# MARKET ORIENTATION AND LOGISTICS SERVICE PROCESS QUALITY: AN EMPIRICAL INVESTIGATION IN THE LOGISTICS SERVICE PROVIDERS IN THAILAND

## Krit Chaisaengduean

Graduate School, Suan Sunandha Rajabhat University, Bangkok, Thailand, E-Mail: krit.ch@ssru.ac.th

## **ABSTRACT**

This article is intended to study service characteristics of logistics service providers (LSPs) in Thailand concerning marketing environment. The first part of this article emphasizes theoretical review on market orientation and logistics service process quality that is essential to logistics service providers. Next, the study is on relationship between quality of logistics service process and level of market orientation of logistics service providers focusing on quality of logistics service process comprising of personnel contact quality, information quality, order accuracy and order procedure of logistics service providers in Thailand. An empirical research was conducted by the method of inferential statistics with 199 samples of logistics service providers in Thailand. The result of the research reveals that market orientation has a positive correlation with quality of logistic service process, personnel contact quality and order accuracy of logistics service providers with different level of market orientation in a statistically significant manner.

Keywords: Market orientation, Logistics Service Process Quality, Logistics Service Providers.

## INTRODUCTION

The logistics system development strategic plan of Thailand (2007-2011) edition 1 has objectives to improve competition ability of logistics service providers in Thailand to international level and build added value for logistics service business section of Thailand [1]. The logistics system development strategic plan of Thailand (2017-2021) edition 3 [2] has objectives to (1) determine strategic position for association among the countries in the sub-region, create commercial door and boost supply chain management (2) develop National Single Window system to a complete connection and revise the laws to support electronic business transactions and (3) develop standards of logistics profession and logistics personnel to an international standard level. From the evaluation reports after the actions of such strategic plans, it is discovered that logistics service providers in Thailand are fragmented causing the lack in term of integrated logistics service, lack of information technology, lack of international management class, difficult to access to funds, lack of marketing capability, lack of network abroad, lack of good management causing competition disadvantages with international logistics providers. The nature of service business of logistics service providers in Thailand in 2012 was no different from 2007 as shown in a study report of Department of Trade Negotiations that common problems of logistics service providers are that they lack marketing capability to develop service forms in complete cycle manner including transportation, collection and compiling and distribution of goods to customers in one-stop-service format and lack of development and clear communication concerning diverse service formats to target customers.

Market orientation is vital to a company to compete with the others in the globalized market [3]. Market orientation of organizations both in industrial factory sector and in service industrial sector enormously attracts technocrats and practitioners, not accidentally, because the study to apply the market orientation idea and determination of business sectors to continuously deliver excellent services to customers push a driving force to various organizations to efficiently develop both their marketing and management for their business success. In Thailand logistics service business sector, the success of Thai logistics service providers is essential to Thai logistics system development as well as is a main driving force to propel logistics service business sector, and in consequence, promote Thai economy. The efficient development of market orientation along with logistics service management of Thai logistics service providers shall be a key instrument to compete with the logistics service providers both locally and internationally.

Therefore, the researcher intends to study the relationship between market orientation level and logistics service process quality of logistics service providers in Thailand.

#### **OBJECTIVE**

To study the relationship between market orientation level and logistics service process quality of logistics service providers in Thailand.

## **METHODOLOGY**

#### Literature review

#### Market orientation

Marketing plays an important role to mainly manage and take charge in knowledge concerning customers especially in customer need data and customer experience to organization to create and deliver excellent services to customers, as a result, various organizations are compelled to build and maintain long-term relationship as well as perform as commitment with customers of good quality and regularly with added value and with innovations. Market orientation is an idea to bring into practice to achieve success and profit to organizations [4].

The meaning of market orientation is that it is business reactions to customer needs based on information data concerning customers' necessities rather than what businesses plan to act for customers. Some renowned marketing technocrats presented ideas of market orientation that market orientation is to determine necessities and needs of target markets and build satisfaction to target markets by the means of designs, communications, prices deliveries of goods and services and there are 5 main characteristics of market orientation that are customer oriented philosophy, integration of various organizations of market, market information data search, strategy and result orientation [5]. Although many marketing technocrats agree with this idea, Kohil and Jaworski gives definition of market orientation that market orientation comprises of behaviors of sellers of goods or services to build a capability of market intelligence generation, market intelligence dissemination and market responsiveness [6]. The meaning of building a capability of market intelligence generation is not only customer's needs but also including government's rules and regulations, technologies, competition status and surrounding factors affected to organizations. Market intelligence dissemination is to communicate and pass on market intelligence to every sector of the organization formally and informally. Finally, market responsiveness is the practices to respond to market intelligence created and disseminated to every sector of the organization and pass on to customers of the organization.

Another concept of Narver and Slater [7] is that market orientation is customer orientation, competitor orientation and inter-functional coordination. Ruekert [8] concept is that market orientation of a business unit in a company is a serious marketing operation to obtain and apply customers' information data to develop business strategies in accordance with main customers' needs as well as apply those strategies to customers. Shapiro [9] is that market orientation of a company is to disseminate all information data of main customers to all departments in a company and strategic and tactical decisions are to mutually made by various departments with different function and those decision makings are impliedly to be mutually performed. Although most of technocrats accept the importance of market orientation, but some of them believe the concept of market orientation is not sufficient to strengthen an organization's capability. What will an organization respond to those needs if they know those needs but they lack real operational capability and skills.

# **Logistics Service Process Quality**

To exactly clarify logistics service process quality is not easy because service quality measurement needs many combined measurement methods to quantify service quality of service providers. Service quality measurement is different from product quality measurement which is concretely countable such as product durability, amount of defects but service quality measurement has different special characteristics relying on nature of the service.

Logistics service business has logistics service providers to play as a key role to develop logistics system of the country. To assess logistics service providers by logistics service customers is to mainly rely on customer's satisfaction. Logistics service customer's satisfaction comprises of service operational quality, the skill of punctual delivery management- fast and without delay, sufficient competent service management skill, quality of service personnel, quality of service-minded personnel, capability of problem understanding and solving of customer coordinated personnel, management expertise of personnel, technical service quality of physical quality of the resources used in technical service, quality of information data and faultless electronic communication.

Mentzer, Flint, and Hult [10] developed a model to measure logistics service quality: LSQ with variables comprising of quality of personnel contact quality, order release quantities, information quality, order procedures, order accuracy, order condition, discrepancy handing and timelines, later, Bienstock, Royne, Sherrell, and Stafford [11] classifies the variables of logistics service quality in 2 parts, the first part: logistics service process quality comprising of variable of personnel contact quality, information quality, order procedures, order accuracy and second part: logistics service outcome quality comprising of variable of order condition, order quality, discrepancy handing and timelines. In conclusion, logistics service process quality is a measurement of service potential of logistics service providers [12].

In the researcher's opinion, to enhance potential of logistics service providers in Thailand, it is required to study both in marketing concept and capability/skill of logistics service providers in Thailand. Marketing orientation study is the study of marketing concept to seek for marketing concept and understanding and the study of logistics service process quality of logistics service providers is the study of capability of services, capability of personnel, information data, capability of problem solving and readiness of action process.

#### Sample

The researcher selected research populations from management in the field of marketing, logistics operation and executives in charge of logistics of logistics service providers in Thailand selected from the list of Office of Service and Logistics Service, Department of International Trade Promotion, Ministry of Commerce at the amount of 484 companies. The researcher took 220 samples with simple random sampling method and the researcher delivered the questionnaire to the samples by mail letters as well as electronic letters then the samples might return the questionnaire by mail letter or by internet and the researcher followed up the questionnaire twice by electronic mail and once by phone. The researcher received the return of questionnaire at 199 samples or 90.45 %.

#### Material

The researcher designs a questionnaire as instrument to do the research in 3 parts, the first part: general information of the respondents, part 2: questions the researcher adapted from the ones of Kohli, Jaworski, and Kumar [13] at the amount of 18 questions asking about market orientation behavior of the respondents' organization using Likert scale. The questionnaire asks for degree of agreement in 1= extremely disagree 5= extremely agree and part 3: the questions the researcher adapted from the ones of Bienstock et al. [11] at the amount of 13 questions asking their opinion about logistics service process quality in term of service personnel, information quality, problem solving capability and sales order reception process. Upon completion of the questionnaire development, it was verified by experts and a pilot test was performed with 30 logistics service providers and the result of which is that it could be launched with the logistics service providers in Thailand.

The data were analyzed by using SPSS 18.0 statistical program and AMOS, reliability correlational analyses and cluster analysis were utilized in order to partitioning, evaluate the relation between the variables.

## Hypotheses

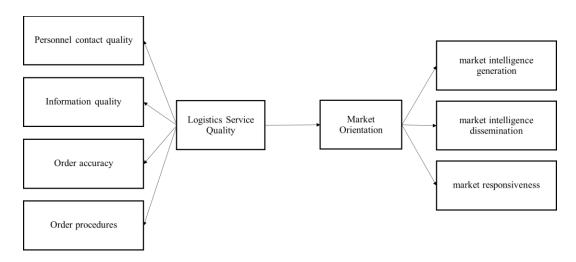
Hypotheses 1: Personnel contact quality of logistics service providers with high market orientation differs from personnel contact quality of logistics service providers with low market orientation.

Hypotheses 2: Information quality of logistics service providers who with market orientation differs from information quality of logistics service providers with low market orientation.

Hypotheses 3: Order accuracy of logistics service providers with high market orientation differs from order accuracy of logistics service providers with low market orientation.

Hypotheses 4: Order procedures of logistics service providers with high market orientation differs from order procedures of logistics service providers with low market orientation.

Figure 1 The Theoretical model



#### **RESULTS**

The result of reliability test of the research instrument of market orientation variable factors has Cronbach's alpha coefficient ( $\alpha$ ) value equals to 0.89 that are (1) market intelligence generation has Cronbach's alpha coefficient (a) value equals to 0.83 (2) market intelligence dissemination has Cronbach's alpha coefficient (a) value equals to 0.74 From Table 1, confirmation factor analysis of market orientation variables has a proper reliable index, GFI=0.93 AGFI=0.91 CFI=0.99 RMR=0.04 and RMSEA=0.04, Pearson correlations between market orientation and standard variation of logistics service process of logistics service providers in Thailand the variables have a positive correlation between each other From Table 2.

Table 1 Reliability value of market orientation measurement

Market Orientation variable	Mean	S.D.	Item-Total	Alpha if Item
			Correlation	Deleted
Market intelligence generation has alpha v	value = 0.83			
MO1	4.16	.86	.60	.80
MO2	4.08	.88	.62	.80
MO3	4.22	.81	.70	.78
MO4	3.85	.89	.64	.79
MO5	2.74	.99	.42	.84
MO6	4.00	.82	.67	.79
Market intelligence dissemination has alpl	ha value = 0.78			
MO7	3.47	.98	.54	.74
MO8	3.50	.96	.61	.72
MO9	3.74	.94	.67	.70
MO10	3.93	.88	.61	.72
MO11	3.94	.98	.36	.80
Market responsiveness has alpha value = 0	0.74			
MO14	3.97	.77	.63	.64
MO15	3.28	.93	.40	.77
MO16	4.42	.73	.57	.67
MO18	3.97	.95	.58	.66

Remark: MO = Market Orientation

The researcher analyzed and divided groups of market orientation level of logistics service providers in Thailand into 2 groups using K-Means clustering technique to divide market orientation level to, group 1: high market orientation (High MO) and group 2: low market orientation (Low MO) and from the analysis it was discovered that group 1 has average market orientation behavior = 4.17 with 124 samples, group 2 has average market orientation behavior = 3.23 with 75 samples. The researcher performed a test of the hypothesis of the research and discovered that the research result supporting Hypothesis 1 and 3 that are: personnel quality of Thai logistics service providers with high market orientation differs from personnel quality of Thai logistics service providers with low market orientation in statistically significant level at 0.001 and capability of problem solving of Thai logistics service providers with high market orientation differs from personnel quality of Thai logistics service providers with low market orientation, in addition, the research result supports Hypothesis 2 and 4. From Table 3.

Table 2 Coefficient value between market orientation and logistics service process quality

Logistics service process quality measurement	Pearson's correlation coefficient	P-value
Personnel contact quality	.537	.000
Information quality	.568	.000
Order accuracy	.609	.000
Order procedure	.616	.000

Table 3 Logistics Service Process Quality classified by market orientation level

Quality measurement of logistics service process quality	High MO (n=124)	Low MO (n=75)
Quality of service personnel	4.39	3.75***
Quality of information data	4.06	3.43 ns
Quality of problem solving	3.90	3.18***
Sales order reception process	4.15	3.48 <sup>ns</sup>

<sup>\*\*\*</sup> P-value < .001, ns = non significant

## CONCLUSION AND FUTURE WORK

This research reveals reliable and accurate market orientation measurement suitable to measure the degree of market orientation of logistics service providers in Thailand. Besides, the research reveals confidence of the factors of latent variable of market orientation with confirmatory factor analysis to verify the structure of the relationship between scale variable and latent variable of market orientation derived from the aforesaid literature review.

The interesting research result reveals the factors of market intelligence generation, market intelligence dissemination and market responsiveness are key elements of market orientation factor and affects to logistics service process quality of logistics service providers in Thailand. Furthermore, the research reveals that market orientation correlates with personnel contact quality, information quality, order accuracy and order procedure. Furthermore, the researcher analyzed relationship between level of market orientation of logistics service providers in Thailand and Thai logistics service process quality and the result of the hypothesis test revealed that quality of logistics service providers in Thailand with different degree of market orientation yielded a different result of quality that is to say that logistics service providers with high level of market orientation have high quality of personnel contact. Order accuracy of logistics service providers in Thailand with different degree of market orientation yielded a different result of quality that is to say that logistics service providers with high level of market orientation have a high capability of problem solving accordingly in a statistically significant manner.

Anyway, information quality and order procedure yield no different result between logistics service providers with different level of market orientation behavior.

In conclusion, the research result indicates that level of market orientation behavior of logistics service providers affects personnel contact quality and order accuracy therefore logistics service providers should pay attention to enhance ability of market intelligence generation and market intelligence dissemination inside the organization, both in organization and individual level. In consequence, that will be a quality development of logistics service process of logistics service providers in Thailand for ability to produce diversified models of service matching with customers' needs and, simultaneously, that will continuously develop a good quality of service management causing competition advantages in both at the same level and internationally.

The research result shows importance of human resource development affecting to service of logistics service providers. If logistics service providers have a drive to develop quality of service, it is essential to develop human resource's capability in term of operational competency, customer's need understanding, fast and on-time problem solving.

Next, researcher would to study on internal market orientation of Logistics Service Providers in Thailand.

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### REFERENCES

- [1] Office of the National Economic and Social Development Board: NESDB (2007), URL: http://www.nesdb.go.th/nesdb\_en/ewt\_dl\_link.php?nid=4220&filename=logistics\_development.
- [2] \_ (2017),URL:http://www.nesdb.go.th/download/document/logistic/plan3.pdf
- [3] Ramayah, T., Samat, N., & May-Chiun, L. (2011). Market orientation, service quality and organizational performance in service organizations in Malaysia. Asia-Pacific Journal of Business Administration, Vol. 3, No. 1, Pp. 8-27.
- [4] Kaynaka, E., & Kara, A. (2004). Market orientation and organizational performance: A comparison of industrial versus consumer companies in mainland China using market orientation scale (MARKOR). Industrial Marketing Management, Vol. 33, Pp. 743–753.
- [5] Kotler, P. (2003). Marketing Management, Pearson Education (11th ed.)., Upper Saddle River, New Jersey: Prentice Hall, Pp. 17-27.
- [6] Kohil, A. K., & Jaworski, B. J. (1990). Market orientation: The construct, research propositions, and managerial implications. *Journal of Marketing*, Vol. 54, No. April, Pp.1-18.
- [7] Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal* of Marketing, Vol. 54, No. 4, Pp. 20-36.
- [8] Ruekert, W. R. (1992). Developing a market orientation: An organizational strategy perspective. International Journal of Research in Marketing, Vol. 9, No. 3, Pp. 225-245.
- [9] Shapiro B.P. What the hell is market oriented. Harvard Business Review 1988; Vol. 66, Pp.119-125.
- [10] Mentzer, J. T., Flint, D. J., & Hult, G. T. M. (2001). Logistics service quality as a segment-customized process. Journal of Marketing, Vol. 65, No. October, Pp. 82-104.
- [11] Bienstock, C. C., Royne, M. B., Sherrell, D., & Stafford, T. F. (2008). An expanded model of logistics service quality: Incorporating logistics information technology. International Journal of Production Economics, Vol. 113, Pp. 205-222.
- [12] Krit Chaisaengduean, Somdech Rungsrisawat & Bundit Pungnirund (2014), Market Orientation and Quality of Logistic Service Process Effect on Performance of Logistic Service Provider, Thailand, Academic Journal: Uttaradit Rajabhat University, Vol. 9, No. 1, Pp. 267-278.
- [13] Kohli, A. K., Jaworski, B. J., & Kumar, A. (1993). MARKOR: A measure of market orientation. Journal of Marketing Research, Vol. 30, No. 4, Pp. 467-477.