Tactical Supply Chain Management: Impacts on Supply Chain Performance and Firm Performance

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Abstract

This paper examines the alignment between supply chain management strategy (SCMS) and supply chain management practices (SCMP), and its impact on supply chain and firm performances. In this paper, we developed a model proposing that deploying the appropriate strategy - lean SCMS and agile SCMS- to support and execute the corresponding practices - strategic supplier partnership and postponements - respectively, will enhance supply chain and firm performances. Using the mediating alignment, our results show that it is critical for focal firms to consider the capabilities and practices of their suppliers before structuring its strategic supply chain decisions to yield the desired benefits of such strategy and improve supply chain and firm performances. Research method includes: item development and a large scale survey of 205 respondents who were mainly purchasing managers/directors of large manufacturing organizations in The United States, and data analysis using Structural Equation Modeling (SEM).

Keywords: Supply Chain Management Strategy, Supply Chain management Practices, Supply Chain Performance, Firm Performance
1) Introduction

Supply chain management (SCM) is becoming increasingly important in today’s global society. As competition shifts from company vs. company to supply chain vs. supply chain, SCM has become a strategic tool for firms’ survival because it increases their competitive advantage (Stalk and Hout; Quinn, 1997; Rich and Hines, 1997; Tan et al., 2002). To compete at the supply chain level, it is important for firms to adopt an appropriate supply chain management strategy. Such strategy needs to be integrated and coordinated throughout the supply chain to enhance the performance of supply chain members (Green Jr. et al., 2008; Cohen and Roussel, 2005; Wisner, 2003). For example, Wal-Mart’s low cost strategy is accomplished through the adaptation of cross-docking system. This technique supports the practice of building a long term relationship with its suppliers Proctor & Gamble (P&G). Having a strategic partnership with P&G allows Wal-Mart to share information about their customers with P&G. The use of this information helps P&G decide how much stock needs to be delivered to Wal-Mart stores, and how frequently, to meet customer demand. By sharing this information, Wal-Mart is able to achieve their financial and market objectives; and P&G better manages their inventory to insure that products are in stock at all times and thus, improving their overall time to respond to customers (Simchi-Levi, 2005). This example clearly shows the importance of recognizing the practices of the supply chain to support the firm’s strategic supply chain objectives. Fitting the proper practices to execute such strategy enhances supply chain and firm performances.

Prior research on supply chain management strategy (SCMS) has focused on aligning supply chain strategy with business strategy. That is a SCMS should directly support and drive forward the business strategy (Evans and Danks 1998). Others have suggested matching the appropriate SCM strategies -lean and agile- to product characteristics –functional and innovative- (Fisher 1997, Mason-Jones et al. 2000) to achieve better performances. In a recent
study, Narasimhan et al. (2006) emphasize the importance of achieving consistency in SCMS by externally aligning SCMS with suppliers’ capabilities and internally with other functions to achieve better financial performances. Despite many scholars and practitioners realizing the importance of developing SCMS and executing supply chain practices, little attention has been paid to the alignment between SCMS and SCMP. Thus, there are no studies that explore the alignment between SCM strategies and practices since different SCM strategies require support from appropriate SCMP capabilities to have better supply chain and firm performances. In the absence of such understanding, there is a lack of framework that managers can use for effectively structuring their strategies in line with their practices. For instance, if the strategic positioning of a company is to have the lowest price in the market relative to its competitors, then this company should emphasize having an efficient supply chain, and then focus on the activities (i.e. JIT, integration, lean practices) that assist and enhance the goal of the supply chain in order to enable the execution of such strategy to have better supply chain and firm performances.

We use the contingency theory to examine alignment between SCMS (i.e. particular types of strategic goals and objectives that supply chains can have) and SCMP (i.e. particular set of activities), and the associated effect on supply chain and firm performances. Using the fit-as-mediation (Venkataraman, 1989) perspective, we develop and empirically validate a framework proposing that the alignment between lean and agile SCM strategies with strategic supplier partnership and postponement practices, respectively, is associated with enhanced supply chain performance and firm performance.

The result of this study contributes to our knowledge of SCM strategies and practices. We used the mediating definitions of alignment and provide a theoretical framework for a contingency-based approach for understanding how the alignment between SCM strategies and
practices impacts supply chain performance and firm performance. The outcome of this study suggests that aligning SCMS with SCMP will result in better supply chain performance and firm performance.

The next section describes the theoretical background of SCMS and SCMP and the hypotheses development. This is followed by a description of research methodology. Next, the results of hypotheses testing are discussed. Finally, conclusion, limitations and future research are given.

2) Theoretical Background

2.1 Supply Chain Management Strategy and Supply Chain Management Practices

SCMS requires an end-to-end supply chain focus that supports integration of business processes throughout the chain for the purpose of providing optimum value to the ultimate customer/consumer (Cohen and Roussel, 2005; Wisner, 2003; Green Jr. et al., 2008). Fisher (1997) suggests that the first step in developing SCMS is to consider the nature of the demand for an organization’s product, proposing that these are either functional or innovative. Functional products are similar to commodities; they are typically stable, fast moving consumer goods that are widely available and satisfy basic needs that do not change over time. As a result, functional products should have a very efficient low-cost supply chain. On the other hand, innovative products have short life cycles with volatile demand that is difficult to predict. They require a flexible and fast supply chain to deal with uncertainty in the demand. Building on Fisher’s 1997 framework, many scholars suggest the need to match the two types of products -standard and innovative- to two types of supply chains strategies -lean and agile- (Vonderembse et al. 2006; Lee 2002; Towill and Christopher 2002). A lean SCMS is aimed at creating cost efficiencies in the supply chain by reducing the inventory and focusing on improving the quality in the supply chain, thus eliminating waste (Huang et al., 2002; Wang et al., 2004; Vonderembse et al., 2006). Christopher and Towill (2000) suggest that an important lean SCMS attribute is the minimization
of total lead-times in the supply chain since by definition excess time is waste and leanness calls for elimination of all waste. An agile SCMS is aimed at being responsive and flexible by responding quickly and effectively to rapidly changing customer needs (Huang et al., 2002; Christopher and Towill, 2000; Wang et al., 2004; Vonderembse et al., 2006). Lin et al. (2006) suggest that agile SCMS focuses on promoting adaptability, flexibility and has the ability to respond appropriately and react quickly and effectively to changes in the market.

Regardless of the type of SCMS the firm is adopting, Porter (1996) argues that the essence of any strategy relies on the activities it performs. The essence of SCMS relies on its practices. SCMP represent a set of activities that accomplish specific important tasks i.e. building relationship with customers and suppliers, eliminating waste, facilitating customization, and sharing information within the supply chain. These practices represent opportunities for organizations to differentiate themselves on the basis of superior performance in the context of demand forecasting, product availability, inventory management, and distribution (Zielke and Pohl, 1996). Thus, organizations that successfully implement SCMP achieve superior supply chain performance. SCMP are defined as a set of activities aimed at improving the performance of the supply chain (Li et al., 2005; Li et al., 2006; Wong et al., 2005; Zhou and Benton, 2007; Koh et al., 2007). Tan et al. (2002) recognized six aspects of SCMP through factor analysis addressing various aspects of supply and material management issues, ranging from a broad-based supply chain integration to more specific just-in-time (JIT) capabilities. Zhou and Benton (2007) consider only three categories of supply chain practices: supply chain planning, JIT production, and delivery practices.

In the absence of consensus on a common set of SCMP and, since the literature describes SCMP from a variety of different perspectives with a common goal of improving supply chain
performance and therefore improving organizational performance, this study will focus on two practices: strategic supplier partnerships and postponement. Strategic supplier partnerships require a high degree of coordination between the organization and its suppliers; companies tend to have a long-term relationship with suppliers that create value to each party. In this study, a strategic supplier partnership is defined as the long-term relationship between the organization and its suppliers which influences the strategic and operational capabilities of individual participating companies to help them achieve significant ongoing benefits (Li et al., 2005; Li et al., 2006; Monczka et al., 1998). It is important to differentiate a strategic supplier partnership from a simple long-term partnership. A strategic supplier partnership is not only about buying goods and services from suppliers, but it is also about impacting the suppliers’ systems and operational capabilities, adding value to the goods and services, and improving the performance of the whole supply chain (Monczka et al., 1998). This kind of partnership emphasizes a direct, long-term association with suppliers, encouraging mutual planning and problem solving efforts, and selecting fewer suppliers (Maloni and Benton, 1997; Gunasekaran et al., 2001).

Postponement is defined as the practice of moving forward one or more operations or activities (making, sourcing, and delivering) to a much later point in the supply chain (Li et al., 2006; Li et al., 2005; Naylor et al., 1999; van Hoek et al., 1999; Beamon, 1998). Firms adopt postponement strategies to sustain competitive advantage. Hence, by keeping materials undifferentiated for as long as possible, companies such as Dell are able to (1) increase their flexibility in responding to changes in customer demand and (2) achieve cost-effectiveness in the supply chain by keeping undifferentiated inventories (van Hoek et al., 1999). Yang and Burns (2003) argue that the implementation of postponement strategies will often result in reconfiguration of the supply chain and often place the warehouse where the final assembly is
processed. Waller et al. (2000) suggest that postponement can be extended further upstream in the supply chain to suppliers of raw materials or downstream in the supply chain to distributors and retailers. They argue that postponement decisions should be made with respect to SCM in market-oriented organizations. In other words, companies should consider their SCM capabilities, and coordinate appropriate changes in postponement among suppliers to achieve faster production and cost reduction.

To assist firms in measuring the effectiveness of their supply chains, the Supply-Chain Council (SCC) developed the Supply-Chain Operations References (SCOR) model. The SCOR model provides a common process-oriented language for communicating among supply-chain partners in the following decision areas: planning, sourcing, making, and delivering (Lockamy and McCormack 2004). In this research, supply chain performance will be measured through: supply chain integration and supply chain flexibility. Supply chain integration is defined as the extent to which all the activities within an organization, suppliers, and customers are integrated together (Stevens, 1990; Stock et al., 1998; Stock et al., 2000; Narasimhan and Jayaram, 1998). Supply chain integration can provide a firm with the opportunity to focus on its core competencies and particular areas of expertise (Simchi-Levi et al., 2003). It will also lead to the amplification of key resources by enabling the sharing of special resources and technological knowledge between the firm and its supply chain partners (Vickery et al., 2003). Such integration will not only help supply chains to reduce costs and be more efficient, but it will also create value for the company, its supply chain partners, and its shareholders (Lee, 2000).

Supply chain flexibility is defined as the ability of supply chain partners to effectively adapt or respond to changes that directly impact an organization’s customer (Vickery et al., 1999; Kumar et al., 2006). The need for flexibility originates from customers; since customers
ask for variety, quality, competitive prices, and faster delivery. This has forced companies to make design changes quickly and respond faster to customer needs in order to sustain the company’s competitive advantage. As a result, companies need to be flexible enough to react to changes in customers’ demands (Aggarwal, 1997).

Firm performance refers to how well a firm achieves its market-oriented goals as well as its financial goals (Yamin et al., 1999). This definition is believed to have a comprehensive framework of firm performance and has been adopted in previous studies (Li et al., 2006) to measure the impact of SCMP on firm performance. Li et al., (2006) measured firm performance through its market share, ROI, the growth of market share, the growth of sales, growth in return on investment, profit margin on sales, and overall competitive position.

2.2 Mediating Alignment

The focus of this paper is to examine the mediating alignment of SCMP on SCMS and supply chain performance. According to Venkatraman (1989), fit as mediation is simply viewed as direct vs. indirect effect of variables. In other words, the fit as mediation between two variables (SCMS and supply chain performance) is determined by their direct relationship as well as through the indirect effect of a third variable (SCMP). This implies that if the presence of SCMP is necessary to influence the effect of SCMS on supply chain performance, then SCMP is called a complete mediator. However, if the direct relationship between SCMS and supply chain performance exists and an indirect effect of SCMP between SCMS and supply chain performance also exists, then SCMP is considered as a partial mediator. This means that the alignment will exist if 1) SCMP (strategic supplier partnership and postponement) support the objective of the lean SCMS and agile SCMS, respectively, to have better supply chain performance and subsequent to this practice, the lean and agile strategies would not have any
direct effect on performance. Or 2) SCMP (strategic supplier partnership and postponement) to support the objective of the lean SCMS and agile SCMS, respectively, to have better supply chain performance and subsequent to these practices, the lean and agile strategies would still have direct effect, as well as an indirect effect mediated by the strategic supplier partnership and postponement, on performance. We expand on this argument and present our hypotheses in the next section.

3) Hypotheses Development

The research framework in Figure 1 depicts our hypothesized relationship between SCMS, SCMP, supply chain performance and firm performance. We propose that SCMS (i.e. lean SCMS and agile SCMS) would be associated with improved supply chain performance. However, we also propose that SCMP mediates the relationship between SCMS and supply chain performance. That is, (1) strategic supplier partnership would reinforce the relationship between lean SCMS and supply chain performance; (2) postponement would reinforce the relationship between agile SCMS and supply chain performance. We also suggest that supply chain performance would be associated with improved firm performance. We next describe the rationale for the research hypotheses.
Hypotheses H1a and H1b: Relationship between SCMS and supply chain performance

Cohen and Roussel (2005) believe that an effective business strategy should be supported by a good supply chain strategy. Using the supply chain as a strategic weapon could improve firm performance, as many firms believe that SCM is the most popular operations strategy for improving organizational competitiveness (Gunasekaran et al., 2008). Companies such as Dell, Amazon, and Wal-Mart are constantly refining their supply chains so they can stay one step ahead of their competitors. Wisner (2003) provides empirical support that SCMS improves firm performances.
The lean SCM focuses on efficiently managing the supply chain by eliminating waste and employing continuous improvement techniques across the chain. So for instance, if the firm’s goal is to cut cost, then a lean SCMS (which emphasizes being efficient) is preferred. The lean SCMS results in improved supply chain performance through better supply chain efficiency. Thus, improving coordination and collaboration of information across suppliers will enable the firm to execute its cost efficient strategy, and improve its supply chain integration. Supply chain integration deals with sharing resources, risk, and knowledge between supply chain partners (Kim et al., 2006). As a result, working together closely with key suppliers will reduce inventory, decrease lead time, and foster improvement (e.g. share problems with them and conjointly finding more effective solutions) (Thun, 2010). The lean SCMS requires a focal firm to make cost reduction its first priority, and implement practices (i.e. just-in-time) which requires supplier integration to eliminate waste and achieve a low cost strategy (Qi et al., 2009). Therefore, it is hypothesized that:

**H1a: The Lean SCMS is positively associated with supply chain performance**

If the focal firm strategy is to respond faster to its customers, then the supply chain strategy should focus on being flexible and enable it to respond quickly and effectively to the firm’s requirements. Christopher (2000) suggests that in order to improve the responsiveness of the supply chain, agility in the supply chain is needed. That is, the agility SCMS adopted by the focal firm enables the supply chain to meet specific requirements and respond faster to changes in customers’ demand. For instance, AT&T (*electronic consumer products*) decided to improve the agility of its supply chain by employing technology to implement electronic transactions to share information among suppliers, the implementation resulted in a better supply chain performance measured by its responsiveness to customers (Gunasekaran at el., 2008). Therefore, it is hypothesized that:
**H1b: The Agile SCMS is positively associated with supply chain performance**

**Hypotheses H2a and H2b: Alignment between SCMS and SCMP and its impact on supply chain performance**

Numerous studies have shown that well managed and well executed SCMP will directly improve firm performance (Shin et al., 2000; Prasad and Tata, 2000; Tan et al., 1998; Tan, 2002). Although most studies have linked SCMP directly to firm performance without explicitly considering any intermediate measures (i.e. supply chain performance); this study is considering SCMP as a mediator between SCMS and supply chain performance.

Firms that have clearly defined their supply chain capabilities and achieve strategic alignment with the suppliers will have better performances (Hofmann 2010). The primary objectives of a lean SCMS can be accomplished by comprising the appropriate capabilities in the supply chain. Building long term relationship with suppliers upon trust will help in recognizing the benefits of lean strategy (McIvor 2001). Graham et al. (1994) found that a strategic supplier partnership improves the quality of supplier operations and improves the quality of parts that are supplied, which results in better product quality. Thus, strategic partnerships will encourage suppliers to be involved and participate in quality certification programs. This will help in eliminating the waste and scrap among suppliers. The benefits of lean SCMS are captured through reductions in inventory levels and cost savings from forming partnerships with one another. Therefore, it is hypothesized that:

**H2a: Strategic supply partnership mediates the relationship between lean SCMS and supply chain performance**

A critical element in the agile supply chain is to carry inventory in a generic form – that is, standard semi-finished products awaiting final assembly (Christopher, 2000). By keeping
materials undifferentiated for as long as possible increases the flexibility in the supply chain in responding to changes in customer demand, as well as improving the cost effectiveness of supply chains (van Hoek et al. 1999). Thus, it enhances the execution of agile SCMS. Therefore, it is hypothesized that:

\[ H_{2b}: \text{Postponement mediates the relationship between agile SCMS and supply chain performance} \]

**Hypothesis H3: Relationship between supply chain performance and firm performance**

Vonderembse and Tracey (1999) empirically tested the relationship between supplier performance and manufacturing performance. They argue that involving suppliers in product design efforts enhances firm performances with regards to production cost, work-in-process inventory levels, product quality, and on-time delivery to the final customer. Narasimhan and Kim (2002) emphasize the roles of supply chain integration on firm performance suggesting that supply chain integration enhances a firm’s performance through moderating the relationship between product diversification (developing different products) and international market diversification. They evaluated firm performance by using sales growth, market share growth, and profitability.

Further, Shin et al. (2000) provided a good example of how an excellent SCM impacts a firm’s performance “when Chrysler launched a supplier- involvement program, which is called Supplier Cost Reduction Effort (SCORE), and benchmarked the supply chain management practices of Japanese companies, Chrysler announced that it achieved more than US$1.2 billion in cost savings through 1997 due to the SCORE program”.

\[ H_3: \text{Supply chain performance is positively associated with firm performance} \]
4) Methods and Analysis

4.1 Data Collection

Purchasing directors, supply chain directors, purchasing managers, and supply chain managers of manufacturing firms in the United States were chosen as respondents for this study. We used a web-survey to collect the data. A mailing list of 5,000 names was randomly selected and purchased from a marketing company. The list was limited mostly to organizations with more than 200 employees and with sales revenue of more than $10 million, since small organizations are unlikely to acquire or use sophisticated information systems in their supply chains. Initially from the 5017 contacts, 1888 bounced back due to e-mails that do not exist. A total of 205 managers completed the survey, representing a response rate of 6.6%.

The research was tested using partial least square method (PLS) of structural equation modeling (Smart PLS). Analysis was conducted in two phases: measurement model and path model.

4.2 Measurement Model Analysis

Measurement model was assessed by the item loading and cross loading, reliability of individual items, internal consistency between items and the model’s convergent and discriminate validity. Table 1 provides the results of Component Based Analysis. The loading for each item on its intended construct is higher than its cross-loading for all other constructs, indicating good discriminant validity. The composite reliability, average variance extracted (AVE), square root of AVE and correlations between the constructs are shown in Table 2. All values of composite reliability are above 0.70 (Bagozzi and Yi, 1998), indicating a good internal
consistency. All AVE values for all construct are greater than 0.50; showing evidence of convergent validity.

<table>
<thead>
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<th>Lean</th>
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Note: Boldface numbers are loadings (correlations) of indicators to their own construct; other numbers are cross-loadings. Boldface item loadings should be greater than cross-loadings.
Table 2. Inter-Construct Correlations: Consistency and Reliability Tests

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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lean</td>
<td>0.56</td>
<td>0.83</td>
<td>0.59</td>
<td>-0.22</td>
<td>0.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner</td>
<td>0.57</td>
<td>0.84</td>
<td>0.16</td>
<td>0.17</td>
<td>0.23</td>
<td>0.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perf</td>
<td>0.43</td>
<td>0.84</td>
<td>0.52</td>
<td>-0.20</td>
<td>0.55</td>
<td>0.35</td>
<td>0.66</td>
<td></td>
</tr>
<tr>
<td>Post</td>
<td>0.50</td>
<td>0.79</td>
<td>-0.14</td>
<td>0.23</td>
<td>-0.16</td>
<td>0.13</td>
<td>-0.05</td>
<td>0.71</td>
</tr>
</tbody>
</table>

The bolded numbers on the diagonal are the square root of the variance shared between the constructs and their measures. Off-diagonal elements are correlations among constructs. For discriminant validity, diagonal elements should be larger than off-diagonal elements.

4.3 Structural Model Analysis

Figure 2 presents a graphical depiction of PLS results, which show statistical significant value of each hypothesis. Lean SCM is positively correlated with supply chain performance with a significant T-value of 4.17 and at 0.05 level of significant. Therefore, Hypothesis H1a is supported. Hypothesis H1b is significant at t-value of 4.50 and at 0.05 level of significant. Hypothesis H2a is supported and partially mediated with T value of 2.97 (0.05 level of significant) for the relationship between lean SCMS and strategic supplier partnership and T value of 2.97 (0.05 level of significant) between strategic supplier partnership and supply chain performance. Hypothesis H2b is not supported, indicating that postponement does not mediate the relationship between agile SCMS and supply chain performance. Hypothesis H3 is supported with T value of 2.97 and significant at 0.05 level. The results are summarized in Table 3.

Table 3. PLS Structural Equation Modeling Results

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relationship</th>
<th>Type</th>
<th>T-Coefficient</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a</td>
<td>Lean SCMS* Supply Chain Performance</td>
<td>Direct</td>
<td>4.17</td>
<td>Yes</td>
</tr>
<tr>
<td>H1b</td>
<td>Agile SCMS* Supply Chain Performance</td>
<td>Direct</td>
<td>4.50</td>
<td>Yes</td>
</tr>
<tr>
<td>H2a</td>
<td>Lean SCMS* Strategic Supplier Partnership</td>
<td>Mediating</td>
<td>2.97</td>
<td>Yes</td>
</tr>
<tr>
<td>H2b</td>
<td>Agile SCMS* Postponement</td>
<td>Mediating</td>
<td>1.51</td>
<td>No</td>
</tr>
<tr>
<td>H3</td>
<td>Supply Chain Performance* Firm Performance</td>
<td>Direct</td>
<td>2.97</td>
<td>Yes</td>
</tr>
</tbody>
</table>
The result of hypotheses (H1a) and (H1b) are found to be significant. The significance of hypothesis (H1a) indicates that for a focal firm, the higher the extent of efficiency or leanness in its supply chain, the greater the extent of its integration with supply chain partners, and the better the supply chain performs. The relationship for hypothesis (H1b) is found to be significant, this implies the greater the extent of agility in its supply chain, the better the supply chain performs.

The result for hypothesis (H2a) indicates that strategic supplier partnership partially mediates the relationship between lean SCMS and supply chain performance. The findings suggest that building long term relationship with suppliers enhances the ability of the supply chain to eliminate waste and improve the leanness of their own operations and thus helps in improving the supply chain performance. In other words, the support of the appropriate practice (strategic supplier partnership) helps in executing lean SCMS and is expected to lead to cost efficiencies along the supply chain. This mean the support form strategic supplier partnership facilitates and allows lean production concepts to be more fully applied.
The result for hypothesis (H2b) is not significant. This indicates that postponement does not mediate the relationship between agile SCMS and supply chain performance, indicating that even without acquiring practices (i.e. postponement) that enhance flexibility, agile SCMS improves supply chain performance. In other words, having the postponement capabilities does not enhance the ability to execute its supply chain agility strategy, and therefore does not help in improving the performance of its supply chain.

Hypothesis (H3) indicates that a better supply chain performance will result in a better firm performance. For instance, if the supply chain is able to respond effectively and react quickly to changes in the market, then the firm will benefit from this by improving its competitive advantage through price, quality, and delivery (Li et al., 2006) which enables the firm to achieve its market and financial goals.

6) Conclusion, Limitation, and Future Research

Tactical supply chain management deals with implementing techniques that will save the company money along a supply chain. Tactical supply chain decisions take the strategic message and focus on creating real benefits for the company. In other words, linking supply chain strategies and activities are critical to achieve better performance. SCMS needs the support of supply chain activities to better execute such strategy. Thus, it must understand the relationship between SCMS and SCMP.

The alignment of SCMS and SCMP has proven to be a critical success factor for a company’s supply chain and performance. When strategy and practice are properly combined, the supply chain and firm performances will improve. Our hypotheses suggest that the higher extent of efficiency and agility, the better the supply chain performs and enable a firm to achieve
its’ goals. As the primary goal of SCM is to provide the highest value to a consumer, it is necessary for a firm to consider their SCM practices when developing a SCMS.

Our study suggests that strategic supplier partnerships help execute a lean supply chain which may eliminate waste and reduce costs along the supply chain. Strategic supplier partnerships build quality into a supply chain because lean concepts are applied throughout the entire supply chain. Strategic supplier partnership also forms a relationship between the company and its’ suppliers, allowing both parties to receive long-term benefits as they have a stable demand and the ability to work closely. For postponement practices, it does not mediate the relationship between agile SCMS and supply chain performance. One reason could be that postponement practices depend on creating a decoupling point. A decoupling point is the point that separates part of the supply chain that responds directly to customers (being agile) from the part of the supply chain that uses strategic stocks to buffer against the variability in the demand (being lean). The aim of postponement is to increase the efficiency of the supply chain by moving product differentiation (at the decoupling point) closer to the end customer (Naylor et al., 1999). This is better fit with a hybrid SCMS. A hybrid SCMS aims at achieving mass customization by postponing product differentiation until final assembly, and adding innovative components to the existing products (Huang et al., 2002; Wang et al., 2004).

Limitations

First, this study is done at the firm level with one person from each organization responding to the survey. A single respondent was asked complex questions about SCM issues dealing with strategy and practices. Although the respondent was a senior purchasing manager/
director, or supply chain manager/director, no one person in an organization is in charge of the entire supply chain.

The research design and method employed may constrain the results found and the implications of this research. Thus, a sample size with 205 responses may not be sufficient to handle a complex model that consists of both strategic and operational levels.

**Futures Research**

There are many other SCMP such as outsourcing, reduced cycle times, purchasing, quality, logistics, JIT, cross functional team, etc..., and many other performance measures such as customer service, inventory level, service level, throughput efficiency, suppliers’ performance, time, assets, information and material flow integration, and delivery performance, to name a few, that are important and were not considered in this study. Therefore, there is an opportunity for researchers to test the same model with different SCMP and different performance measures, and perhaps test the same model using other SEM techniques such as LISREL or AMOS.

********** REFERENCES ARE AVAILABLE UPON REQUEST**********

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