

Supply Chain Management and Service Quality in Malaysian Hotel Industry

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Abstract

Studying supply chain management has been receiving numerous attentions. In the hospitality industry attempt have been made to study this concept, but more enquiries need to be conducted. Along with this objective, this study investigated the role of supply chain management practices in enhancing service quality in the hotel industry in Malaysia, which is a favorite destination nowadays. Analyzing 89 data from managers in hotel industry in Malaysia revealed that successful supply chain management practices would lead to higher service quality.

Keywords: Strategic purchasing, Communication, Suppliers' relationship, Service quality, Hotel industry.

1. Introduction:

During the past decades industries have been experiencing a tremendous and drastic change in the traditional way of purchasing and logistics functions. Supply chain management has been introduced as a strategic approach to manage purchasing materials and their distributions in an efficient way in order to enhance the level of productivity in a given organization. The concept of supply chain management has gained huge amount of interests from both theoretical researchers and practitioners since it is believed to have substantial impact on costs and quality in different industries (Zhang et al., 2009)

Arguments have been made on the influential role of supply chain management in organizations in changing and evolving modern business management practices (e.g. Fantazy et al., 2010). Handfield and Nicolas (1999) mentioned "supply chain management aims to integrate all key business activities through improved relationships at all level of the supply chain (internal operations, upstream supplier network, and downstream distribution channel) to achieve a competitive advantage". It could be inferred that supply chain management (SCM) practices not only bring efficiency and costs deductions, but also place a given firm in a competitive advantage edge.

While SCM literature is still experiencing theoretical and practical developments and different arguments are set forth, different concepts driven from SCM conceptualization has been introduced among which is strategic purchasing (SP). Fantazy et al. (2010) noted "Early understanding of the purchasing responsibility was limited to obtaining the materials, supplies, and services required to produce a product or provide a service" (p. 685). This traditional notion of purchasing function in organizations has been evolved to be a more strategic integration in higher level of organization that would enhance the performances in a given firm (Stanley and Wisner, 2001). It is believed that the role purchasing could play in enhancing firm performance has become very significant and crucial and it is able to impact strategic purchasing greatly that indicate the importance of SP in supply chain practices (Ellram and Carr, 1994, Cousins and Spekman, 2003, Carter and Narasimhan, 1996).

Based on the above introductory discussions, this study aims to investigate the role strategic purchasing (SP) plays in enhancing buyer-supplier relationship. This relationship have been empirically examined in different industries (Chen and Paulraj, 2004a, Paulraj and Chen, 2005), but service industries still lacks investigations on how SCM practices enhance the performance. This study therefore desires to empirically examine how SCM practices enhance service quality in Malaysian hotel industry.

2. Literature review and hypotheses development:

Following the influential five forces model proposed by Porter (1980), purchasing has been considered as an important strategy in organizations that impact the competitive advantages. Carr and Smeltzer (1997) defined strategic purchasing as "The process of planning, implementing, evaluating, and controlling strategic and operating purchasing decisions for directing all activities of the purchasing function toward opportunities consistent with the firms' capabilities to achieve its long-term goals".

Supply chain management (SCM), on the other hand, has gained numerous interests from both academicians and practitioners and shown to be a significant part of organizational success. Unlike the meaning

that the SCM term might convey, it does not only concern logistic or resource planning activities (Croom et al., 2000) and it comprises different issues from strategic concerns to relationship management with suppliers (Cox, 1997, Lamming, 1993, Sako, 1992). Attempts have been made to define supply chain management. Ellram (1991) defined it as “A network of firms interacting to deliver product or service to the end customers, linking flows from raw material supply to final delivery”. Harland (1996) describes supply chain management as “managing business activities and relationships (1) internally within an organization, (2) with immediate suppliers, (3) with first and second-tier suppliers and customers along the supply chain, and (4) with the entire supply chain. Tan, Kannan, and Handfield (1998) defined supply chain management as “Supply chain management encompasses materials/supply management from the supply of basic raw materials to final product (and possible recycling and re-use). Supply chain management focuses on how firms utilize their suppliers' processes, technology and capability to enhance competitive advantage. It is a management philosophy that extends traditional intra-enterprise activities by bringing trading partners together with the common goal of optimization and efficiency”.

Following the operational definition for both SP and SCM, the current study will be followed by explaining the variables included in this empirical investigation. The first variable is strategic purchasing, which discussed to be an important role in managing firm resources (Cousins and Spekman, 2003). These empirical examinations have found the link between SP and SCM (Chen et al., 2004)

The next variables in this study are based on what Fantazy et al. (2010) suggested and examined for the hospitality industry, which are communication and suppliers' relationship. Effective communication is believed to be a significant indicator for a successful supply chain (Chen and Paulraj, 2004a, Krause et al., 1999). As discussed strong two-way communication between two parties lead to higher competitive advantage (Fantazy et al., 2010). Sharing critical information regarding the issues related to procurement would also lead to higher performance such as time, costs, and quality (Paulraj et al., 2008). Suppliers' relationship is also an important driver of better performance (Fantazy et al., 2010). Proper selection of suppliers and establishing close relationships with them would lead to higher customer satisfaction and better financial performance in organizations (Bensaou, 1999, Carr and Pearson, 1999, Stanley and Wisner, 2001).

The last variable in the current study is service quality (SQ). Service quality in the supply chain context is defined as “the difference between the expectations and perceptions at each level within the supply chain and for the chain as a whole” (Seth et al., 2006). The relationship between strategic purchasing and service quality, and between supply chain management practices and service quality have been proposed and empirically supported (Stanley and Wisner, 2001).

Following the above discussions, the hypotheses for this study will now be developed for empirical examination later. The first two hypotheses are regarding the relationship between strategic purchasing and supply chain management practices (here communication and suppliers' relationship). Communication is believed to be a key to vitality in a partnership (Mohr and Spekman, 1996) and it could improve the confidence between partners (Anderson and Narus, 1990). Empirical examinations have established the positive and significant relationship between strategic purchasing and communication, and findings suggest that strategic purchasing would develop communication effectively (Cox, 1996, Fantazy et al., 2010, Paulraj and Chen, 2005, Paulraj et al., 2006). Both theoretical and empirical relationship between strategic purchasing and communication have been proposed and investigated (Chen et al., 2004, Spekman et al., 1995).

The second hypothesis in the current study is regarding the relationship between strategic purchasing and suppliers' relationships. Fantazy et al. (2010) believed that this relationship is based on the fact that cooperative and close relationship form the supply chain, which indicate the long-term ongoing relationship among firms involving in the supply chain process and sharing crucial information for the success of this relationship (Ellram and Hendrick, 1995). Both empirical and theoretical contributions support the notion that the relationship between strategic purchasing and suppliers' relationship is significant (Chen and Paulraj, 2004b, Paulraj and Chen, 2005).

Based on the above discussions the first two hypotheses are as follows:

H1: Strategic purchasing is positively and significantly related to the level of communication between the organizations in the supply chain.

H2: Strategic purchasing is positively and significantly related to the suppliers' relationship.

The next hypothesis in this study is regarding the relationship between strategic purchasing and service quality. This relationship has been suggested to be positive and significant (Stanley and Wisner, 2001). Strategic purchasing would lead to better service quality, which in turn would lead to higher customer satisfaction. In the hospitality industry, strategic purchasing has also been empirically investigated and findings suggest its significant and positive relationship with service quality (Fantazy et al., 2010). Therefore, the third hypothesis is as follow:

H3: Strategic purchasing is positively and significantly related to the customer service quality.

The next two hypotheses for this study concern the relationship of communication and suppliers' relationship with service quality. Service quality is an important factor in the firm financial and non-financial performance (Fantazy et al., 2010). On the other hand sharing and providing crucial information among sellers and buyers is believed to lead to higher quality services and better product designs (Carr and Pearson, 1999, Turnbull et al., 1992). Empirical results obtained suggest that the successful communication among sellers and buyers would result in higher service quality (Lengnick-Hall, 1998). In similar ways, the relationship between suppliers' relationship and service quality is significant. Empirical results showed that since service quality is very critical component in the service industries such as the one investigated in this study, suppliers' relationship is positively and significantly related to the higher level of service quality (Fantazy et al., 2010). Therefore, the last two hypotheses are as follows:

H4: Communication is positively and significantly related to customer service quality.

H5: Suppliers' relationship is positively and significantly related to customer service quality.

Figure 1 depicts the hypothetical model for this study.

"Insert Figure One Here"

3. Methodology:

3.1. Sample:

This study distributed survey questionnaire to collect the primary data to examine the above hypothetical model in the hotel industry in Malaysia. The samples were taken from hotels and motels in the city of Kuala Lumpur. Respondents included supply chain managers, purchasing managers, procurement managers, and general managers. The questionnaires were distributed in person and collected the following week. Total number of 200 questionnaires were distributed out of which 89 valid response received.

3.2. Measurement instruments:

Strategic purchasing measured using the questionnaire developed by Paulraj and Chen (2005) and Carr and Smeltzer (1997), which later validated for hospitality industry by Fantazy et al. (2010). 5 items used to measure strategic purchasing. Communication was measured using the questionnaire developed by Paulraj and Chen (2005) and Carr and Smeltzer (1997), which later validated for hospitality industry by Fantazy et al. (2010). 4 items used to measure communication. Suppliers' relationship was measured using 5 items questionnaire developed by Paulraj et al. (2008), which later validated for the hospitality by Fantazy et al. (2010). Service quality was measured using 6 items questionnaire developed by Akbaba (2006) and validated by Fantazy et al. (2010). All of the measurement instruments were based on the 7-point Likert Scale.

3.3. Reliability and validity:

All of the measurement instruments included in this study proved to be reliable since the Cronbach's Alpha for all of them were above the acceptable level suggested (Nunnally, 1978). In order to establish the validity of the instruments used in this study Confirmatory Factor Analysis (CFA) was performed and results indicate satisfactory validity. The following table (table 1) presents the results for the validity analysis.

"Insert Table One Here"

4. Results:

The following table (table 2) shows the correlational analysis for the variable included in this study. As shown all variables reached the significance level of $p < 0.01$

"Insert Table Two Here"

In order to examine the proposed hypotheses Structural Equation Modeling (SEM) using AMOS 18.0 was developed. The following figure (figure 2) shows the Standardized Regression Weights for the proposed directions.

"Insert Figure Two Here"

Table 3 below presents the results for the hypothetical framework along with critical ratios and the status of the hypothesis tested.

"Insert Table Three Here"

As shown all the hypotheses were supported. Strategic purchasing was found to be positively and significantly related to communication, suppliers' relationship, and service quality. Results proved that both communication and suppliers' relationship are positively and significantly related to service quality.

5. Discussions and Conclusions:

This study set out to target the issue of supply chain management in the hotel industry in Malaysia. To the extent of our knowledge no study has addressed this issue in this particular sector in the hospitality industry. To fill this current gap, this study set to investigate the supply chain management practices in the hotel industry in Malaysia and examine how these practices influence the service quality.

The results obtained from this study suggest 1) strategic purchasing positively influences communication, suppliers' relationship, and service quality; and 2) both communication and suppliers' relationship are positively related to service quality. These findings imply that effective supply chain management practices are able to enhance the level of service quality in the hotel industry as service providers. Hotel managers in order to increase their service quality should take this fact into account that the way they manage their supply chain would lead to higher service quality.

Consistent with prior studies (Fantazy et al., 2010), this study confirmed the significant relationship of supply chain practices in the Malaysian hotel industry. The results of this study indicate that managers in Malaysian hotel industry understand and are aware of this significant role of supply chain management practices. Hotel industry is of critical importance in Malaysia since it has attracted many people to consider this country as a desirable destination. Therefore, delivering high quality services would increase the financial and non-financial performance of hotels in Malaysia. This study showed that practicing successful supply chain management in hotel industry is a significant driver of service quality.

This study could not include other variables such as financial performance. Future studies could include these kinds of variable in the performance part of an organization. In terms of studying the hospitality industry, the current study could focus on the hotel industry only. Future studies should include another sectors in the hospitality industry to expand the model especially in non-western context and in countries such as Malaysia due to their desirability for tourists.

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Tables:

Table 1: Confirmatory Factor Analysis

Variables		Loadings	t-value
SP1	Purchasing long-range plan is reviewed and adjusted to match changes in the hotel's strategic plans on a regular basis.	.85	Fixed
SP2	Top management emphasizes the purchasing function's strategic role.	.89	11.17
SP3	Purchasing professional development is aligned with the hotel's strategy.	.79	9.13
SP4	Purchasing is viewed as being equal to other functions in the hotel by the CEO/owner.	.85	10.16
SP5	The purchasing function has a good knowledge of the hotel's strategy objectives.	.86	10.55
COM1	We exchange information frequently, accurately, informally and/or in a timely manner with key suppliers.	.88	Fixed
COM2	We have very frequent face-to-face planning/communication with key suppliers.	.94	13.84
COM3	We constantly communicate about events or changes that may affect the other party.	.82	10.40
COM4	We involved our suppliers in our strategic planning process.	.88	11.91
SR1	We view our suppliers as an integrated part of the supply chain.	.76	Fixed
SR2	We cooperate with key suppliers to improve the chain quality in the long run.	.94	9.78
SR3	We expect our relationship with key suppliers to last a long time.	.94	9.74
SR4	We maintain close relationship with a limited pool of suppliers.	.93	9.59
SR5	We develop a partnership program with our key suppliers for the benefit of the whole supply chain.	.89	9.18
SQ1	The hotel has visually appealing buildings and facilities.	.86	Fixed
SQ2	The hotel has modern looking equipment (air conditioner, furniture, elevator, etc.).	.89	11.50
SQ3	Employees of the hotel appear neat and tidy (as uniforms and personal grooming).	.87	11.05
SQ4	The hotel performs the services right the first time.	.87	11.05
SQ5	The hotel keeps accurate records (reservations, guest records, bills, orders, etc.).	.88	11.28
SQ6	The hotel provides flexibility in services according to guest demands.	.90	11.92

Table 2: Mean, Standard Deviation, and Correlation Analysis

Variables	Mean	S.D.	1	2	3	4
Strategic Purchasing	5.25	1.34	1			
Communication	5.26	1.52	.56**	1		
Suppliers' relationship	5.31	1.51	.54**	.60**	1	
Service quality	5.15	1.41	.61**	.60**	.62**	1

** $p < 0.01$

Table 3: SEM Results

Hypotheses		Standardized coefficient	t-value	Conclusion
H1	Strategic Purchasing → Communication	.64***	6.12	Supported
H2	Strategic Purchasing → Suppliers' Relationship	.56***	5.14	Supported
H3	Strategic Purchasing → Service Quality	.33***	2.58	Supported
H4	Communication → Service Quality	.29**	2.67	Supported
H5	Suppliers' Relationship → Service Quality	.27*	2.66	Supported
Model Fit	$\chi^2/df = 264.166/165 = 1.601$; CFI= .99; IFI= .95; TLI= .94; RMSEA= .083			

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Figures:

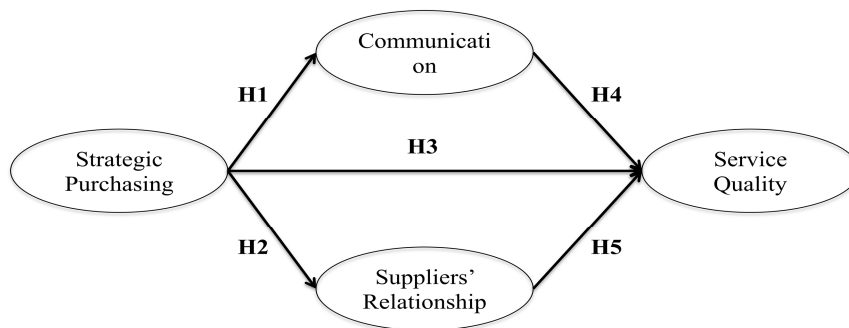


Figure 1: Hypothetical model for this study

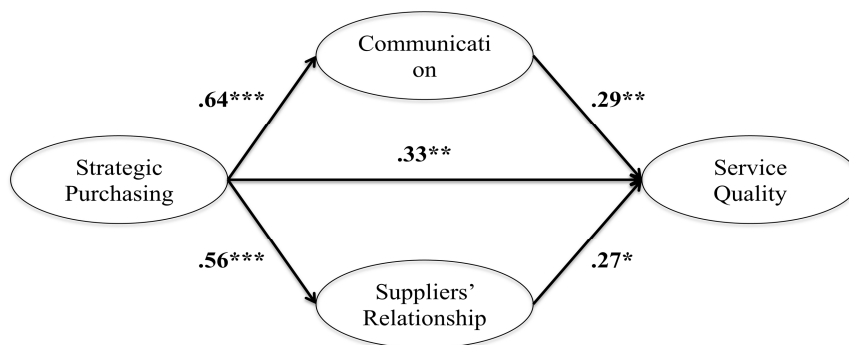


Figure 1: SEM results (Standardized Regression Weights)

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