

# CHAPTER 1

## INTRODUCTION

### 1.1 Background of the Study

Global economics pressure with a high competition required business firms for searching more competitive advantage. Most edges of competitiveness in research were several studies on developing strategic theories. The myth of competitiveness and sustainability are in the middle of somewhere in between the subjective and objectiveness.

Changing in business transactions based more online with several of marketing channels. Strategies were changed in contextual eases of use and into fast speeds. Business units are applying their practices through the self-appraisal for best practice. However, there is a question on how to evaluate the self-assessment with the competitive level, as well as how to measure the comparison to its competitors. In political science, the sleeping giant awakens, China, India, and all fellow travelers managed their government policies and economic reforms speedily. All European countries gathered into a Union (EU). The World economics shift supply chain and logistics demanded a better management, better firm's competitiveness for better performance in the high competition market (the Office of Trade Logistics, Department of Export Promotion: DEP, 2012, p. 109).

Follow the EU. Southeast Asia integrated all Asian countries into ASEAN Economic Community: AEC (DEP, 2012, p. 112). Such changing led to unforeseen agenda, either freedom of investment, new alien's establishing free-trade areas, and communities in connections. Bigger market with many players required for the high competitiveness in both products and services.

Logistics and transport provider is also a mediator, one of the key drivers in the role of supply chain delivery in supply processes. From the upstream, raw material and process with the low-cost inquired with the high performance efficiency. However, with only a single driver is unable to produce out any systematic studies, the ability in service where the monetary subjects had been omitted. The operating service at the middle stream reflected service performs to the downstream as an outcome output.

Competency of logistics in supply chain studies seemed emphasized more on manufacturers and productions than service. In physical distribution, there were about service speed solutions, distribution and warehouse management, routing and delivery performance. While the Third Party Logistics: 3PL, as a logistics service provider with the ability on own businesses and competitiveness compared to other service operators were ignored. A Thousand pieces of literature in this service sector offered practitioners only for Key Performance Index: KPI and service assessment which broadly works for the hotel, banking, education, and healthcare business. (Pauline, et al., 2014; Zwickle, et al., 2014; Horhota, et al., 2014; Goby & Nikerson,

2014; White-Farnham & Gardner, 2014). Observation on many papers, most were found the related Supply chain performance measurement in Logistics studies were in forms of Key Performance Index: KPI; Balance Scorecard: BSC, SCOR model, supplier selection criterion.

The measuring tools were Key Performance Index: KPI with service attributes only in service operations. Nevertheless, the most important in between the problems and issues are service is perishable product. Once some provider had made a mistake or a delay in delivery, it could effect to the willingness of client's repurchasing from the buyers.

This gap showed that there were no any indicators fitted well in previous study, on the ability, capability assessment for a logistics provider company. The competency measuring tools most were built only as a guideline for the competence standard. Moreover, the ability in marginal profit was set aside. In Thailand, many of them were trying to trace for company's annual gross profit with the fact that it was inaccessible from all participants.

In real practice, there were no and less in participation when the survey wants to learn for the business units' annual net income from the respondent, unless they are a public company which all profit performance, gross sales amount and operating expenses well advertised in the stock exchange publication's site.

Hence, this thesis creates the new area of study proposed with a cognitive conceptual framework for both in non-financial terms and measurable competitiveness. Theoretical reviews with constructed serviceability attribute called to start this research. The holistic model contributed to achieve the research questions and objectives were well described by the analyzed results as the outcome of this research study.

## **1.2 Significant of the Study**

Several entire research and most availed tools in existing studies for the performance measurements were hard to achieve. Many approaches recommended their survey designs under considerations of annual profit, gross sales amount, or the measured assets-base, asset-allocation utilization. Some were the defect unit in production and delivery. Nevertheless, the entire standard whether Key Performance Index: KPI (heterogeneous) instead of the ability testing on competitiveness comparison with other competitors (homogeneous). Hence, today the best tool would be Logistics Performance Index: LPI as a performance measuring tool in global view (the World Bank, 2016). A stand-alone tool for country indicator for performing logistics and supply chain offers overall scores, and does not means for self-evaluation to each business unit.

This research leads to weigh for the Serviceability which the strategic sourcing related to the quality of service in logistics transport business. The study will enrich for supply chain success and best practice towards logistics business competitiveness. The ability in competitiveness gains was the most essential key and highlight to conduct a survey for the study.

The research study aimed to investigate the competitiveness of service providers in three nations (Thailand, Vietnam, and China) in order to investigate for generalities of the model.

Initiative from other studies, the reviews started at upstream, and the input process began from the strategic sourcing (insourcing and outsourcing) for the selected techniques, decision on supplier selection and dependency with dominant power in relationship. At the middle stream, the modified service quality through service performance influenced the service level. A new research study with new measuring factors and level of variables' degree in relationship lead to competitiveness was the main goal and the most interest of this study.

### **1.3 Research Questions**

1. What are keys driven for the international transport logistics service provider's competitiveness?
2. Which variables are the direct effects and indirect factors influencing the service level?
3. Does the model is being applicable for logistics service providers in any other countries? (Case study: logistics service providers in Thailand, Vietnam, and China).

### **1.4 Research objectives:**

1. To find the most significant factors producing the highest impact on the degree of service level's competitiveness in the international logistics business.
2. To investigate the direct effects and indirect effects of variables impacts the logistics service providers' competitiveness in Thailand, Vietnam, and China.
3. To develop a causal model and investigate the generality of the model by invariance model test (case study: Thailand, Vietnam, and China).

### **1.5 Research scopes and limitations:**

**Countries:** Research studied on only purposive selected from three countries in AEC Thailand, Vietnam, and China. As a geographical constraint, the study ignored Singapore and Malaysia with a reason that both of them are transshipment hubs and operated as carriers' connection. The differences between infrastructure bases, mega investments, and functional processes as a cross-docking distinguish the general pier activities.

Lao PDR is the landlocked country. Cambodian is still in developing logistics infrastructure on roads and highways. Therefore, the study will not be included all the said countries which a constraint in comparison without bias on measuring performance.

Thailand as a member of ASEAN (Association of Southeast Asian Nations) operated three main marine ports which were: Bangkok port, Leam Chabang and ICD Ladkrabang as an inland port. Among AEC members (THAI-AEC, 2015) Vietnam is also a member who is having three major ports: Hochiminh, Haiphong and Hanoi and most closed to Thailand (where Ladkrabang and Hanoi were inland ports for maritime service). Therefore, Viet Nam could be the best country in marine service comparison with Thailand. However, China as the biggest player with the greatest volume of export/import activities and numbers of service providers will be the best sample in benchmarking.

By the way, under LPI score (see World Bank's LPI in appendix B) the LPI factor scores of International shipment over 3.00 within 55 countries rank, it showed that the most nearby Thailand and in South East Asia countries were Vietnam and China. Hence, the limitation of this survey research was made only in these said three countries: Thailand, Vietnam, and China.

## 1.6 Definitions

<b>3 PL</b>	Third Party Logistics (LSP: Logistics Service Provider, Freight Brokers)
<b>4 PL</b>	Fourth Party Logistics (integrated more in I.T. system or network application control with customers than 3PL at shipper's premises site)
<b>Co-load</b>	Outsourcing for cost and service giving by other operators to operate
<b>Consolidation</b>	Full containers loaded gather all LCL (partial) shipments as own make.
<b>Dominant Power</b>	Dependence and Relationship commitment (Baofeng Huo et al., 2015), included the Organization Theme (Managerial), Corporate Theme (Middle); Function Operation Theme (Staff) Lysons and Farrington (2006). David, Philip & Edith (2009) refer to Collaboration of firm (Policy); Operational performance (Price); Relation with trading partner (People).
<b>Flexibility</b>	Service level by flexible time and lot Size (Pisoot & Pasawat, 2015).
<b>Freight Supplier</b>	The logistics provider who sells the freight rates cost (the first tier supplier acts as master consolidator or second and third tier as co-loaders)
<b>Invariance</b>	The model or a parameter of the model will not be variance when apply in other samples of the study.
<b>LCL</b>	Less than a Container Loaded, charge per unit of measurement or tonnage
<b>Local Charges</b>	Other related charges in port terminal (such as lift on-off, storage, equipment, papers, forms and permits for import or exports)
<b>MoB</b>	Make or Buy decisions (Canez, Platts and Probert, 2000). (Make means by arrange own consolidation service; Buy means outsource to co-loader).
<b>Service Agreement</b>	Service agreed on outsourcing performance (Handfield et al., 2009)
<b>Service Level</b>	Cost, mean delivery time and delivery time valiance (Cooper, 2007).
<b>Service Perform</b>	assessment of business benefit delivered (Canez, Platts and Probert, 2000).

<b>Sourcing Technique</b>	A purchasing method in single & multiple sources (Bailey et al, 2005).
<b>SPU model</b>	Service 5Rs dimensions on performance: Reliability, Rate, Resources, Risk avoidance, Responsiveness (Pisoot, 2013a).
<b>TCO</b>	Total Cost of Ownership: purchasing cost to salvage value (Ellram, 1994, Buffa, 2007)
<b>T/T</b>	Transit Time; Lay can or Lead time (Leenders et al., 2002)

### 1.7 Research study value

This survey research was expected to investigate variable affects the quality and service level competitiveness, with the direction of the variables' relationship, the level of degrees that affects service competitiveness among service providers in three selected countries. The study provided invariance test for generalities of the model in case future apply for JV or other countries study.

### 1.8 Research Contribution

**Academicians:** This study integrated non-financial terms under a cognitive design, purify the elements rational with factors to draw out as a holistic framework for logistics transport competency. Advices were given by the academicians and experts in supply chain and transport logistics. A process based was extended the research study for the firm's competitiveness and re-design.

**Practitioners:** Mythical self-appraisals for any organizations. Designed variables construct for generality and friendly in adaptation. In measuring 3PL with service performance, leading companies were required to investigate the effects factor concerned firm's competitive service level.

**Professionals:** The study focuses on the causal relationships of leading factor. A new solution for service performance facets enlightened for qualification assurance. This pilot study well rational designed and variables proof by various experts as professionals in logistics transport field. Consciousness to parliament's policy in export-import and AEC facilitated issues lead this study to offered organizational competency and competitive measurement. Outcome reported into both aspect points of views (capable in serviceability and competitiveness).

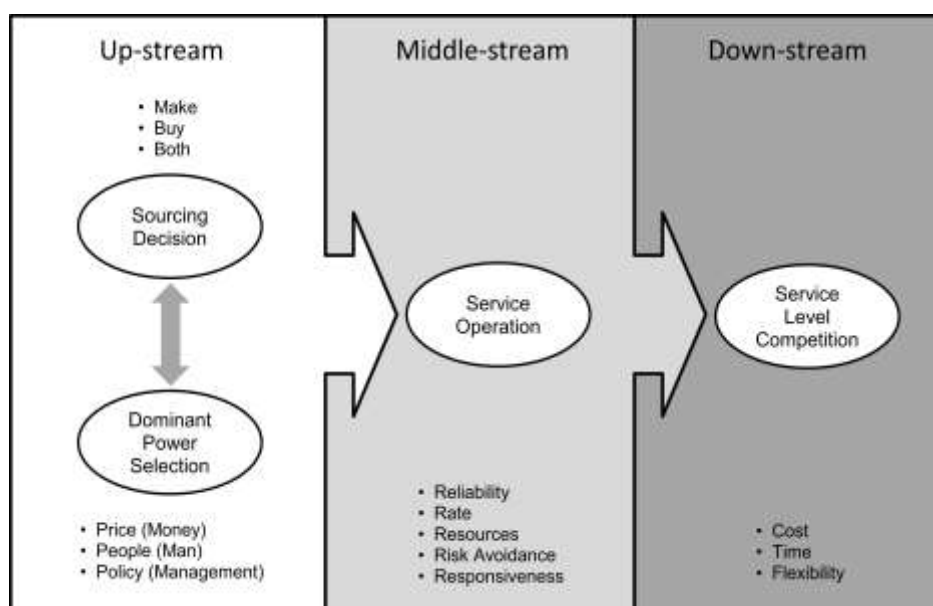
**Researchers:** The study provided syntheses attribute, rational construct factors directly related and concise to focus on sea logistics service providers. Research designed by mixed methods (qualitative by interview experts) and quantitative (measured model). Quality in servicing as a "Subjective value" was interpreted into quantitative data as statistical analysis.

This robust model suits to all transport firms in adaptation for service performance assessment and generality of the model for implementation in any other fields or transportation modes. The proof was done as an invariance model test.

Academicians and professionals purified the model with high reliability of alpha. This worth added as a new area of research and gap filling on the entire literature of in physical distribution and logistics transport fields that model endorsed by the key executives.

### 1.9 Conceptual Framework for Competitiveness

This research study designed the conceptual framework with four latent to purify the model of serviceability competitiveness. Competition on service level in three countries may value worth for understanding the competitive service level's variables and effects.



**Figure 1.1** Conceptual Frameworks for Serviceability (Pisoot, 2013a)

Competitive service level was developing on serviceability from the past work of Pisoot (2013a).