

# The Model of Integrated Tourism Logistics in Nakhon Pathom Province to Create Value for Stakeholders

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**Abstract-** The model of integrated tourism logistics in Nakhon Pathom Province is an integration of the collaboration, during the demand forecasting, tourist service, processing orders, communication, transportation process, inventory control and warehouse management. It was found that Route A day trip tour, Route B 1 day 1 night tour, and Route C 2 days, 1 night tour; there was no central agency that provided information on the tour routes. Six stakeholder groups have created an alternative program for tourists' decision making including budget-based tourism, tourism by major tourist attractions, tourism by type of tourism and tourism with multiple conditions.

**Keywords - Model Tourism Logistics**

## I. INTRODUCTION

The tourism industry is an important part of the economy of all countries around the world; the tourism industry has been developing and expanding continuously and rapidly. Until becoming the main product in international trade and is important on a scale 1-3 in the top 10 of the major industries. This context is consistent with the growth of the Thai tourism industry as well. Thailand's tourism industry is the driving force of the economy that has played a prominent role in the past as well as being a catalyst for economic growth leading to employment, job creation, income distribution, and investment. In related businesses, it creates wealth for people [1] and the country and leads to success in enhancing the quality of life of the Thai people [2]. Logistics and the tourism industry are inevitably interrelated due to the flow of movement. Tourists from start to finish must transport and provide an additional service, which is the origin of the word Tourism Logistics Service (TLS), and if the word "quality" is added, it becomes "Tourism Logistics Service

Quality" (TLSQ) [3] and also has a channel. Availability, communication services, expectations, and recognition from travelers are also involved. Tourism logistics is "Activities" to facilitate the physical flow of tourists from source to destination without errors. It also gives the tourists the most satisfaction. Tourists' transportation is just one activity in tourism logistics. Transport takes place only at a certain point, not along a route, such as aircraft, bus, and boat transportation activities. There will be no further transportation activities in the accommodation. If speaking in the dimension of tourist transport, how is it different from transporting goods? The answer that can be easily understood is that people are Physical Flow with life, mind and emotions, feelings that can laugh, can walk around, get tired, hungry, and get sick [4].

Currently, the problem of tourism is not concerned about the management of tourist attractions [5], but it likely is a problem related to tourism management that is inconsistent with the tourism logistics and supply chain. As a result, it was unable to create added value in tourism products at all [6]. In addition, the problems about tourism in Nakhon Pathom Province were found to include 1) The presentation of tourism information or public relations through attractive media 2) A system to support decision making and to provide advice for effective management and presentation of tourism information [7] 3) English communication with tourists [8] 4) Merging the cultural strength with tourism and incapability to add value during tourism activities 5) Lack of coordination among relevant parties [9] 6) Problems related to tourism logistics management [10]. These problems cause it impossible to truly optimize tourism management.

From the problems mentioned above, the concept of logistics and supply chain management applied to solve tourism problems in Nakhon Pathom Province is to allow stakeholders in the tourism supply chain management (TSCM) [11] to earn benefit mutually, where the tourism logistics management concept will involve in physical flow (Products and services) and information flow (Information). From that reasons, the subject research "The Model of Integrated Tourism Logistics in Nakhon Pathom Province to Create Value for Stakeholders" will help solve the current problems of tourism management. Existing studies have not been able to resolve these issues. The findings could also be applied to provincial governments in other provinces, although in practice it may not be easy to manage the tourism logistics system provided by all relevant sectors. To participate and integrate work together and to develop tourism services to meet acceptable standards will attract foreign tourists to flow into tourism and promote Thai people to travel together within the country. These are still challenging when compared with other international tourism competitions. This research is another way to solve the problems and increase efficiency in tourism logistics management, which leads to build competitiveness and improve service efficiency in order to attract tourists and distribute income to the crowd and benefit the nation now and in the future.

## II. LITERATURE REVIEW

### *2.1 Tourism Logistics Management*

Logistics is the movement of materials (Material Flow) and information. Information Flow will be from being a raw material until becoming a finished product [12, 13, 14]. Being moved and delivered to the consumer, each step has coordinated operations in every activity, with elements of the logistics system consisting of (1) Customer Service (2) Order Processing (3) Communication among each other. Transmitted through distribution of goods and services (Distribution Communication) (4) Inventory Control (5) Demand Forecasting (6) Traffic and Transportation and (7) Warehousing and storage. Integrated supply chain will be able to give a competitive advantage in accordance with the principles of Porter (1985) [3, 11, 15, 16], it helps the company to receive

awards and provides a way to get more jobs from customers [17]. Management of incompatible travel logistics by managing some of the tourism logistics only, the management will be inconsistent with the tourism supply chain, therefore it will be unable to increase the potential or value of the tourism. Tourism logistics covers 3 main areas (1) Transportation, tourists and objects (physical flow) (2) Information flow [18] and (3) Money payment and receiving (Financial flow). Singapore is a good example of tourism logistics. The Singaporean website is very complete and provides useful information. Moreover, the service provided is also a direct links from the main website to the travel-related websites and travel for a specific purpose [19]. However, at present times, the service of the tourism logistics must pay more attention onto the travel in time of crisis and also the recovery of entrepreneurs in the face of crisis as well [1].

## *2.2. Elements of Tourism*

Factors influencing tourism include (1) Demand for tourism (2) Supply per tourism (3) Marketing Mix [11, 20] and (4) Marketing Mix for Service Business [5] and Value-Added Related Components. The results of the tourism industry in Thailand consists of (1) the size of the industry (2) the industrial structure (3) the competitive and operating model (4) the value-added analysis (5) the domestic net-added value and (6) the assessment of the efficiency of the income-generating opportunity. However, the elements of tourism is still related to the tourism demand and supply policy information flow and physical flow of marketing and services whose size of the industry can affect operations and competition as well as ways to create added value.

## *2.3. Tourism Business Administration*

The definition of traveling is an activity that involves temporary travel from normal residence to another place and is the voluntary travel for any purpose which is not for occupation or earning money [21]. However, Thailand has seriously promoted tourism by establishing the Ministry of Tourism and Sports, which plays a role to focus on tourism marketing management [22, 23] in Thailand in order to accelerate the development of information technology systems for tourism support for transactions via network systems and e-commerce for marketing benefits. As a matter of fact that Thailand has many natural attractions, therefore staying in focus on developing potentials to support tourism to be concrete can make a good impression on visitors which will help promote careers in related business lines including economic and social development resulting in the development of infrastructure. It helps people to work and earn more income [24]. In addition, tourism is not limited to the number of tourists, therefore it is able to generate a lot of income but still found the problem of lacking of good management in tourist attractions. Although there are many types of tourism, such as eco-tourism, which emphasizes natural travel to learn, appreciate and enjoy the sceneries to merge with cultural plan and manage local participation aiming to raise awareness of ecosystem and conservation. However the problem is found that a large number of tourists are novice tourists who lack of experience and knowledge to perform appropriately, therefore the tour guide has an important role in guiding tourists to satisfy them, impress them and make them happy. Good human relations and personality, rhetorical, passion of work and proficiency in both Thai and foreign language are needed. They should also have experience in conservation tourism.

## *2.4. Value Chain Management to Create Added Value for Stakeholders*

This makes value-added products and services through each process of the supply chain. The value chain model consists of two activities [25, 26, 27] main activity and support activity to act as a driver of supply chain operations to achieve success and generate profits. The main activities consist of inbound logistics, operation of the production of goods or services, outbound logistics marketing and sales and after-sales service while supporting activities include technology

procurement, human resource management and the infrastructure of the company. The goal of the value chain is to add value to the product and create a competitive advantage in the market.

### III. METHODOLOGY

#### *3.1. Research Model*

By using a qualitative research model, focus group method and in-depth interview. This will provide more insight information and it will be more useful and efficient than using questionnaires.

#### *3.2. Population and Sampling*

Six groups of stakeholders in the research interview were identified, 120 people from the research population of more than 3,016,431 tourists and stakeholders (Department of Tourism, 2019). The 120 subjects were (1) hotel group, 20 persons (2) local community group (consisting of 20 persons in tour guide, restaurant, shop, OTOP product shop and agricultural tourist attraction (3) Transportation and public services group 20 persons (4) Spa and health services group 20 persons (5) Nakhon Pathom Provincial Tourism and Sports office group of 20 persons and (6) Tourists group of 20 persons, the sample groups were randomly selected by specifying the same proportion in each group.

#### *3.3. Research Tools and Instrument*

The research tools and instrument were the interview forms divided into 4 parts through 3 expert quality testing.

#### *3.4. Data Collection*

The researcher had a method for collecting qualitative data through in-depth interview. The interview took place approximately 30 minutes in each session.

#### *3.5. Data Analysis*

The researcher used the data from the interview of the sample and tests the integrity by using the method of triangulation which is the examination of the data by verifying that the obtained data is accurate by examining different sources of information, times, places and people. To get the same information and examine the triangle by means of data collection (Methodological Triangulation) is to collect data in several ways. By all means of the studies, academic document, in-depth interview and observation. When the information is accurate, the data was sorted out according to the research objectives.

### IV. Results

#### *Integrated Tourism Logistics in Nakhon Pathom Province*

1. Tourism demand forecasting side, found that the integration of tourism demand forecasting integration was not found. Therefore, information sharing is not used, which group 5. Although the data of tourists traveling to Nakhon Pathom were also accumulated, but there was no further action to manipulate those forecasted data to share the benefit of preparation for other stakeholders. These groups will use data from their previous years to forecast tourism demand. Together with news from sources such as newspapers, television, internet and other media to forecast, data are independent from each other so that the management approach is group 5. The information should be listed that other groups should be accessible too and recipients should be assigned to coordinate within other groups. Each group should select a representative to attend a group meeting among groups 1-6 in order to plan and make use of information pertinent to "expecting tourism demand" together.

2. In term of tourism service, found that all groups were involved in tourism services, where groups 1-6 to provide information, recommendation, complaints or service improvement or to inform the

desirable requirements so that service providers can provide or respond when needed. The study found that there is integration between the groups but not all of them. For example group 6: tourists notify for the use of tourism services and notify their wishes and group 3 provides boat transportation and brings customers to Nabua, Kluea Mai garden or pomelo orchard along the waterfront. And during sight-seeing, group 2 will distribute water, food and souvenirs for tourists and they will travel to stay with group 1 and then use the services of group 4 within a hotel or accommodation or nearby areas. This point can be proved that group 5 was not involved in the integration tourist service together with other groups.

3. In term of processing orders for tourists, found that there was integration between group 1, group 2, group 3, group 4 and group 6, except for group 5. For example, buying order will be transmitted together. The process begins when the customer makes a reservation for public transportation (such as booking a boat for a cruise along the canal) or the process begins when the customer makes a reservation and stays at a hotel. Before starting to travel, there will be a co-ordination between the groups of tour operators. By the channel used in “Processing tourist orders” or forwarding the most used channel of orders are (1) Web site that is Web Programming of a booking agent or website of the company (2) Line application and (3) Telephone.

4. In term of communication for transmission, distribution of products and services, found that there were 2 types of product distributions (1) distribution for preparing to sell or prepare to bring services to tourists, such as manufacturers bringing raw materials to restaurants, hotels and accommodations. The study also found that communication outside the organization was used and (2) distribution of service locations, such as juice and fruit selling sites, selling food at multiple points at the same source to facilitate many littering points, etc. It was found that communication within the organization to deliver products and services, the use of the Line Application makes it convenient, fast and cost-effective, so it can be concluded that there is integration between the groups but not all of them.

5. In term of the transportation process, found that there was an integration of cooperation in transportation as well as product transportation and people transportation, such as transporting goods or things into hotels, or transporting tourists by boat to the orchid garden, etc.

6. In term of inventory control, there was no inventory control integration. Each group is independent from each other, for example the inventory of restaurants serving tourists is almost exhausted. The restaurant will be self-managed by contacting with the restaurant to purchase the supply to the store or call to make orders to the manufacturer to deliver items which is simply a nature of general trading that do not require any joints or Just-in-Time systems because they think it is not that essential.

7. In term of warehouse management, found that there was no integration of collaboration in warehouse management. It is true that there is no inventory control integrated.

### *Excursion Program*

1. Route A; Day-trip tour, found that The cruising tour in route along Maha Sawat canal, witness lotus pond, orchid garden and pomelo plantation at Ban Khao Tang, Salaya district, Nakhon Pathom province is the historical canal of the province. This route is important to enjoy the way of the riverside community life from the past until the present. Tourism Authority of Thailand (TAT) in collaboration with the Department of Agricultural Extension who organize agricultural tourism and the cruise along the Maha Sawat Canal, which are 4 points of view: Nabua, Orchid Garden, processed products of the farmer’s housewife group and fruit orchards and rice fields. This Klong Maha Sawat community received the Thailand Tourism Industry Outstanding

Community Award in 2007 and is of great interest to many tourists. By this route, it is very popular travel program for most tourists or visitors coming from Bangkok, where is only 50 kilometers far from Nakhon Pathom province, including traveling from adjacent provinces such as Suphanburi province, Ratchaburi province, Nonthaburi province and Pathum Thani province. There are more local tourists or domestic visitors than foreigners and most of them travel by private cars rather than public transportation. For the program displayed for tourist routes, the central agency did not provide the route information but tourists must search for themselves through search engine websites such as Google.com and consider making their own comparison decisions. Therefore, the 5 groups of stakeholders, namely group 1 - 5, should send their agents together and create tourism programs to be working together as integration. The website application of group 5 was used as a channel to distribute travel routes; however, they can still obtain feedback after the tourism process ended by receiving opinions of group 6, a group of tourists through the website of group 5 to use tourists' recommendation in the dissemination or display of travel routes.

2. Route B; 1 day 1 night tour, found that Don Wai Floating Market - Song Khanong Temple - Hom Kret Temple - Wang Pla, Samphran District, Nakhon Pathom province able to stay for 1 night at Baan Klong Suan, Homestay, Samphran, Nakhon Pathom or Civilaya House - Rai Khing Samphran, Nakhon Pathom by this route which is a very interesting travel program. Tourists do not have to rush to travel. There is an overnight stay to rest 1 night, with most of the tourists still come from Bangkok and adjacent provinces. While the tourism program was shown, the central agency did not provide the route information. Visitors must search for themselves through search engine sites such as Google.com and consider comparing on their own information. There is no difference from excursion program Route A, so the course of action or advice for this route is to do the same as Route A.

3. Route C; 2 days 1 night tour, found that Day 1 - Don Wai Floating Market - Song Khanong Temple - Hom Kret Temple - Wang Pla, Samphran District, Nakhon Pathom Province. (Stay overnight at Ban Klong Suan, Homestay Samphran, Nakhon Pathom or Civilized House - Rai Khing Samphran, Nakhon Pathom), Day 2 Travel route, boat trip along Maha Sawat canal, witness Bua, orchid garden, Pomelo plantation, Khao Tang, Salaya district, Nakhon Pathom province, while the program shows tourist routes, the central agency did not provide the route information. Visitors must search for themselves through search engine sites such as Google.com and consider comparing on their own information. There is no difference from displaying Route A and B, so the guideline or recommendation for this route is to do the same as Route A.

#### *Support System to Decide the Travel Route*

1. In term of budget-based tourism, found that all 6 groups of stakeholders agreed to the formation, tourism route decision support program with options to help make decision which are (1) Budget-based tourism (2) Tourism by major tourist attractions (3) Tourism by type of tourism (4) tourism with multiple conditions. This program should be displayed through the website of group 5. All 6 groups of stakeholders are able to meet together to integrate their work. Group 5, a government agency, will be assigned to develop programs through the website so that tourists can access them. However, the budget tourism to travel in the area of Nakhon Pathom expected that tourists will not have problem about budget regardless of choosing the travel Route A, B, C because it will cost no more than 10,000 baht.

2. In term of tourism by major tourist attractions, found that all 6 groups of stakeholders agreed to make tourism route decision support program with options to help make decision which are (1) Budget-based tourism (2) Tourism by major tourist attractions (3) Tourism by type of tourism (4)

Tourism with multiple conditions. This program should be displayed through the website of group 5. All 6 groups of stakeholders are able to meet together to integrate their work. Group 5, a government agency, will be assigned to develop programs through the website so that tourists can access them. However, tourism in major tourist destinations will result in the change of accommodation, if the attraction is outside the recommended route.

3. In term of tourism by type of tourism, found that all 6 groups of participants agreed to create tourism route decision support program with options to help make decision which are (1) Budget-based tourism (2) Tourism by major tourist attractions (3) Tourism by type of tourism (4) Tourism with multiple conditions. This program should be displayed through the website of group 5. All 6 groups of stakeholders are able to meet together to integrate their work. Group 5, a government agency, will be assigned to develop programs through the website so that tourists can access them. However, the tourism by type of tourism, it will not affect the change of accommodation, since most of Nakhon Pathom is agricultural tourism except outside the recommended route.

4. In term of tourism with multiple conditions, found that all 6 groups of stakeholders agreed to the formation tourism route decision support program with options to help make decision which are (1) Budget-based tourism (2) Tourism by major tourist attractions (3) Tourism by type of tourism (4) Tourism with multiple conditions. This program should be displayed through the website of group 5. All 6 groups of stakeholders are able to meet together to integrate their work. Group 5, a government agency, will be assigned to develop programs through the website to allow tourists to access them. However, the tourism conditions will cause uncertainty in the choice of place to stay including travel route and budget expenditures, depending on the conditions of each specified program.

#### *Creating Added Value for Stakeholders*

1. Income of stakeholders was increased from tourism. The model of integrated tourism logistics in Nakhon Pathom province to create value for stakeholders in the field of “income” found that if this model is applied, it will result onto 4 groups of stakeholders who will earn more income from increasing number of tourists using the tourism services, among these 4 groups (1-4).

2. Enhancing the efficiency of tourism information services and services can improve their efficiency and information by 5 groups which are 1-5.

3. The satisfaction of stakeholders and tourists will be increased. The stakeholders included in these criteria will be a total of 6 groups (1-6).

4. Stakeholders will learn to grow and make the 5 groups to be flourishing which are groups 1-5.

#### V. CONCLUSION

To summarize and discuss the research results as shown in Figure 1.

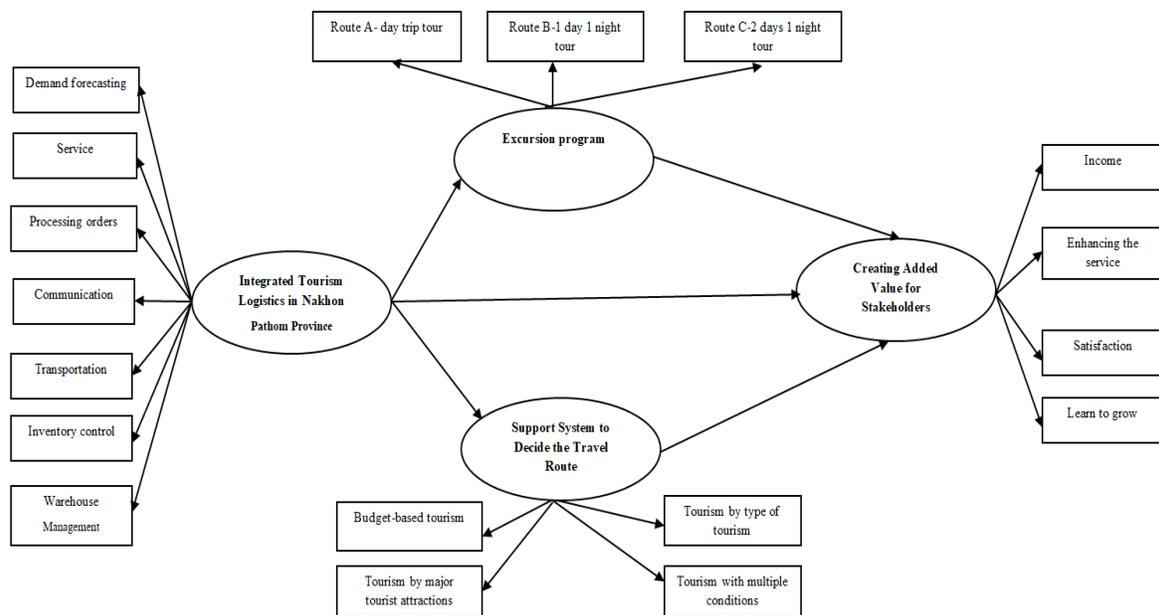


Figure 1: The Model of Integrated Tourism Logistics in Nakhon Pathom Province to Create Value for Stakeholders

### *Suggestions for the Application of Research Results*

1. Each group should select a representative to attend a group meeting together between groups 1-6 for planning and exploiting the information expecting tourism demand together.
2. A representative should be sent together and a tourism program should be organized to be integration. Working together and using the website channel of group 5 to distribute tourism routes. However, feedback can still be received after the end of the tourism process by obtaining opinions from group 6, a group of tourists through the website of group 5 in order to use recommendations of tourists in the dissemination or display of tourism routes.

### *Suggestions for the Future Research*

Quantitative and developmental research should also be undertaken by developing web programming to display travel routes and programs to help make decision onto the choice of travel routes.

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