

Impact of Guanxi on Logistics Performance in Thailand: A Proposed Method

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Abstract. Modern manufacturing logistics practices such as supplier management, inventory control, distribution management, order processing and forecasting have significantly affected the management of business activities. Collaborative relationships between members of upstream and downstream channels have received considerable attentions in obtaining strategic advantages in the current competitive environments. Along with the current innovative practices such as Industrial 4.0, a considerable shifts of modern business management have been witnessed, which business entities acts no longer as solely autonomous individual. The term ‘Guanxi’ has been deeply rooted in the Chinese Confusions study, which are used to describe the interpersonal connection with a broad social and cultural construct. The concept is deeply embedded in the mind-set of most Asian people and in every aspect of their personal and organizational interactions. The purpose of this research is to propose an evaluation model to investigate the impact ‘Guanxi’ on Logistics Performance. A Structural Equation Modeling (SEM) was developed and proposed to evaluate the impact on Logistics Performance based on the Logistics Performance Index (LPI) concept. The result of the model is aimed to indicate the level of impacts on ‘Guanxi’ on each individual performance indicators. This study is expected to contribute to both the ‘Guanxi’ and the logistics performance literature.

Keywords: Logistics Performance, Guanxi, Structural Equation Modeling, Manufacturer, Thailand

1. INTRODUCTION

One of the most known archetype transfer of modern business management is that individual businesses does not compete as a sole identity but rather as a complete supply chain (Williamson, 2010). Supply chain members are strategically weaved together to create value and to gain competitive advantages. For more than three decades, organizations have been focusing on developing close collaborations with supply chain partners through careful execution of relationships to proliferate business performances. Thus, relationships in between firms have a considerable impact on many areas of supply chain (Khan and Fasih, 2014).

Relationship is one of the most fundamental pillar or business performance that defined as a mutually oriented interaction in between two reciprocally committed persons (Sheth, et al, 2001). Moreover, the single most important ingredient for gaining competitive advantages may well be trusting relationships among partners’ capabilities and actions with positive interpersonal relationships which may lead to effective functional systems. Considerable attention has been

geared toward western literature that investigates the relationship marketing issues between organization established in western companies but few have examined the context of relationship in an Asian context. Doing business in Asian countries, i.e. China, are known for its difficulties and the key differences lie in between business practices of managing personal relationship, known as Guanxi. The term Guanxi has been deeply rooted in Chinese confusion study for centuries. Guanxi is a Chinese term used in defining the human relationship connections with a general social and cultural construct. In other Asian countries, Guanxi corresponds with kankei in Japan and Kwankye in Korea (Yen, et al. 2010).

The concept which is embedded in confusion social theory has become one of the most important building blocks in constituting the social structure of Chinese society (Chen and Tang, 2012). In term of business context, Guanxi contains the role of close friends, associates and a network of individuals to help with general business activities. Both Guanxi and relationship marketing has different procedure in developing relationships. Relationship marketing, found in

western literature, focus on business network rather than social network as found in Guanxi. The nature of network for relational marketing are universalistic rather than particularistic and the establishment of relationship are done by organization level rather than personal level in Guanxi (Geddie, et al. 2005). In order to achieve positive logistics performance, traditional measurement systems have been used to capture information ranging from manufacturing, distribution, warehousing, inventory management and administration. However, typical measurement problems that can be seen in previous research are: strategy and measurements are not connected, a biased focus on financial metrics, too many isolated and incompatible measures and problems in a supply chain context (Holmberg, 2000). Therefore, in this research, a subjective measure of logistics performance will be used. Nevertheless, by business nature, relationship motives possess a strong correlation with logistics performance (Chao, 2011).

2. LITERATURE REVIEW

2.1 Logistics Performance

The awareness of logistics performance has gained high momentum in logistics literature. The management of logistics activities has become a common way of maintaining competitive advantages and to enhance overall organizational performance. Therefore, it is critical to provide feedback on the implemented changes.

An extensive literature can be found in between logistics performance and business performance. According to Mentzer and Konrad (1991), the evaluation of performance is an important managerial function which allows organization to quantify actions and procedures to pursuit performance improvement. Since 2007, World Bank (2012) has developed the first measurement index to evaluate logistics performance of each country. The composition of the indices is: the capability of customs and border management clearance (custom), the infrastructure quality of trade and transport (infrastructure), the ease of preparation competitively priced shipment (ease of arranging shipment), the ability and quality of logistics services (quality of logistics service) and the frequency with which shipments pursue consignees within expected delivery times (timeliness). However, the comprehensive index has proposed challenges in portraying performances in Asian countries, i.e. Thailand. Therefore, a revised version of the index was proposed by Banomyong and Supatn (2011).

The revised indexes include the following logistics activities: customer service and support, demand forecasting and planning, purchasing and procurement, inventory

management, order processing and logistics communications, material handling and packaging, transportation, facilities site selection, warehousing and storage and return goods handling and reverse logistics. With all nine key logistics activities, each of them are measured in three dimensions, namely; cost, time and reliability.

Based on the nine logistics activities, 27 measurement items can be found in measuring a firm's logistics performances. For example, if a firm would like to measure the performance of its transport activities, the firm would have to gather its ratio of transportation cost per sale, average delivery cycle time and rate of delivery in full on time (DIFOT). However, according to the nature of the scale, the indices is more formative rather than reflective measure of the logistics performance. Furthermore, obtaining a complete measurement result of the items may pose challenges for academics or practitioners. In this paper, based on the logistics performance index proposed Banomyong and Supatn (2011), the author wishes to explore the possibilities of using the measurement dimensions of cost time and reliability as measurement constructs and the nine logistics activities as measurement items. It is to be noted that constructs used in this research are different in nature. According to the objective of this paper, the author intends to operationalize the measurement items into scales in measuring opinions (statement agreement and satisfactory) subjectively. It is hoped that the result will provide an insight of management practices in Asian or Asian-alike countries (Chao and Anantana, 2014).

2.2 Guanxi

For the past two centuries, the long standing history of China has shaped its social order which keep chaos at bay in Chinese culture. The term Guanxi is an ambiguous term that embeds Chinese philosophy of social structure and interaction (Chao and Anantana, 2014). In the Asian context, the term relationship is deeply embedded in mindset of most Asians, and in every aspect of their personal and organizational interactions. In Thailand, with a population estimated to include 14 percent Chinese and 30-40 percent of Chinese descent (CIA, 2012). Guanxi can be characterized by the bestowing and receiving of benefits of each other and it represents a catalyst to elevate customer satisfaction with established services. Guanxi plays a significant role in small and medium-sized companies, due to their limited economic influence, when comparing with larger firms. Owner of smaller firms' value Guanxi as their company asset. Other forms of relationship that can be find in the literature are relationship marketing.

Guanxi and relationship marketing has different procedure in developing relationships. Relationships in Guanxi

is unique in non-Western relational exchanges. In other hand, relationship marketing is commonly found in western-type relational exchange (Shaan, 2007). Relationship marketing is important for business in the context of business stability, however, in Asian or Asian-alike cultures, native practices influenced by particular forms of relationships and background of creating relationships with customers is highly implicate. Differences in between Guanxi and relationship marketing is shown in Table 1. In this research, Guanxi will be

operationalized rather than relationship marketing. One of the reason is that business relationship in Thailand tend to target more on the establishment of relative social relationship. Mutual exchange in Thai businesses are processed on an individual basis where economic incentives are taken into account along with business transactions.

Table 1: Differences in Between Guanxi and Relationship Marketing

Criteria	Differences	
	Guanxi	Relationship Marketing
Network type	Social Network	Business Network
Network nature	Paticularistic	Universalistic
Network level of working	Individual	Organizational
Relationship nature	Personal	Impersonal
Relationship established	By individual	By organization
Consequence of relationship	Personal relationship leads to transaction	Satisfactory transaction leads to relationship
Orientation	Tactical	Strategic
Exchange type	Favors and affection	Commercial and economic
Exchange partner's role expectations	Implicit	Explicit
Commitment type	Affective	Calculative
Relational behavior	Care and favors	Cooperation
Motive for reciprocal behavior	Face-saving	Mutuality
Promises type	Implicit	Explicit
Deadline for fulfilling promises	No deadlines	Well-defined deadlines
Customer position	Company and customer become one cooperative unit	Customer viewed as more of a subset than a partner
Measure of customer expectations and satisfaction	Complex to measure for most promises	Mostly measureable
Importance of trust development	Relatively more important in Guanxi than relationship marketing	Relatively less important in relationship marketing than Guanxi

Source: Adapted from Davies et al. (1995), Yau et al. (2000), Wang (2007) and Chao (2011).

To evaluate the quality of Guanxi, the three dimensions that portrays the construct are; Ganqing, Renqing and Xinren (Cheng and Tang, 2012). Ganqing is a Chinese term that can be translated into English as 'feeling'. This term indicates affection, sentiment and emotion. This demonstrates the level of emotional perception, networks and sharing of feeling of happiness and fear in between two people or organization. Renqing stands for favor in English context (Yen, et al. 2010). Exchange of present or gift with one another identified as social norm that one should follow to get along well with other people (Lu, et al. 2006). In another word, Renqing is a special interpersonal treatment, providing resources to another party as a 'gift' in the process of a market transaction, to strengthen

the links in between parties. Finally, Xinren, in English refers to trust. Trust, including commitment, is considered as a underlying building block of a relationship pattern and a trustable person is often regarded to have Xinren, which means one's ability to keep promise and obligation (Wang, 2007). Therefore, Xinren in the social interaction process in between two parties is very important in building mutual trust in between two parties.

The role of Guanxi in management practices are trending to engage managers to form informal collaboration with its suppliers or customers to achieve advantages or other economic benefits of its business performance. Generally,

Guanxi has been recognized as a major fundamental of the national culture of China. It can also become a benefit and a joint culture at the firm level as intimate relationship, which are widely dedicated used by the firm. According Yang (2011), Guanxi are considered as the initial stage in establishing a business in China.

Previous research has shown that Guanxi is one of the most extensive success factors which manipulate business in Chin, as a result of having the right Guanxi can bring many assets (Chao, 2011). Business Guanxi expresses the managers' network and social string with their suppliers, vendee, whole seller and competitors (Chung, 2011). From the view point of inter-organizational connection, Guanxi opens communication, establishes trust between partners, resolves channels conflict and ultimately bonds an interpersonal long-term relationship (Zhuang, et al. 2010). Regardless, in the western literature which portrays the negative side of Guanxi which may lead to unethical behavior, corruption and bribery that stem from the market economy. In this respect, Guanxi may also considered as a source of misbehavior connect with cronyism and nepotism that bring about under-the-table dealing or privileged treatment. Therefore, Guanxi can be a considerable benefit tools for network as long as follow legitimate personal or business affairs, whereas Guanxi would be corrupted in case of exchanging or transaction out of the law.

Guanxi can be characterized between favor-seeking Guanxi and rent-seeking Guanxi. Rent-seeking environment Guanxi appear to be the real source of corruption in Guanxi that institution norms signifying social collusion based on power exchange in China. However, favor-seeking environment Guanxi is reciprocal favor of resource in collectivistic society that em dramatically benefits (Su, et al. 2007). Guanxi practice is only identified as reasonable demands and reciprocal favor among interpersonal connection, long-term personal networks, and helping one and other (Smart and Hsu, 2013).

3. PROPOSED RESEARCH MODEL

Based on the literature review, a subsequent relationship in between Guanxi and logistics performance can be found. The author hypothesized that Guanxi is a multidimensional construct that can be associate with each dimensions of logistics performance index. The significant role of Guanxi connection can used to lower transaction costs related with uncertainties in the competitive environment. It is to be believed that the result of using Guanxi will lead to a higher profit or other economic benefits. The common belief of Guanxi among Asians or Asian-alike countries has exceeds the important of price or quality (Chao, 2011). Therefore, this research hypothesis that Guanxi would have a positive impact

on Cost dimension of the logistics performance index.

According to prior research, building a positive Guanxi relations when conducting businesses in China would endure benefits and competitive advantages (Shaan, et al. 2013). Positive Guanxi communication may assist organizations to obtain valuable knowledge and information in gaining a faster access to new potential markets. Therefore, in terms of logistics performance, a more flexible time period can be gained in conducting business transactions. Therefore, in this research, the researcher argues that Guanxi has a positive impact on Time dimension of the logistics performance index.

Further literature can be found that Guanxi can also be used in assisting customer orientation to achieve a higher level of customer satisfaction. This generally leads to building trust on performance level. In this regards, a positive Guanxi with associated partners is important for firms to utilize its resources to generate a reliable supply of goods and services. Therefore, in this research, Guanxi would direct a positive impact on Reliability dimension of the logistics performance. With the reviewed literature, the researcher would like to propose the research model, hereunder (Figure 1).

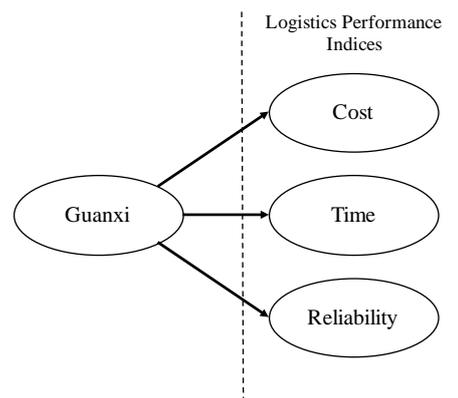


Figure 1: Proposed Research Model

In this study, a questionnaire survey will be used as the main empirical data collection method. A structural equation model (SEM) will be conducted in order to examine the casual effect in between each appointed constructs. According to Hair, et al. (2010), SEM approach is considered as one of the most appropriate multivariate analytical technique which allows researchers to estimate multiple and interrelated dependence relationships. SEM embraces unobserved concepts that are termed constructs, latent variables and factors thus allowing the researcher to handle large number of endogenous and exogenous variables, as well as latent (unobserved) variables as linear combination (weighted average) of the observed variables. In this research, an evaluation of the causal relationship among each constructs are suggested to validate

the measurement items and to rigorously test the relationships in between them in the form of a structured model.

In order to assess the output of the measurement model, a set of criteria was used to evaluate the model validity. According to Hair et al. (2010), report of χ^2 value and the associated degree of freedom with ratio of 3 to 1 ($\chi^2/df < 3$) is suggested with at least one absolute fit index and one incremental fit index. In this study, a combination of absolute fit indices was used (χ^2/df , GFI and RMSEA), along with CFI and TLI as the incremental fit index. As for scale reliability, CR, average variance extracted (AVE) and Cronbach's Alpha (α) were reported for measurement reliability. The rule of thumb for the threshold value of CR and α is .70 or higher (Byrne, 2001). However, if the research is on an exploratory phase, then value slightly below .70 would also be acceptable.

The output value of AVE should be equal or exceed .5 based on a reciprocal relationship to the measurement errors. If the measurement errors are low, then the value of AVE should be higher (Hair, et al. 2010). Based on the same criteria, convergent validity can also be tested. A good rule of thumb of convergent validity is that the standardised residual loading estimates need to be statistically significant and their estimates to be at least .5 or higher, preferably .6 or higher with composite reliability equal to or more than .7. In order to estimate the relative amount of convergent validity among items measured, AVE measures were used as the summary indicator of convergence, extracted from the mean variance of the items loading of a construct. If the AVE value is less than .5, then it indicates that on average, there are more errors in the items than the variance can explain (Schumacher and Lomax, 2004).

Furthermore, to assess the extent to which a particular construct is truly distinct from other constructs, discriminant validity was provided to show that the construct is unique and captures phenomena that other measures do not (Hair, et al. 2010). In this research discriminant validity is examined through every possible pair of latent variables within each construct. Farrell (2010) suggested that parameter estimates for two factors are to be constrained to 1.0 (constrained model) and compared with a freed parameter estimate (unconstrained model). With one drop in degrees of freedom, if the difference of a chi-square value exceeds 3.84, discriminant validity between the two factors is supported.

In terms of data collection, the researcher wishes to use questionnaire to gather at least 250 sets of data via online questionnaire. Online questionnaire platforms, such as Google Survey or Survey Monkey is two potential platforms. The respondent lists that this research is aimed to collect are companies registered in Thai Chamber of Commerce.

4. DISCUSSION

In this research, a model in measuring impact of Guanxi on logistics performance is proposed and developed. The measurement model developed in this research appears to adequately fit with the data that the research with to collect. The contribution that this research wishes to contribute is to evaluate the impact of Guanxi on a new perspective of logistics performance index, cost time and reliability construct. The hypothesized relationships in between Guanxi and logistics performance is geared to contribute the general logistics literature through converting conceptualized ideas into tested hypotheses.

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