An Exploratory Analysis of Competencies and Challenges for SMEs in the Demand Chain

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ABSTRACT

Small and medium enterprises (SMEs) continue to contribute to economic growth in the U.S. While several SMEs operate in the demand chain, little research exists on how these businesses compete in the demand chain. Specifically, what are the capabilities of SMEs that can not only add customer value, but also ensure their survival in the demand chain? In addition, what are the challenges faced by SMEs in the demand chain? This paper provides an exploratory, qualitative study regarding these issues. Two SMEs in Southern India were interviewed. In addition, directions for future research and implications for managers are provided.

INTRODUCTION

Despite the abundance of articles on supply chain effectiveness, the topic is often criticized as adopting a myopic approach in creating value for customers (e.g. Walters, 2002; Wisner, 2003). While the supply chain has been successful in coordinating the flow of materials and information from suppliers to manufacturers, distributors, and final customers (flow towards downstream activities), it has not been successful in coordinating final customers' requirements backwards to the supplier (Korhonen et al, 1998). The information flow in the supply chain consists of only periodical forecasts and stock orders; such narrow flow of information is insufficient to meet customer demands in a quick and efficient manner. Other limitations such as increasing costs of operating due to adversarial relations between supply chain partners and failure to assess demand adequately have also been noted. The latter situation has caused several industries to experience either stock outs or too much inventory (Fisher, 1997). Consequently, the supply chain is said to focus on operational productivity and logistics instead of customer satisfaction (Walters, 2002). These shortcomings have prompted organizations to adopt a more effective business model, the demand chain model (Korhonen et al, 1998). According to Vollmann et al (2000, pg. 84), "the demand chain management concept extends the view of operations from a single business unit or a company to the whole chain. Essentially, demand chain management is a set of practices aimed at managing and coordinating the whole demand chain, starting from the end customer and working backward to raw material suppliers. There are two fundamental objectives: (1) to develop synergy along the whole demand chain, and (2) to start with specific customer segments and meet their needs rather than focus on internal optimization."

Several large firms have accrued significant benefits including improvements in demand forecasts and cost-savings from implementing the demand chain model (e.g., Lee & Whang, 2001; Lilley, 2003). However, there is no literature regarding the demand chain application in Small and Medium Enterprises (SMEs).

The Small Business Administration defines a small business as "one with fewer than 500 employees" (Small Business Administration, 2003). SMEs continue to be key contributors to job creation and economic growth in the U.S. and other countries in the new millennium (Kuratko et al, 2001; Morris & Brennan, 2000). For instance, small firms represented more than 99% of the workforce and employed around 50% of the private sector workforce in 2003 (Small Business Administration, 2003). Moreover, small enterprises are generally considered to be very innovative, bringing new products and services to the global market (Small Business Administration, 2004). Given the importance of these entities it is paramount to explore the ways SMEs can be more competitive. Thus, we explore the application of key demand chain concepts to SMEs. Specifically, our objective is to examine potential SME capabilities that may be conducive to application of key demand chain initiatives such as (i) improving flexibility, (ii) improving customer value, & (iii) maintaining favorable supplier/customer relations. We also present an exploratory, qualitative review of two SMEs in India with an examination of the potential to apply demand chain initiatives in these two organizations.

LITERATURE REVIEW

The Importance of Flexibility in the Demand Chain:

Flexibility can be defined as "increasing the range of products available, improving a firm's ability to respond quickly, and achieving good performance over this wide range of products" (Upton, 1994, 1995, pg. 76). A flexible organization can avoid lost sales by being able to respond to rapid changes in product mix, variety, or volume (Fisher et al, 1997). Thus, flexibility is becoming an increasingly important competitive strategy for many firms (Yusuf et. al, 1999). Numerous studies have also focused on the impact of flexibility on organizational outcomes such as manufacturing performance (e.g., Das & Nagendra, 1993). The concept of flexibility has evolved and expanded from a manufacturing focus to an emphasis on marketing, design, labor, and other operations within the organization (Christopher & Towill, 2002). Previous studies have also indicated the importance of integration across functions and organizations to achieve flexibility (Hamel & Prahalad, 1989; Lowson, 2002). Based on this perspective of cross-departmental and cross-organizational flexibility, the concept of demand chain flexibility has emerged recently (Zhang, Vonderembse, & Lim, 2002).

The emphasis in demand chains is on improving speed, flexibility, and efficiency in order to meet customer needs (Vollmann et al, 2000; Walters, 2002). The rationale behind demand chain management is that customers' needs are fulfilled as opposed to mere achievement of efficiencies and effectiveness of machines and processes (Zhang et al, 2003). Accordingly, the key success factors required to achieve competitive edge in the demand chain include technical expertise, innovation, low cost, responsiveness, flexibility, and cooperation among partners (Walters & Lancaster, 2000). Researchers have pointed out that flexible operations throughout the demand chain are key to improving customer satisfaction (Lowson, 2002; Zhang et al, 2002). Hence, flexibility is increasingly becoming a significant competitive factor in the demand chain.

Flexibility in SMEs:

Scholars have asserted that SMEs need to be flexible and adopt strategies that are customer-oriented (Abdul-Nour & Lambert, 1999). Despite recognizing the importance of flexibility in retaining customers, few studies have looked at whether SMEs have the capabilities to manage flexible operations. Since SMEs constitute a major part of the economy and the demand chain, this study argues that it is necessary to have a clear understanding of flexibility in relation to firm size in the demand chain. Research has shown that large organizations tend to have more complex structures (Mintzberg, 1983). Large companies tend to have bureaucratic structures and decentralized decision-making (Kuratko et al, 2001). These structures can impede accurate and speedy decisions, making large corporations stagnant or too slow to respond to environmental changes. Besides, the bigger volume of transactions and associated information overload and coordination difficulties makes it extremely difficult for large companies to adapt to rapid changes in the environment (Poon & Joseph, 2000).

Alternatively, small businesses don't tend to have functional boundaries and bureaucratic structures (Warren & Hutchinson, 2000). Also, the central decision making authority enables SMEs to make speedy decisions (Rodwell & Shadur, 1997). Furthermore, the strong orientation to adapt by small business owners makes them very flexible and responsive to rapid changes in products and processes (Kuratko et al, 2001). Efficient communication and coordination of effort among fewer employees and close relationships with customers (Ronstadt, 1990) also make SMEs very responsive to unexpected customer changes. There is some evidence in the literature to point out that SMEs may be competent to manage flexibility in the demand chain. Hence, it may seem that SMEs have the capabilities to compete successfully on this dimension in the demand chain.

Customer Focus in the Demand Chain:

Shorter product life cycles and rapid changes in customer demand necessitate development of new products or modification of existing ones on a continuous basis in the demand chain (Zhang et al, 2002). In addition, the demand chain begins with identification of customer needs and then works backwards through the system to fulfill those needs (Joy, 2001). High levels of customer satisfaction and successful demand chain performance necessitate high levels of product customization and customer service (Heikkila, 2002; Korhonen et al, 1998).

Customer Focus in SMEs:

The high level of customer interaction maintained by SMEs facilitates the generation of ideas for new product development (Valsamakis & Sprague, 2001). In addition, the existence of highly skilled workforce, close interaction between different functions, and strong customer orientation are attributes in SMEs that are conducive to new product development (Warren & Hutchinson, 2000). Research has also shown that small entrepreneurs tend to establish close relationships with their customers (McGowan et al, 2001). Having a small customer base for most SMEs facilitates closer and long-term relationships and helps them meet their requirements more efficiently (Valsamakis & Sprague, 2001). Besides, small suppliers are increasingly being valued for their technical expertise, pre-sale, and post-sale activities, including acceptance of customer feedback (Hakansson et al, 1997). Furthermore, SMEs long-term commitment towards customers not only facilitates better understanding of customer needs, but also reduces uncertainties in demand (Valsamakis & Sprague, 2001). This paper extends the lower uncertainties associated with SMEs to the entire demand chain and argues that SMEs are indispensable in assessing and meeting customer requirements in a timely manner. Moreover, the small business literature shows that SMEs have the capabilities to identify and fulfill customer needs accurately and in a timely fashion.

Significance of Favorable Supplier/Customer Relations in the Demand Chain:

The trends towards outsourcing and maintaining a reduced supplier base have stressed the importance of partnerships across the demand chain (Walters, 2002). Accordingly, several articles have concentrated on studying buyer-supplier relations (e.g., Monczka et al, 1998). The key success factors in the demand chain are high levels of coordination and cooperation, speedy and accurate communication, and development of long-term relationships with all traders in the demand chain (Claycomb et al, 1999; Vollmann et al, 2000).

Much emphasis has been placed on the degree and type of integration mechanism to promote quick and accurate flow of information in the demand chain. For instance, Frohlich and Westbrook (2002) have pointed out that demand chain practices characterized by a higher level of integration compared to supply chain activities, are related to higher levels of manufacturing performance. Similarly, the Internet, has helped facilitate integration activities and develop virtual relationships in the demand chain (e.g., Karlsson, 2003).

Supplier/Customer Relations in SMEs:

Several articles have pointed out the significance of partnerships for mutual benefit. However, the realities are not that simple. For instance, several authors have shown the incidence of poor communication flow and integration of activities, opportunistic behavior, and adversarial relations between partners (Fisher, 1997; Holmstrom et al, 2000; Walters, 2002). Powerful players also tend to dominate the smaller suppliers, who are forced to assume additional responsibilities in order to remain in business (e.g., Campbell, 1998). In addition, large customers often base their relationships with smaller suppliers only on the price criterion (New & Burnes, 1995). Such relationships tend to be short-term and adversarial, as opposed to the long-term, cooperative relations recommended by researchers (Valsamakis & Sprague, 2001). Furthermore, traders are unwilling to invest financial and other resources in the partnership (Williamson & Winter, 1993). In this regard, the concepts of cooperation and trust are extremely relevant. Trust is a critical factor in supplier-customer relationships (Morgan & Hunt, 1994).

Also, partners will be more likely to cooperate and less likely to behave opportunistically if there is a high level of trust between them (Campbell, 1998).

The significance of mutual trust and cooperation in benefiting all traders in the value chain has also been mentioned. For instance, Christopher & Towill, (2002) asserted that only absolute cooperation among all traders can result in improved inventory turns and return on investment for every link in the chain. Similarly, all partners must work closely together to eliminate inventories all through the demand chain, instead of merely shifting the burden to other traders (Balsmeier &Voisin, 1996).

Sharing information on sales, orders, and inventories with each member in the value chain is necessary not only to reduce inventories (Christopher & Towill, 2002; Frohlich & Westbrook, 2001), but also to reduce uncertainties and improve responsiveness to the customer. However, members are less likely to share such information if they don't have high levels of trust and cooperation (Campbell, 1998). Hence, willingness to trust and cooperate with other members is key to successful partnerships. We extend this argument to state that trust and cooperation will determine the extent to which information is shared about changing customer needs, survival, and growth of the small firm. Besides, shared investments in time, cost, and other resources are crucial to attaining mutual benefits in the demand chain. However, the literature indicates that larger traders tend to dominate small suppliers and other traders in the demand chain. Hence, opportunism, adversarial relations, and poor integration among demand chain traders pose potential threats to SMEs. The survival of small suppliers may depend on the extent to which their large customers are willing to cooperate and trust them.

METHODOLOGY

Qualitative data were collected from two small business owners in Chennai, a metropolitan city in Southern India. Semi-structured interviews were conducted using email and telephone. Interviews included background information about the small business owners and their businesses, management and decision-making issues, experiences on working with large firms in the demand chain, and discussions specifically focused on flexibility, customer relationships, and partnerships with other traders in the demand chain. Respondents were also asked to identify their position in the demand chain. Since both interviews were conducted in Tamil, the local language, two independent translators completed the initial translation and back-translation (i.e., from English to Tamil). In addition, follow-up interviews were conducted to ensure accuracy of data content and meaning. Furthermore, respondents were fully assured of confidentiality of data. We used thematic content coding to classify the data on the basis of key demand chain practices that may be applicable for SMEs. We also identified SME capabilities and difficulties associated with each practice. In the next section, we describe the business characteristics of the two firms we interviewed. In the following section we provide the results in detail.

Firm A:

Firm A is a small supplier of raw materials (e.g., ingredients such as vegetables and spices) and partly made food products (e.g., pre-cooked & frozen curries, pastes, & sauces) to 17 restaurants in the city. 12 restaurants (approximately 71%) are medium to large customers, while the rest are relatively small customers. The main aim of the firm is to function as an intermediary between manufacturers/wholesalers and major restaurants in the city. The firm procures orders from restaurant managers and ensures speedy, reliable deliveries of quality products at low costs, directly from the manufacturers to their customers. Hence, this firm carries little or no inventories. This firm has four partners, who are not only joint-owners, making all the decisions related to the firm, but also the employees, taking care of day-to-day business activities. Hence, this firm has only four employee-owners. The four owners are male and average age of the four partners is 41 years, with the respondent's age being 47 years. The firm has been in operation for the last 4.5 years and steady increases in sales can be attributed to word-of-mouth communication and excellent service. Based on Wolff and Pett's (2000) and the U.S. Census Bureau's classification, this firm is considered to be a micro-business (i.e., less than 20 employees).

Firm B:

Firm B is a small retailer with 7 full time employees and 2 part-time employees. The sole business owner also manages several other businesses including a pharmacy, Internet/telephone kiosks, and taxicab services. Hence, this business owner delegates authority to his store manager, who assumes several decisions related to the store. However, key decisions are still within the control of the owner. Since the owner was totally aware of the 'demand chain' concept and handled all the issues related to demand chain and SMEs, the interview data are considered valid and useful for purposes in this study. This retailer caters to customer needs by selling all-purpose products (e.g., food products, toiletries, and non-prescription medicines, etc.) and offering door delivery within certain locations in the city. Most products are received directly from manufacturers or wholesalers, though sometimes, certain products have been purchased from other retailers to avoid out-of-stock situations. Contrary to Firm A, this firm carriers a lot of inventory, usually at least one-month's supply of non-perishable goods, in a warehouse located close to the store. Since this firm also has fewer than 20 employees, it is classified as a micro-business. This respondent is male and is 53 years old. The business has been in operation for 12 years. In addition, sales of the firm are attributed to word-of-mouth communication and advertisements (i.e., flyers) posted in the owner's other businesses. This firm has also received positive feedback from its customers' in the form of verbal feedback and a customer survey conducted by a consultant in 1998.

RESULTS

Levels of Flexibility:

The respondents were first asked the levels of flexibility they currently employed to meet customer needs. Both respondents asserted that they adopt flexible practices to meet changes in customer requirements most of the time. While firm A felt that rapid changes in quantities or varieties demanded by its industrial customers were somewhat frequent, firm B considered such rapid changes in demand to be quite remote. However, since Firm A has only 4 employee-owners, the ability to respond immediately rested on these few employees. While this firm felt that having few employees was a constraint, it also perceived this situation as an opportunity. In this regard, one of the partner's who receives a last-minute change in the customer order usually responds to the change immediately, thus making a speedy decision on behalf of the other partners. The partners usually acted on behalf of each other, closely following a mission statement that states,

> *"Our guarantee is to provide 100% customer service or you get back 100% of your cost."*

Firm A felt that thorough knowledge of all aspects of the organization enabled each partner to make spontaneous decisions without concurrence from the others. The respondent felt such quick and accurate decisions would not be possible even if they delegated authority and empowered a manager.

Furthermore, firm A asserted that it has met changes in delivery options (e.g., overnight or 24 hours delivery), quantities, varieties, and brands demanded, packaging (e.g., plastic bottles instead of glass bottles), and other service options (e.g., billing) about 90% of the time. This firm felt that the main reasons for having a high level of internal flexibility was the close communication, cooperation, mutual trust, and willingness to share responsibilities amongst the partners. In addition, this firm felt strongly that in the event of expansion and employment of several workers would undermine its ability to respond effectively. The respondent mentioned,

> *"Even if I have numerous, well trained, and well paid employees in my company, I don't think they will act in the best interest of the firm. My partners and I can always handle any contingencies adequately and act in the best interest of the firm."*

Moreover, this firm felt its customers, big and small, relied on and believed in the ability of the partners to make prompt changes to orders or schedules. The respondent stated repeatedly that his customers would not consider alternate suppliers, because he was sure their firm was giving them 100% service at reasonable costs, something other firms were still battling with. This firm was also very confident about its long-term relationship with most of its customers. In response to the strategy used to maintain long-term customer relationships, the respondent stated,

> *"My partners and I are willing to do whatever it takes, at least for the most part, to bring in new and keep old and new customers. We can easily change policies, prices, & products within our capacity. We can adapt almost any part of our business; not just deliveries or billing; but just about anything, in fact it is not difficult to do so, to please customers. We think this is the only way to survive and keep customers coming back for a long time. This is important in our type of business, which has several huge competitors."*

It is apparent that firm A not only believes that internal flexibility will add customer value and enhance competitiveness, but is also willing to expand its dimensions of flexibility to other areas in the organization. This firm has a strong customer focus and drives all its efforts to improve flexibility. In addition, the respondent pointed out the capabilities of the small firm that influenced their ability to respond to quick changes in customer demand. These capabilities included: customer-centered mission statement, adherence to the mission statement, effective communication and coordination, central decision-making authority, strong sense of responsibility, and commitment to the customer.

On the contrary, Firm B's owner rarely received customer orders or answered customer queries directly. The store manager undertook full responsibility to receive the order and ensure customer needs were met. However, the owner was usually notified about dramatic changes in customer orders, though these incidents were quite rare. On a few occasions, the firm carried stock of certain brands that were generally not sold in the store. This was done in response to requests from a local Rotary club. However, this firm did not have a mission statement or the technical capabilities to offer product maintenance or after-sales service.

The firm's strong capabilities included flexibilities in delivery options. The owner indicated that customers were increasingly requesting door-to-door delivery of products. Although these deliveries were of small value and quantity, the manager did not hesitate to deliver to areas outside their range of operations. The owner also pointed out that often deliveries to distant locations put pressure on the few employees to take up additional responsibilities. These deliveries were also made at no extra cost to customers.

Firm A relied on its employees' willingness to take on additional responsibilities, cooperation, and coordination efforts to maintain delivery flexibilities and add customer value. Though firm B did not exhibit strong customer commitment compared to firm A, they were adding customer value in delivery options. In short, both firms were not only aware of the need for high flexibility, but also made sincere efforts in improving flexibility in the demand chain.

Customer Focus:

Both firms clearly explained how customer needs were assessed and what capabilities enabled them to assess and meet customer needs. For instance, firm A pointed out that all the partners knew the restaurant managers for several years and hence developed strong relationships ("almost like friendships") with them. Hence, any sudden changes in requirements were communicated either by phone or fax in an informal manner.

Similarly, Firm B mentioned that being in business for 12 years has enabled them to intuitively 'predict' sales of unpredictable items. This was usually done taking into account the local preferences and tastes. Customer input on new items was sought on an informal basis. Besides, a customer service survey indicated certain shortcomings, including insufficient staff and inadequate hours of operation. The firm took the feedback seriously and implemented changes immediately. The owner of firm B mentioned,

> "*after that survey, my sales went up in no time. And because my customers liked the new, improved store, they kept giving Ramu* (the manager) *more and more suggestions during casual talk. One lady told him her new hair dryer could do with some improvement on the extension cord and he sent her comment to the manufacturer. Nine weeks later, the company marketed their improved hair dryer and replaced her old one for free. She was happy.*"

Firm A and B highlighted the importance of developing close customer relationships, having a small customer base, and using informal approaches to assess customer needs accurately and speedily. Besides, prompt implementation of customer feedback assured the customers that their input was being valued. This in turn generated further comments and suggestions on products and services. Since key customer information was sent to the manufacturer, they could solve the problem before major complaints (and lost sales) were given. Hence, the data indicate that both firms were willing and able to meet customer needs, a key practice in the demand chain.

Supplier/Customer Relations:

Since the focus of this paper is on flexibility in the demand chain, the respondents were also asked how their suppliers or traders preceding them in the demand chain were contributing to demand chain flexibility. Specifically, respondents were asked if there was any cooperation and trust amongst demand chain partners that enhanced (or hindered) their ability to meet customer requirements promptly and accurately. Also firms were asked if large firms in the demand chain expected their smaller counterparts to assume additional responsibilities in order to remain in business. Furthermore, respondents were asked to provide input on the type of information flow, coordination, willingness to share resources/benefits, and expected duration and quality of relationship between partners in the demand chain.

Despite showing outstanding commitment towards its customers, firm A experienced difficulties in generating a quick response from their manufacturers or wholesalers, positioned further upstream in the demand chain. The respondent cited that reasons were either due to poor relationships with their suppliers, inefficient communication, or lack of commitment on their supplier side. In addition, they pointed out that most of their manufacturers were big companies who had several customers. Hence, these manufacturers or wholesalers were not always committed to making rapid changes required by firm A. Besides, the respondent from firm A indicated that though it was possible for him to share sales and inventory data, his suppliers were large firms that would not be concerned enough to undertake any significant changes to their internal operations or to their relationships. The respondent stated,

> *"They just don't care about small people like us."*

Moreover, firm A asserted that most of the relationships with their suppliers, though relatively long-term, were based on price criteria. Besides, the respondent felt these relationships were adversarial and improvements in cooperation would certainly facilitate customer response in the entire demand chain.

To some extent, Firm B reiterated firm A's criticisms about large companies in the demand chain. For example, a key point mentioned by the owner was,

> *"at present, it is impossible for me to ask my manufacturers to partner with me and spend money on improving my employees' skills or my shop. Do you think a big company like P & G* (Proctor & Gamble) *will spend on a small shop like mine?"*

Another criticism highlighted by owner of firm B was that he had to hold buffer stock in order to meet customer demand. He explained that large firms would not be interested in partnering with him to share information and reduce inventories across the demand chain.

However, a few positive experiences with manufacturers affected his overall impression. For example, firm B believed strongly that a large company that was marketing a relatively new product line (e.g., hairdryer) was more likely to take customer feedback seriously. Firm B argued that such companies are usually trying to expand their revenue and are quite sincere about improving their products. This firm was also positive about future relationships with large manufacturers. For instance, the firm owner felt that there was plenty of scope for deep, long-term relationships based on cooperation and mutual trust amongst traders in his demand chain. In his words,

> *"of course, this city is still seeing many price-based partnerships. But that trend will change… it will take long, but there is hope for better partnerships. For the time being, I see price competition as the mode of operation"*

The data don't clearly point out the relationship between trust, cooperation, and firm success for SMEs. However, there are several implications with regard to SME supplier/customer relations in the demand chain. First, both firms indicated that partnerships in the demand chain were not based on cooperation or trust, but were mostly price based and adversarial in nature. Secondly, there was also some mention of poor commitment on the part of large firms to improve customer value. Specifically, large firms showed little or no interest in sharing key customer information or modifying their internal processes to accommodate changes in customer requirements. In addition, large firms also dominated the smaller ones in the demand chain, expecting them to hold inventory on their behalf. Hence, data support earlier research that poor cooperation and trust impede information sharing and improvements in customer satisfaction. Moreover, the data support the need for cooperative, long-term relationships to improve customer value, efficiencies, effectiveness, and profit margins for all traders in the demand chain.

OVERALL CONCLUSIONS AND FUTURE IMPLICATIONS

This paper has reviewed the literature on the significance of flexibility, customer focus, and cooperation and coordination among traders in the demand chain. In addition, the paper highlighted key capabilities of small businesses that are conducive to applying these practices. In addition, the paper has pointed out the challenges faced by small businesses when competing in the demand chain. Specifically, this article emphasized the difficulties faced by SMEs in obtaining cooperation and commitment from their large suppliers in the demand chain. The study also extends previous literature on highlighting the importance of strong supplier-customer relationships not only to improve customer satisfaction, but also for improving efficiencies throughout the value chain. Strong supplier/customer relationships are extremely relevant in today's competitive manufacturing environment, which is characterised by global outsourcing and a reduced supplier base.

Future researchers can glean several insights from this article and extend scholarly work in this area. For instance, empirical work is required to identify the type of cooperation and trust required for products with highly volatile demand. In this regard, it seems intuitive that products with relatively low fluctuations in demand (e.g., toothpaste) would not require extensive modifications to the product and to delivery options. Hence, demand chain traders can use forecasting tools to reduce inventory in the whole chain. On the other hand, highly volatile products such as electronics and fashion apparel would require the entire demand chain to be extremely flexible to meet those changes. Hence, inventories, delivery options, and after-sales options should be adjusted depending on demand fluctuations. Rapid fluctuations require firms to communicate more frequently and coordinate their efforts effectively. Although studies have emphasized the importance of supplier relationships, most of these have only looked at first-tier suppliers. Besides, few studies have researched the 'type' of partnership or the extent of trust and cooperation required for products that have highly fluctuating demand. A related research question is what type of capabilities should first-tier and other suppliers have for highly flexible and innovative products. Future researchers can also extend this work to include dimensions of flexibility such as manufacturing and logistics flexibilities and the capabilities required by small traders in the demand chain to manage these types of flexibility.

Practitioners can also gain several implications from this framework. For instance, it is important for managers to invest resources in creating and maintaining trust and cooperation, the key to long-term relationships, with all traders in the value chain. This is a difficult task to accomplish, but the mutual benefits of such partnerships exceed the initial investments.

A major finding of this study is that small businesses have the capabilities to compete successfully in the demand chain. This finding is contrary to anecdotal evidence that SMEs are often unable to compete successfully in the supply chain because of larger firms. Though SMEs often face difficult hurdles, the two firms in this study provide a clear demonstration that some capabilities of SMEs (e.g., informal relationships and closeness to customers) cannot be easily duplicated by large firms. Moreover, the information and advice given by SMEs are indispensable to growth of the entire demand chain. These aspects of SMEs point out their importance in contributing to sales and growth of the economy. Given the contributions of SMEs to the growing economy and the importance of flexibility in creating customer value in the demand chain, it would be useful to further research in this area. Certainly, the SME and demand chain flexibility literature are still evolving and much more empirical research is required in this area. This article is only a first step towards determining the opportunities and threats for SMEs in the demand chain.

REFERENCES

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