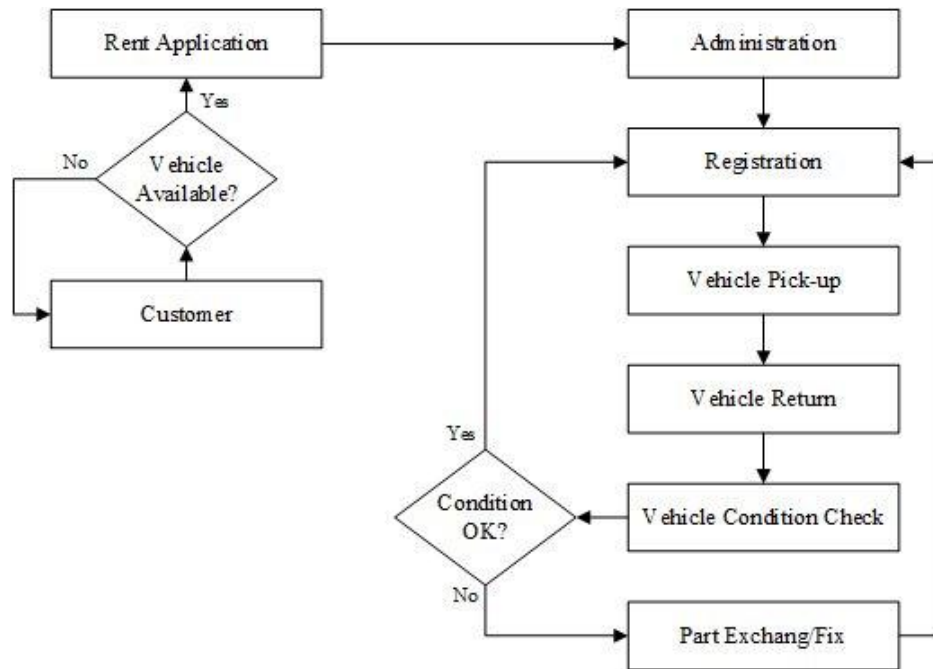


Figure 2 Workflow of car renting in the transport department.

According to Figure 2, when a customer requiring a car rent, the first process is to check whether a preferred car is available. In this stage, the Application section will have to check with the Registration section to ensure that they have the preferred car available. If yes, the customer has to fill some forms and then to continue with a process of administrative service, which traditionally will send the necessary forms containing the vehicle model preferred by the customer. After the documents arriving at the Registration section, the rent information will be recorded regarding date of leaving, mileage, registration number, condition, destination, and expected return date, traditionally operated in the form of written. When a vehicle is returned, the Registration section also has to inspect the vehicle condition that is normally expected as good condition as the first date of rent. If everything is fine, the vehicle will be in the list of availability waiting for the next registration process. Nevertheless, if a part of the vehicle is either broken by the customer or obsoleted due to its life cycle, or both. The data will have to be written to the vehicle record. Then, it will be brought to exchange the part or repair in order to keep the vehicle available for the next rent.

By studying the context of the workflow, there are several tasks in which the operators have to share among sections in the department. However, the data is recorded by hands that makes the tasks complicated and resulting in time consuming and perhaps simply to make mistakes. Therefore, the DBMS application was designed and developed in order to replace the paper work, but to facilitate the work done more fluently while to eliminate mistakes during the workflow.

DBMS Platform Development

To develop the DBMS software, the key process is to categorize the data structure and to design the functions to manipulate those data. As a result, Figure 3 shows the relationship of each data category in which functions are design to manage.

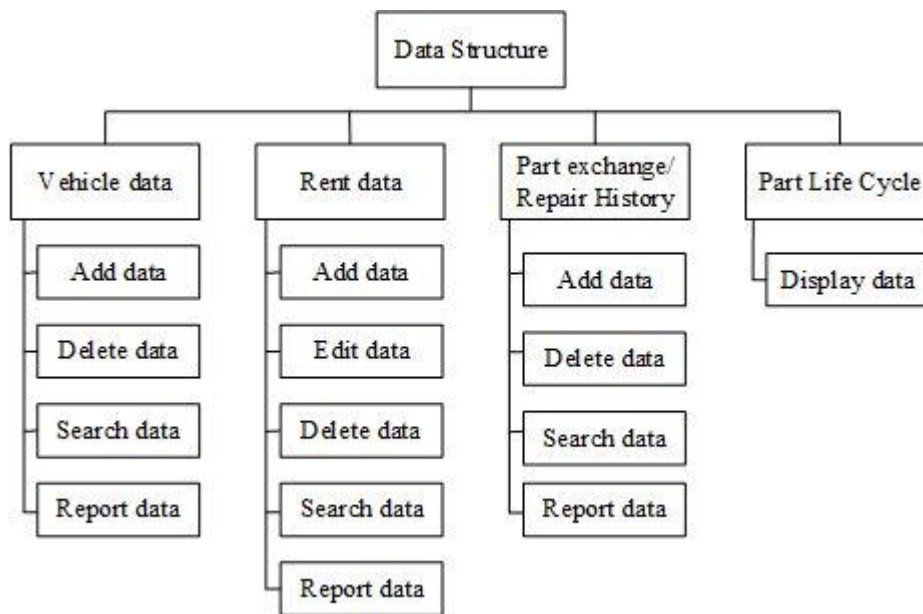


Figure 3 Data structure and designed functions.

When obtaining the data structure of the transport department, the next step is to establish the database and the relationship between the database and the data structure. Figure 4 illustrates the relationship between the data table and the user interface that presents the structure.

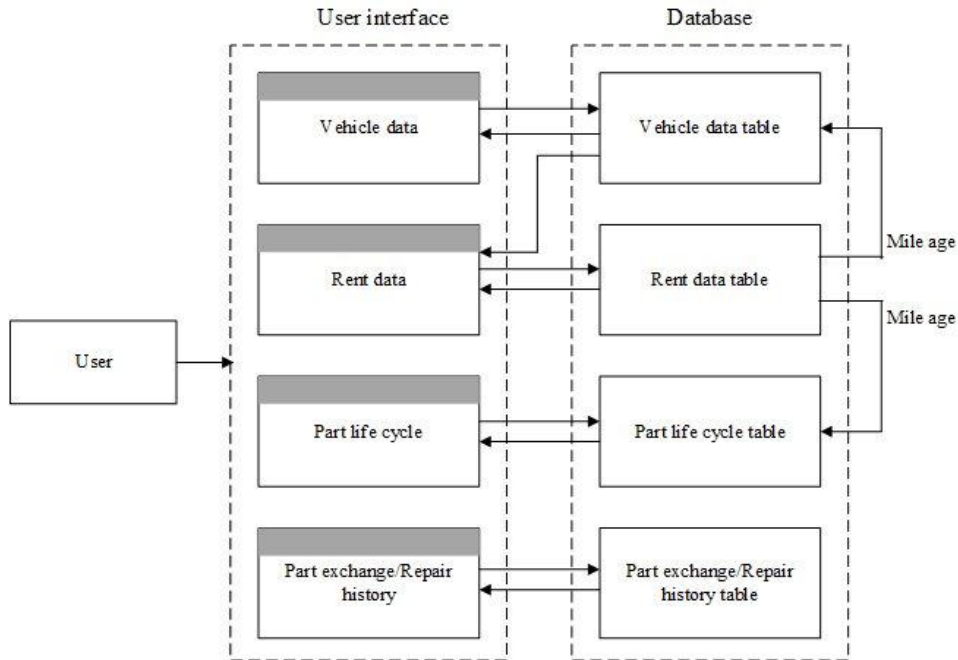


Figure 4 Data relationship.

For the database setup, the Microsoft Access was implemented for storing the data. While VB is coded to manipulate the data in accordance with the functions designed. By using VB, the GUIs were designed and developed in order to serve the users for managing the data such as add new data, edit data, delete data, search data. The DBMS application also enables the users to print out the data in the form of paper as a data report. The GUIs of managing the data of vehicle, rent, part exchange and repair, and part life cycle are shown in Figure 5, 6, 7 and 8 respectively.

By doing this, the users can operate the data with less paper work. Operating on the DBMS platform also leads to time saving because the software eliminates the manual processes written on paper resulting in more work efficiency. Additionally, by using the programmed platform, mistakes occurred by human error can be reduced, and this may eliminate repeated processes due to such human errors. As a result, the company may receive more service availability and subsequent customer satisfaction due to better performance.

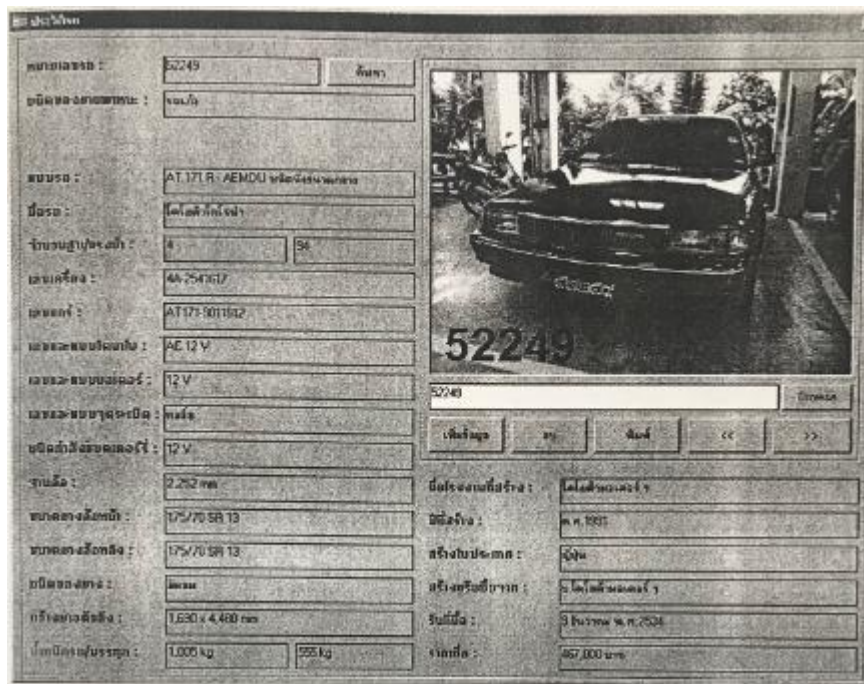


Figure 5 GUI for vehicle database management.

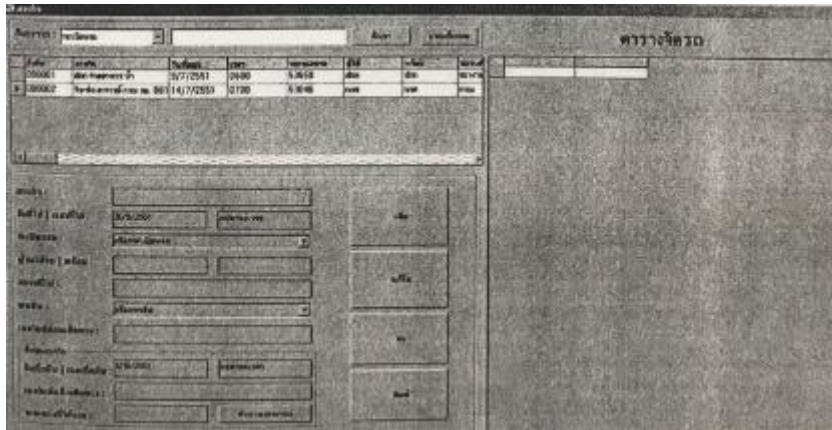


Figure 6 GUI for rent database management.

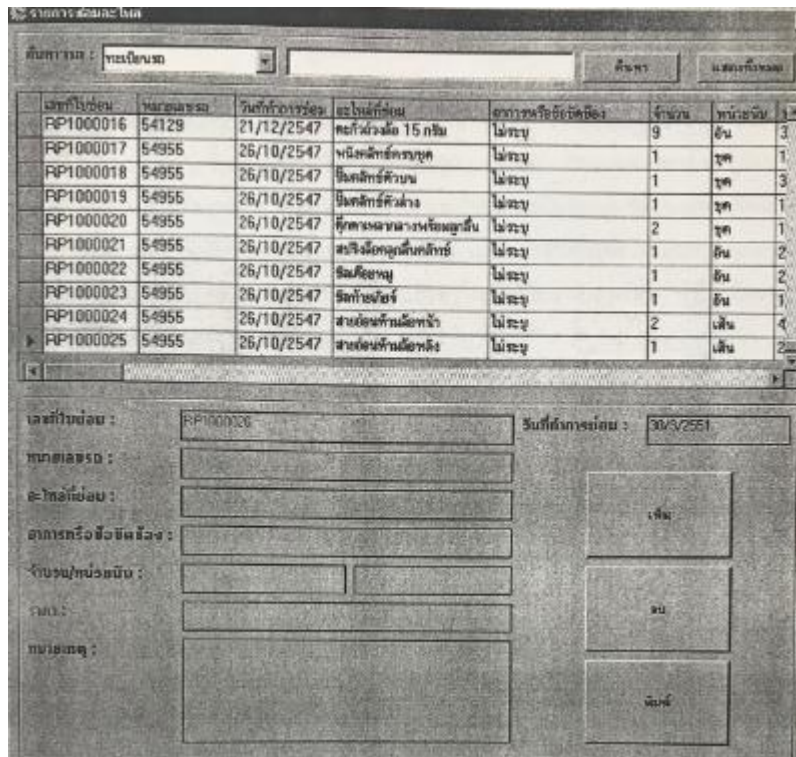


Figure 7 GUI for part exchange/repair database management.

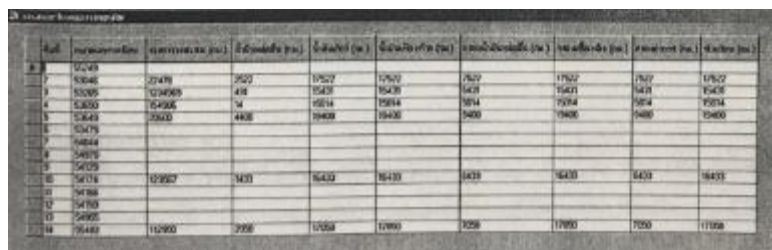


Figure 8 GUI for part life cycle database management.

Furthermore, the DBMS platform were developed to have an ability to share the information between sections in the department. The main advantage of this is that the data of the resources can be shared in the department concurrently. This facilitates the stakeholders to update the data among different sections resulting in working together more efficiently. As a result of the development, the users have been satisfied using the DBMS software rather than the old-fashion working style using paper work.

CONCLUSIONS

This paper presents a DBMS software development for managing transport resources in the transport department of Transport Go Company. The research employs the methodology using the waterfall model of Software Development Life Cycle. The DBMS platform were coded by using VB programming connected with the MS Access. The GUIs were designed for easy visualizing and operating by the users. The

key functions of the DBMS are allowed the users to manipulate the database of the resources efficiently. The result shows that the stakeholders of the company were satisfied implementing the developed platform.

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Communication for Development of Instructional Model to Enhance System Thinking Process for Undergraduate Students.

*Chitpong Ayasanond

College of Logistics and Supply chain Suansunandha Rajabhat University 1 U-thong Nok Road, Dusit, Bangkok 10300 Thailand
chitpong.ay@ssru.ac.th.

Abstract The objectives of this research were 1) to develop an instructional model to enhance system thinking process for undergraduate students and 2) to evaluate the efficiency of instructional model and to compare the system thinking process of the students before and after participating in the activities. The participants of this experimental research were 33 students in the first semester of the academic year 2018, Bachelor of Communication Arts Program, Krirk University by cluster sampling. The research instruments consisted of 1) The instructional model to enhance system thinking the process for undergraduate students 2) Lesson plans 3) The behavior system thinking process measure 4) The system thinking process measure. The statistics used for data analyses were means, standard deviation, the criterion of efficiency and t-test. Found that (1) The instructional model consisted of four components; 1) Syntax which includes six phases: Presentation of problems, Development of thinking, Select strategies for the problem, Exchange of thought, Group to learning and Summary; 2) Social System; 3) Principles of Reaction and 4) Support System. (2) The teaching model had item-objective congruence and efficiency of 81.15/ 85.95 which was higher than 80/ 80 criterion. (3) The testing scores after using the model was higher than before using at the .05 level of significance.

Keywords: Communication, Instructional Model, System Thinking Process, Undergraduate Students

INTRODUCTION

In the era of globalization is an era of academic progress modern science technology and a society that is changing from the industrial age into the information age and technological progress. The link between social change and quality education is a way to answer educational quality issues to cope with social changes in various areas. Which will lead to the approach to create analytical thinking ability (Gaby McDonald, 2012) of the learner and is an indicator in the educational quality assessment system due to the rapidly changing society such as technology free economic flows challenges of new technologies. The competitive in the ability quality of education social, the inequality from that change, society lacks balance with psychological development is the source of social problems affecting the way of life of people. The cultural influences from foreign countries into Thailand through media and information technology can make the children and youth lack systematic analytical thinking skills (Lawrence Duane House, et al., 2010). Unable to screen and select the appropriate culture Resulting in values and behavior that emphasizes materialism and consume more and more lack of public consciousness morality and ethics decreased.

Globalization, information, and technology society or globalization makes people need to know to choose to receive news, information, and choose the right technology, compete with people in the global society and become more self-reliant, which must be people who think. To act as a solution thinking makes humans able to create knowledge or information to make decisions about themselves and society appropriately. Learning is the center of learning management or learning that focuses on learners, the most important is to think, analyze and create their own knowledge. But in the current state, the lack of thinking skills, the main reason is the lack of thought development process due to the rapidly changing social conditions, for this reason, it is an important duty of teachers to develop learners to have a learning process. By organizing quality teaching activities according to the objectives of the curriculum and developing the thinking process for learners which is the basis for developing the most prudent processes, organizing learning processes that focus on practicing thinking process skills, dealing with situations and use of knowledge prevent and solve problems, arrange activities for students to learn from real experiences, practice thinking, act as a reason, think reasonably, have a system and learn continuously, combine diverse knowledge, cultivate morals, good values and desirable characteristics. In all learning, the line is for students to learn and have knowledge. Therefore, students should have the ability to gather information as a tool for sustenance for survival in the news age society with thinking skills. It is very important to have taught critical thinking skills (Halpern, D.F., 1996; Bailin, et al., 1999) and the education that needs to develop a system thinking process with the objective, direction, and careful process.

The Bachelor of Communication Arts Program, Krirk University, is considered as a service organization that is primarily engaged in teaching and learning. The ultimate goal is student learning, system thinking processes are related to student learning achievement. Developing a systematic thinking process will help promote learning that is conducive to increasing academic achievement and is a great result in moral development ethics and desirable values in the behavior of students directly. This is because education management to improve students' thinking is not as successful as they should be. Developing direct thinking or teaching thinking skills along with the teaching content in university, consistent basic beliefs in all teaching styles aimed at improving the quality of thinking by creating skills of various types of thinking methods and currently using many different forms that will help to learn to focus on appropriate actions learning management model for developing systematic thinking processes, learning process can develop students to create ideas and holistic knowledge.

RESEARCH OBJECTIVE

1. To develop an instructional model to enhance system thinking process for undergraduate students
2. To evaluate the efficiency of instructional model and to compare the system thinking process of the students before and after participating in the activities

LITERATURE REVIEW

Teaching is the communication way (Detlef R Prozesky, 2000) for transferring the knowledge thoughts and experiences from one person to another, which is considered the most important behavior of human beings based on the beliefs and theories of learning. Teaching is a task that requires principles, theories, including methods. Teaching and learning activities, instructors tend to stick to the objectives that Bloom (1956) defined in the Taxonomy of Education Objective, which is divided into 3 groups: Cognitive, Affective and Psychomotor, abbreviated as CAP. The Cognitive refers to the group that emphasizes knowledge in the subject matter of the teaching story. Affective refers to a group that emphasizes the thoughts and views that will arise from each teaching. Psychomotor means groups that focus on skills include teaching to be able to practice fluently. Each point needs different teaching methods. This is because teaching consists of many factors. Which are 1) the purpose of teaching 2) learners 3) the nature of the content 4) technology and materials can be used and 5) the characteristics of the instructor, which each factor has the following details.

1. Teachers must be clear about the purpose and should have an understanding of what the purpose is may use different methods of teaching strategies, tactics, and teaching techniques, such as if the instructor sets the purpose of teaching students to have the ability to listen, to information, instructors may use teaching methods to create concepts or may practice listening skills by actual practice and presented to the instructor.

2. Teachers must consider that learners are living things. The feeling that the instructor cannot know at all students will make the teaching methods of the instructors diverse. Because students are different nature of course content is another factor that teachers must have a deep understanding of the nature of the content, otherwise, the instructor will not be able to teach the content effectively, such as teaching literature requiring different teaching strategies from science, etc.

The instructor must use technology and teaching materials suitable for learners, for the nature of the course content, and for the budget and benefits or values that will occur. The characteristics of professional teachers or instructors must be unique, for example, if the teacher does not have the habit of being patient with different students would show bad characteristics. The instructor must have a unique style that motivates the learner need and want to speak and study.

Instructional model of teaching refers to a plan showing the structure and various elements that will be used in the development of learners so that learners will learn according to the intended goals in the development of teaching styles, there should be criteria for selection to achieve the desired result with an important concept for developers to consider as follows (Saylor and Others, 1981, pp. 294-299)

1. Goals and objectives instructional model developers should take into account the teaching objectives. Determining the purpose of activities assigned to learners will help to achieve the general goal of teaching as much as possible. Therefore, the model that will be developed must be consistent with the objectives and goals in general.

2. High probability of achieving goals, the developer of the instructional model must take into account the possibility of achieving the goal. The level of feasibility depends on the consistency of the training activities in the study.

3. The motivation of learners, the effectiveness of the instructional model depends on the level of participation in the student's learning activities. The model developer should provide activities that will motivate students to learn. Maybe done by providing new media that challenges learners to prevent learners from boredom in learning

4. Learning principles, the development of instructional styles should not adhere to the theory or principles of learning alone but should adopt many learning principles. Like to be used in practice, such as intellectual development, motivation, reinforcement, development of attitude and values, basic human needs.

5. Facilities tools and resources, the developer of the instructional model must take into account the readiness of the tool, facilities and the resources necessary for the implementation of some of the important points that are observed in the development of instructional styles (Joyce & Weil, 1996) are as follows. 1) The instructional model should have supporting theories such as learning psychology theories. 2) When developing the instructional model, before being widely used requires research to test the theory and examining the quality of the user in real situations and applying the findings to improve, but some forms have only 2-3 stories, but all forms have a trial in the classroom until it is guaranteed that can be used easily and effectively. 3) Development of instructional styles may be designed to be widely used or for one specific purpose. 4) Development of instructional styles, there is the main aim that is considered to be the main consideration in choosing the format to be used. That is if the user uses the instructional model to match the main aim will cause maximum results but can apply that pattern in other situations if deemed appropriate.

Theory of co-operative or collaborative learning is a small group of learning with about 3-6 different talented members helping to reach the goals of the group. David Johnson and Roger Johnson said that in teaching and learning in general, we often do not pay attention to the relationship and interaction between learners. Most of us tend to focus on the interaction between the instructor and the learner or between learners and lessons. The relationship between learners is a dimension that is often neglected or overlooked, both with research results that clearly indicate. The feelings of the learners towards themselves, the instructor school and classmates have a great impact on learning. There are 3 interactions between learners (Johnson and Johnson, 1994, pp. 31-32) (1) Competition in education and learning each student will try to learn better than others to get a good score honored or receive compensation in various ways. (2) Different characteristics of different students, each one is responsible for taking care of themselves to learn and not interfere with others. (3) Collaboration or help in learning is that each person is responsible for their learning and at the same time must help other members learn as well.

System thinking is aimed at looking at things in a holistic way as a framework that looks at patterns and interrelationships. What is special is the holistic world that is more complex. Systematic thinking makes complexity a manageable thing (Senge, 1993,

p. 6). System thinking is a view that makes it possible to see the situation, the pattern of new practices and respond to situations and patterns with better levels, resulting in more quality improvement processes. System thinking is like a special language that helps communicate with the system around. The relevant quality system thinking is like a set of powerful tools to help visualize and understand the systems of components and behaviors that can be communicated to other people and also help to design systems for management for effective problem-solving.

System thinking (Checkland, Peter B., 1981) is a way to understand the world and complex systems. To understand the story of the globalization world, it must understand the systems of society, economic systems, cultural systems or other systems. Which requires learning and practicing thinking methods, how to link and understand each other's reasoning. This way of thinking is a way of thinking methods of looking and analyzing various systems, which the system is already existing and everyone is in the system, both natural systems and man-made systems. Which has a system that is a complex mechanism and system that is difficult to understand? These systems consist of many sub-systems. Therefore, understanding the system and thinking systematically is the basic principle of understanding towards stories related to lifestyle. The system cannot be separated from human life. Understanding relationships the connection that see the relationship and the connection of life makes it possible to see human values and there is a process of evolution that does not stop.

System thinking has the following principles (Kieran Conboy, 2009): 1) is an idea that looks at the "holistic" thinking of holistic thinking can compare that when the problem occurs people tend to focus on specific events that occur at that time. Such a look is a narrow view can be perceived, but the result of the change that occurs from which part is the direct result only but the system thinking principle teaches to look back from the point of the problem and look at it as a big picture or look at the image in a holistic way. This is because the problems may be related to other parts of the system trying to find the source of problems that may be related to other parts is a comprehensive, comprehensive look. 2) is to create a balance between short-term and long-term views. Expectations of success in solving problems or creating work. Sometimes there may be a view that the activity should be expected to be accomplished in a short or successful period. In the long term, system thinking has the idea that developing behaviors will lead to short-term success or success. Short-term that immediately happened.

Sometimes it may be something that can destroy the long-term success, but this does not mean that the creation or solution will aim only for long-term success. If trying to determine the balance between acceptance that will have less success in the short term to hope for long-term success may be something that must be tried to balance. 3) Accepting dynamism complexity and interrelationships of natural systems all things in the world have systems that are complex, dynamic and related. Or in other words, things are constantly changing life is chaotic and everything is connected. Solving problems or creating new things, practitioners have the intention to make simple, uncomplicated, sequential, or work with each problem. System thinking problems will try to rank, build relationships in a manner that is reasonably connected. Which will be used in the synthesis of reasonably And accept the relationship of various systems? 4) Accept and use data from both quantitative and qualitative factors, system thinking, acceptance and use of data for system improvement, both quantitative and qualitative data. 5) All parts support the system, system thinking will assume that all parts of the system are all important to the overall image of the system. Each sub-section will have to complete the mission of their own full capacity. Remember that every part that is a sub-element of the system is important and the actions of each part will affect the public. Even though the overall results are returned to each sub-section (Anderson & Johnson. 1997).

RESEARCH METHODOLOGY

The participants of this experimental research were 33 students in the first semester of the academic year 2018, Bachelor of Communication Arts Program, Krirk University by cluster sampling. Creating and finding quality tools used in this research, the researcher divided the process into 3 phases as follows:

Phase 1: Creating an instructional model:

Step 1: Study basic information

Step 2: Create an instructional model, proceed as follows; 1) Define the conceptual framework and create an instructional model. 2) Create a learning management plan. 3) Create an instructional manual. 4) Create tools for collecting data.

Phase 2: Quality inspection of instructional styles:

Step 1: Check the consistency and appropriateness of the instructional model.

Step 2: First revision

Step 3: Check the quality of instructional styles

Step 4: Second amendment

Phase 3: Experiment using the instructional model:

Step 1: Experimental grouping

Step 2: Preparation of experimental equipment

Step 3: Implementation of the instructional model

Step 4: Data analysis

Step 5: Summary of trial results

The research instruments consisted of 1) The instructional model to enhance system thinking the process for undergraduate students 2) Lesson plans 3) The behavior system thinking process measure 4) The system thinking process measure. This research used the Quasi-Experimental Designs, One-Group Pretest-Posttest Design as shown in Figure 1.

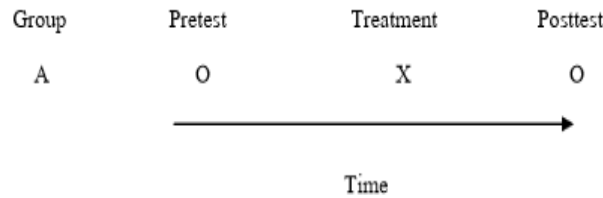


Figure 1. One-Group Pretest-Posttest Design (McMillan, 2001)

The statistics used for data analyses were means, standard deviation, the criterion of efficiency and t-test.

RESEARCH RESULT

Found that (1) The instructional model consisted of four components; 1) Syntax which includes six phases: Presentation of problems, Development of thinking, Select strategies for the problem, Exchange of thought, Group to learning and Summary; 2) Social System; 3) Principles of Reaction and 4) Support System. The results of the assessment of the appropriateness instructional model to enhance system thinking process for undergraduate students are shown in Table 1.

Table 1. Elements of Instructional Model

Elements of Instructional Model	\bar{X}	S.D.	Congruence	\bar{X}	S.D.	Suitability
1.Principles of instructional model	4.2	.83	Much	4.4	.54	Much
2.The purpose of the instructional model	4.2	.83	Much	4.6	.54	Much
3.The consistency of the activity process (Syntax)	4.2	.83	Much	4.2	.44	Much
4.Social Syatem	4.2	.83	Much	4.4	.54	Much
5.Principles of Reaction	4.2	.83	Much	4.4	.54	Much
6.Support System	4.4	.89	Much	4.2	.44	Much
An overview of the elements	4.3	.84	Much	4.36	.50	Much

The results of the effective instructional model to enhance system thinking processes for undergraduate students found that the teaching model had item-objective congruence and efficiency of 81.15/ 85.95 which was higher than 80/ 80 criterion as shown in Table 2.

Table 2. The efficiency of the instructional model

Testing	Total Score	\bar{X}	Percentage
During Study	360	286.47	81.15 (E)
After Study	20	17.19	85.95 (E)

For the testing scores after using the model was higher than before using at the .05 level of significance as shown in Table 3.

Table 3. Comparing the system thinking process of undergraduate students

Sample	n	Total Score	\bar{X}	S.D.	t	p
Before participating in the activities	33	20	14.03	.95	16.56*	.000
After participating in the activities	33	20	17.18	.98		

*p < .05

DISCUSSION

The efficiency instructional model to enhance system thinking process for undergraduate students may come from the development of the instructional system process (Joyce & Weil, 2004) including the study of steps in the development of instructional styles. Under the conceptual framework of studying basic information, creating instructional styles for quality and applying. The role of teachers in teaching and learning activities requiring the facilitator to support the students able to think, express, and asking questions periodically at all the time. The instructor must encourage the students to express their opinions transparently, try to make a difference in ideas from every member and help each other to learn to solve problems. Teachers must play a role in helping students, including advice on planning to find sources of knowledge and collaboration. Teachers will not be able to create an atmosphere in the classroom to learn if there is an atmosphere of stress and scaring. The atmosphere that supports learning well must be a relaxing atmosphere (Rogers, 1969). The learning atmosphere should allow the learner to be free to work, study, be self-sufficient. By having a teacher as an advisor in the environment that is convenient and in the operation (Schunk, 1996, p. 404).

The teaching and learning activities that focus on learners are important. By requiring the social system to be cooperative learning is an important factor that will result in learning and thinking more efficiency. Cooperative learning also helps develop academic achievement (Ajose & Joyner, 1990, p. 198; Johnson & Johnson, 1994, pp.13-14).

CONCLUSION AND RECOMMENDATIONS

From the results of the development instructional model to enhance system thinking process for undergraduate students found that the teaching model had item-objective congruence and efficiency of 81.15/ 85.95 which was higher than 80/ 80 criterion, and the testing scores after using the model was higher than before using at the .05 level of significance. Therefore, instructors should use such instructional styles to develop systematic thinking processes for students.

There should be a development of teaching styles in order to develop a systematic thinking process in other educational areas in a similar context or across the country. There should be a way to study the causal relationship of the system thinking process with variations such as family basics life experience, environment, student learning potential, etc. There should be a development of teaching styles to develop systems thinking processes in other learning strands, in order to develop a systematic thinking process along with learning management in content for students. For the next research, should study the relationship between system thinking and learning achievement of the students.

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