

Logistics Service Provider Management Among Thailand Food Export Entrepreneurs

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Abstract

The study of Logistics Service Provider Management among Thailand Food Export Entrepreneurs aims to 1) study and analysis the affecting variables of selecting logistics service provider among Thailand food export entrepreneurs 2) provide guidance of logistics service provider management among Thailand food export entrepreneurs. The sample in this study was 126 food export operators in Thailand. 5 - Point Likert Scale questionnaire was used to data collecting. For data analysis, were analyzed using by frequency, percentage, mean, standard deviation, t-test, f-test and multiple regression analysis.

The results of the study were as follows: logistics service provider selecting among Thailand food export entrepreneurs, price factor was selected in the most influential factor (4.22). Logistics performance factor was selected in the second (4.20). The third of influential factor is customer services (4.17). The last influential factor in logistics service provider selecting is LSP organization (4.03). The export entrepreneurs also pay attention to the quality assurance system certification of service providers such as ISO to ensure the quality transportation services.

Keywords: Management; Logistics Service Provider; Export Entrepreneurs

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การบริหารจัดการผู้ให้บริการโลจิสติกส์สำหรับผู้ประกอบการส่งออกอาหาร ในประเทศไทย

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บทคัดย่อ

การศึกษาเรื่องการบริหารจัดการผู้ให้บริการโลจิสติกส์สำหรับผู้ประกอบการส่งออกอาหารในประเทศไทย มีวัตถุประสงค์เพื่อ 1) เพื่อศึกษาวิเคราะห์ตัวแปรที่มีผลต่อการตัดสินใจเลือกผู้ให้บริการโลจิสติกส์ด้านการขนส่งของผู้ประกอบการส่งออกอาหาร 2) เพื่อเสนอแนะแนวทางในการบริหารจัดการเพื่อการเลือกผู้ให้บริการโลจิสติกส์ด้านการขนส่งของผู้ประกอบการส่งออกอาหาร กลุ่มตัวอย่างในการวิจัยครั้งนี้คือ ผู้ประกอบการธุรกิจส่งออกอาหารในประเทศไทย จำนวน 126 ตัวอย่าง โดยใช้แบบสอบถามที่มีมาตรวัดแบบลิเคิร์ต 5 ระดับเป็นเครื่องมือในการเก็บรวบรวมข้อมูล สถิติที่ใช้ในการเก็บข้อมูลได้แก่ ค่าแจกแจงความถี่ ร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน การทดสอบค่าที (T-test) การทดสอบค่าเอฟ (F-test) และการวิเคราะห์การถดถอยแบบพหุคูณ (Multiple Regression Analysis)

ผลการวิจัยพบว่า ปัจจัยด้านราคาเป็นปัจจัยที่มีอิทธิพลมากที่สุด (ค่าเฉลี่ย = 4.22, ส่วนเบี่ยงเบนมาตรฐาน = 0.87) ต่อการเลือกผู้ให้บริการโลจิสติกส์ด้านการขนส่งของผู้ประกอบการส่งออกอาหาร ปัจจัยด้านประสิทธิภาพโลจิสติกส์เป็นปัจจัยที่มีอิทธิพลในระดับรองลงมาเป็นลำดับสอง (4.20) และปัจจัยด้านการให้บริการลูกค้าเป็นปัจจัยที่มีอิทธิพลในลำดับสาม (4.17) โดยปัจจัยที่มีอิทธิพลในลำดับสุดท้ายคือปัจจัยลักษณะองค์กรผู้ให้บริการ (4.03) โดยผู้ประกอบการส่งออกอาหารในประเทศไทยให้ความสนใจกับการได้รับการรับรองคุณภาพของผู้ให้บริการด้านโลจิสติกส์ เช่น การได้รับการรับรอง ISO เพื่อความมั่นใจในคุณภาพของการให้บริการด้านการขนส่ง

คำสำคัญ: การจัดการโลจิสติกส์; ผู้ให้บริการด้านโลจิสติกส์; ผู้ประกอบการส่งออกอาหาร

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Introduction

With the expansion of Thailand food industry, the total food exports in 2016 had reached 972 billion baht which the increasing of 7.0 percent. In 2017, the food industry was likely improved. It was expected that the export value of the Thailand food industry would be US \$ 27.4 billion, 4% growth from the previous year. The expansion were included shrimp, chicken and canned pineapple (Kasikorn Research Center, 2017)

At present, Thailand food industry is expanding and competing strongly. The business sector seeks to find the good management practice to meet customer needs and cost less than competitors. The potential of entrepreneurs will be able to compete in the current market. The food export entrepreneurs are looking for the better ways to manage their processes to reduce costs and create customer satisfaction such as good service quality, product quality, and timely delivery to meet the customer need. Also need to consider in the distribution factor, freight rates as well (Kunthamon & Tharatorn, 2011)

The food industry in Thailand has been focused on logistics management in order to meet the customers need with efficiency and low cost services. Focus on the transportation system as it is the mostly logistics cost. The business focuses on the logistics management systems based on transportation activity. The transportation system is the best way to achieve their objectives in the higher competition, the ability on fast delivery is

important for business competition. Transportation is an activity that contributes to economic value, both time and place. The entrepreneurs that have good transport management will distribute the product properly according to the location, times and customers. This can be considered as the basis of the organization competitiveness.

Facing with the intense competition, transportation supplier evaluation and selection are of vital importance. As the pace of market globalization quickens, the number of potential suppliers and the number of factors to consider when selecting suppliers increases. Thai Food Exporters adaptation is required in selection of transport providers. The criteria of consider should be adjust and add to the selection process for choosing transport operators more than based on price only. The decision to choose a transport operator based on only price and lack of systematic selection cause to poor service quality, delay delivery and cannot meet customer requirement. Eventually, were no improvement, Thai food exporters will lose their competitiveness in the long run.

The research objectives

1) To analysis the affecting variables, including service quality, logistics performance, price and organization of selecting logistics service provider among Thailand food export entrepreneurs.

2) To explore the management guid-

ance of selecting logistics service provider among Thailand food export entrepreneurs.

Review of Literature

1. Logistics and Transports

1.1 Logistics is the concept of modern distribution. The Association of Supply Chain Management Professionals has defined the term as widely accepted today. Logistics management is a part of supply chain management. It has a streamlined planning process for delivering and managing both flow and reverse. Storage services and information are linked from the origin to the point of consumption with lowest cost and have to meet the consumer need. There are 13 activities in logistics management; forecasting customer needs, inventory management, communication, material management, order process, warehouse management, packaging plant and warehouse location selection purchasing raw materials logistics, reverse, transportation, parts and services support (Stock and Lambert, 2001)

Logistics is viewed as the systematically continuous process in supply chain modeling. This is the link between the flow and chain of logistics which the main activity is facilitating activities moving goods from origin to consumption point (Kamolchanok et al., 2004) including customer service, demand forecast, inventory management, communications, procurement, order processing, packaging, facility location and reverse logistics.

1.2 Transportation is part of the distribution system that is designed to balance supply and demand in every business. This is important in virtually every business. In the delivering activities the operators need to focus on transportation with low transport cost.

Transportation in Thailand consists of five transport modes including 1) Road Transportation it is the most abundant form of transportation. The advantages of road transport include the Door-to-Door Service or sending goods to the customer place. Both manufacturers and consumers are more comfortable than other forms of transportation. 2) Rail Transportation; it is a long way to travel Thai society. Rail transport products are usually shipped in bulk, such as rice, sugar, cement, coal, gas, and petroleum products. 3) Sea Transportation; it can also be sorted out inland water transportation. The waterway transport on the mainland is a transportation route through the canal or river. Major river transport routes of Thailand are Mekong River, Chao Phraya, Tha Chin, Pa Sak, Mae Klong and Bang Pakong. Sea and ocean transportation means the water transport through the sea and ocean. Sea transportation is the most valuable international shipping. Almost all of Thailand's shipping is through two ports include PAT Port and Laem Chabang Port 4) Air Transportation; it is the fastest and easiest way to transport which has the most expensive unit cost and need to build a huge infrastructure. To support the whole air transport system, it also requires

road transportation on goods delivering to the customers at various destinations. 5) Pipeline Transportation; it is a unique transportation system because the transported goods must be in the liquid form and one-way transport from source to destination, no return trip. Pipeline transportation includes water, crude oil, petroleum products and natural gas (Kamolchanok, 2004).

2. Logistics Service Provider

Today, logistics service providers are an important part of running businesses in a wide range, such as retailing. The selecting of good logistics service providers will affect the efficiency of the service also create in highly competitive advantage environment.

Logistics service provider refers to the external service provider as a group of individuals or external operators. They have specialized expertise in any job that is capable of the entering role. The organization will conduct itself in a contractual manner in exchange for the fees or benefits receiving. The results of outsource external service providers will be better than the organization do by itself in terms of efficiency and effectiveness. In other words, allowing outsourced operators will take a less risk. Organizations will choose and carry out specific tasks that are more important and cost effective. Choosing an external provider involves dealing with the balance of time and money. In general, logistics providers are divided into 4 levels. (Gary R. Allen, 2001)

1. Logistics Service Provider: LSP or Asset

Based Logistics (2PL); it is the management of traditional logistics operations such as logistics transportation, warehousing, operational, infrastructure facilities. The main reason is reducing costs and investment in asset acquisition.

2. Third Party Logistics: 3PL/TPL or forwarding logistics or contract logistics is the activities undertaken by the logistics provider on behalf of the sender include at least management and operations services in the field of transportation and inventory management.

3. Lead Logistics Management: LLM is the evolutionary concept of logistics service # 3 for better service response to meet the customers need. It can handle more complex logistics than controlling and informing the supply chain, covering technology and business management.

4. Joint Operation Model: JOM; is the supply chain management risk diversification in solution, deep improvement or technically advanced systems to support and develop the market. The success factor in this part is the information technology systems.

3. Logistics Performance

The logistics performance of the supplier is a crucial factor for the success or failure of any company. Rational and effective decision making in terms of the supplier selection process can help the organization to optimize cost and quality functions. The nature of supplier selection processes is generally complex, especially when the company has a large variety of products and

vendors. Over the years, several solutions and methods have emerged for addressing the supplier selection problem. Experience and studies have shown that there is no best way for evaluating and selecting a specific supplier process, but that it varies from one organization to another. The results of many studies indicate that the supplier selection problem as a multiple criteria decision problem. Quality, Delivery, Price, and Customer service are four significant the list of critical success factors for supplier selection. In addition, reliability and flexibility have begun to be considered in some industries (Cheraghi and et al., 2011).

4. Service Quality

Service Quality is a model in service marketing that can be applied well in targeting. Ziethaml, Parasuraman & Berry (1993) model of SERVQUA identifies key areas or dimensions of service quality in five areas.

4.1 Reliability

Reliable trust means customers feeling. This dimension of service has been accurate, accurate, not wrong, and on time.

4.2 Assurance

Confidence means customers feel confident. This assurance is based on the knowledge and professionalism of the service provider that gives the customer confidence in services.

4.3 Tangibles

The concrete of service means the customer has seen the availability of tools

and components. This dimension relates to the subject matter. All equipment that the customer can see such as uniform and service personality.

4.4 Empathy

Care means the customer feels that the service is attentive to this dimension is “to please him to care for us”, paying attention to individual customers and attentive to the specific needs. Customers can register their names and services at any time, in accordance with their needs.

4.5 Responsiveness

Response means the customer feels satisfied. This dimension means never refuse a customer requests before attempting to meet the requirements including immediate customer response.

5. Price

The supplier selection in the purchasing literature and found that price, quality and delivery were the most commonly listed supplier evaluation dimensions (Worapon and Busaba, 2009). Practically, the price or service charge is a primary factor that was taken into consideration in the selecting carrier because it will be affected to the cost of product. Moreover, price or service rates are significantly correlated with performance and service quality. As a result, price cannot be neglected. For this study, a good price does not mean the lowest price but is the suitable price which is beneficial to either the shipper or carrier, while a shipper who may only concentrate on price, which may ruin the potential partnership with

the supplier. Thereby, it is important for both the seller and buyer to know price is not the only factor in the overall trading relationship. In the past research demonstrated that prices are flexible which can be influenced by many factors (Pooler et al., 2007).

6. Organization of service provider

For business management, choosing a suitable supplier is a crucial business process in many companies. A good supplier usually denotes lower risks and a higher profit. However, there are always various kinds of challenges when a company selects a supplier. To reduce the risk, business is trying to find a reliable service provider (Pooler et al., 2007). The method of determining each company is different in terms of the factors that will be used to evaluate but to reach the same goal is to get a good service provider. Selecting of logistics service provider depends on customer perception about LSP service quality

which consists of 5 components as follows: equipment, staff, environment, reliability and serviceability (Kodchakorn, 2010). From previous research, the reliability is very important for customers of service provider. They need certification of work standard in international level such as ISO. Moreover, guarantee is essential to the customer.

Following the previous line of reasoning that service quality, logistics performance, price and organization of service provider are influencing to suppliers selection. However, the results of the previous study found that the criteria for selection of service providers was changed depend on each industry. The changing is a change of priority in duplicate factors (service quality, logistics performance, price and organization of service provider) and some specific factor will be selected add to the evaluation criteria of each industry. Therefore, the conceptual framework in this research is following:

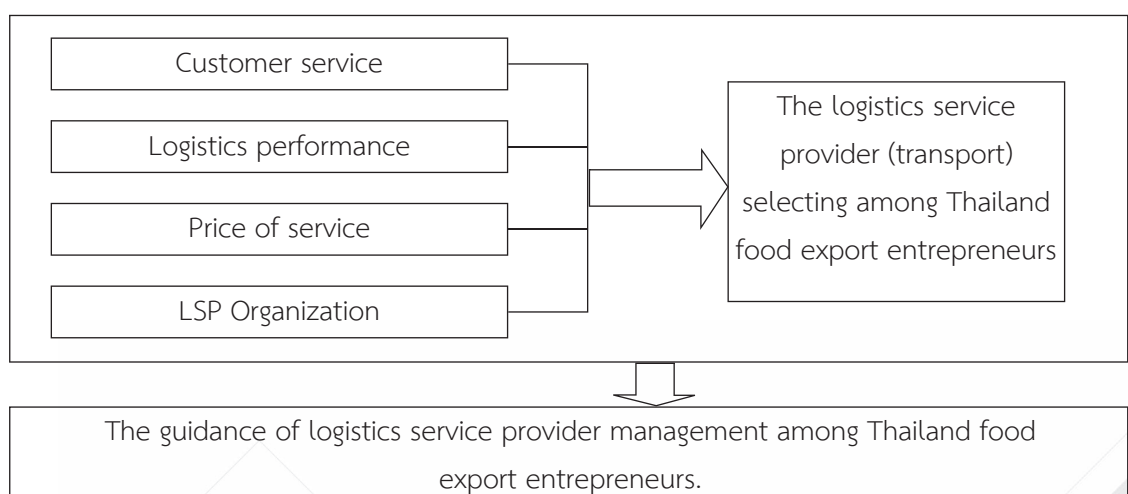


Figure 1 Research conceptual framework

According to figure 1 which shown the relations between independent variables including customer service, logistics performance, price of service and LSP organization and dependent variables is the logistics service provider (transport) selecting among Thailand food export entrepreneurs. The relations were analyzed and developed to the guidance of logistics service provider management. In this study, the research hypothesizes are as follows:

Hypothesis 1 Service quality affects the selecting of logistics service providers for transportation of food exporters.

Hypothesis 2 Logistics performance has affected the selecting of logistics providers for transportation of food exporters.

Hypothesis 3 Price affects the selecting of transportation logistics providers of foods exporters.

Hypothesis 4 The organization of service provider has influenced the selecting of transportation service providers of food exporters.

Methodology

A survey instrument was developed to collect data for this research. Previous literature was used to identify supplier selection criteria. For each criterion, respondents were asked to evaluate its important to their firm in supplier selection, using a 5 point likert scale (5 = very high importance, 1 = very low importance). A validity test of the survey instrument was conducted, using Item-Objective Congruency Index (IOC) techniques (Sireci, 1998), by academics supervisor and

industry experts. The IOC from the testing was 0.73. The measurement items were refined and improved by the application of the feedback. The reliability of responded questionnaires was tested by Cronbach's alpha (Giem, J. A., & Gliem, R. R., 2003) the alpha value from the testing was 0.76.

The sample group consisted of foods exporter which are member of the Thailand Frozen Foods Association. The population included 183 companies and 126 samples were selected by simple random sampling. The managers with purchasing/supplier selecting responsibility were contacted by e-mail and were requested to participate in the survey. A total 126 surveys were mailed and returned at three-week intervals.

Research Results

From the collection of 126 samples of food exporters in Thailand, using the questionnaire and descriptive statistical analyze. The study indicated that the most of the companies are limited companies 70.77% of the registered capital is from 1 to 50 million baht, accounting for 47.70% of the total 62 employees with the duration of 5 years operation.

Considering the factors that affect the selecting of logistics service providers in the transportation of export food manufacturers has showed in figure 1., the samples focus on the price factor to the first rank (4.22), logistics efficiency was the second rank (4.20) and the organizational characteristics was the last (4.03).

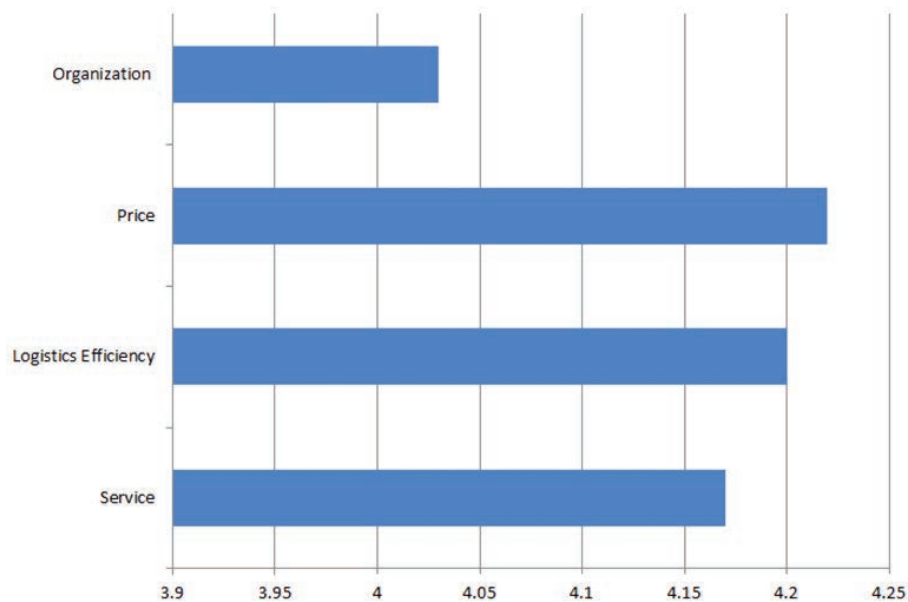


Figure 2 Mean score of factors effect to logistics service providers selecting

Research results are consistent with previous studies, most of these considered price was also important in this decision making (Ghodsypour & Brien, 2001). In addition, many researches on the supplier selection issues, service quality and logistics performance were identified as an important criterion in choosing a service provider. With a similar reason, these factors have a positive impact organization's performance (Cheraghi and et al., 2011, Worapon a& Busaba, 2009, Pooler et al., 2007). However, the organizational of service provider was analyzed by food

exporters in high important level. For this research, the organizational of service provider factor focus on the reliability of service provider company in customer view which it can be used to considering before dealing with service provider (Worapona & Busaba, 2009, Kodchakorn, 2010).

Taking into the questions, the top 10 questions consisted of 2 items in service factor, 3 items in logistics performance factor, 3 items in price factor and 2 items in organization factor.

Table 1

Overall 10 top ranking questionnaire score

Factors	Questionnaire details	Mean	SD
Price	Carriers have lower transportation costs than competitors.	4.50	.60

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Table 1*Overall 10 top ranking questionnaire score (continued)*

Factors	Questionnaire details	Mean	SD
Service quality	Carriers are provided with after-sales service.	4.42	.73
Logistics performance	The staff of the freight forwarder has service mind.	4.38	.67
Logistics performance	Carrier has a good tracking system.	4.38	.74
Price	Carriers are consistent in pricing.	4.30	.77
Organization	The shipping department has clearly separated the duties of each correct department.	4.27	.92
Organization	Carrier-certified freight forwarder such as ISO	4.26	.71
Service quality	Carriers offer chance to hear customer service ideas.	4.25	.67
Price	Carrier has a price that includes insurance.	4.22	.87
Logistics performance	Carriers have good information systems.	4.21	.77

From the details of the questionnaire, the firstly scoring is the price factor item which the means that the foods exporter was compared with the price of the service provider to finding a best choice and a reasonable price. Secondary, the exporter focused on after sale services which it's a part of service quality factor. Good after-sales service, it is important to build good relationships with customers and create good experience which will be affecting to repeat service.

The service mind of staff is necessary in customer's view because It will make the work is smoothly complete. Moreover, tracking system ranking was showed in highly score that reflected to the importance of fast growing technology. The export entrepreneurs also pay attention to the quality system certification of service providers such as ISO to ensure the

quality transportation services.

Implications for Supplier Selection

Several observations can be made regarding the relationship between price and its impact on supplier selection. The ability to meet customer needs, deemed to be the most important factors, correlates positively only with suitable price, while logistics performance and service quality has been a minor priority. Anyway, services provider cannot abandon any factor because the customer determine the importance of three factors (price, logistics performance, and service quality) in highly importance level. Therefore, the service providers must have to manage their company for competitive advantage in three dimensions. Strategic planning was deployed to create competitive advantage base on price factor,

logistics performance and service quality.

Base on this study result, food exporters does not compare logistics service provider in pure price term, but they compare price in term of weighted with logistics efficiency and service quality.

Discussion and Conclusions

The aims of this quantitative research is to analysis the affecting variables of selecting logistics service provider among Thailand food export entrepreneurs and explore the management guidance of selecting logistics service provider among Thailand food export entrepreneurs. The research is focus on four key factors including service, logistics efficiency, price and organization. The samples used in the research were 126 samples are members of the Thailand Frozen Foods Association. The result shown that, Thailand food exporter entrepreneurs are most concerned about price factors. This is consistent with the results of a recent study by Siriporn Punyapan, et al. (2011), Sak Kongsuwan and Chet Pattanalee Srisiri (2013) which the results showed that

price is an important factor of selecting logistics service providers. However, this research has reflected the interesting point, the lowest price are not significant for the exporter but the reasonable price when compared with logistics efficiency and service quality is mostly important. This is an important finding leading to the management guidance of supplier selection in a both exporter and service provider. In service provider perspective, the pricing competition is not only tool to meet the customer needs and attract customer decision making. Logistics performance and service quality must be given more attention by service providers to develop and maintain level of service according to customer requirement. For exporters, reasonable price is a mostly important. The elements of reasonable price will be finding to determine the approach for selecting a service provider. Suitable prices vary according to business type, period, and including business vision and policy. The effective of supplier selection affect to business efficiency and increase competitiveness.

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