The Customer-Supplier Relationships in Supply Chain Management: A Small Manufacturing Enterprise (SME) Perspective

Mamorena Lucia Matsoso¹ and Olumide Henrie Benedict²

¹Department of Management Accounting, Faculty of Business Cape Peninsula University of Technology, South Africa
²Department of Financial Accounting, Faculty of Business Cape Peninsula University of Technology, South Africa
E-mail: ¹<matsosom@cput.ac.za>, ²<benedicth@cput.ac.za>

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ABSTRACT Customer-supplier relationship (CSR) is deemed vital in supply chain management (SCM) processes; well researched, received, understood and practised in large corporations. Sadly, SME’s face a major challenge of benefiting from the concept. This is an exploratory study followed by observations from purposively selected SMEs manufacturing firms. This paper discusses the significance and impact of the relationship in a SCM operation and its success towards the attainment of ‘Just in Time’ (JIT) production in the small manufacturing enterprises (SMEs) sector. Literature reveals that SMEs do not have the negotiating power over their suppliers due to orders being on a smaller scale than those of large entities, and as a result it is difficult to operate a JIT system. Some measures which are significant to product quality and cost effectiveness must be put in place before the implementation of JIT in order to attain a successful SCM operation.

Address for correspondence:
Mamorena Lucia Matsoso
Telephone: +27(0)214603310
Fax: +27(0)866006347
E-mail: matsosom@cput.ac.za

INTRODUCTION

A good relationship between customers and suppliers improves the performance and enhances speedy delivery of goods and services to their final destination. Although this topic is well researched in large entities there remains a lack of research on good relationship building between buyers and suppliers and purchasing practices in small manufacturing entities (Sagar 2012:3). This is a complex relationship due to the utilisation of multiple suppliers by Small Manufacturing Enterprises, often leading to an inability to connect with prominent suppliers, ineffective delivery schedules, and failure to achieve economical prices on orders placed for the most desired quality, quantity and type of commodity (Singh 2011: 620). A close relationship with suppliers is maintained when there are fewer suppliers to work with (Hald et al. 2009: 963), and prices and delivery scheduled dates may be easily negotiated when there is close contact with a supplier. This enables smooth operation in the production and so assists with meeting target-dated dates on supply to the end customer. Furthermore, maintaining a close relationship encourages lean production in a ‘Just in Time’ (JIT) system because there is an advantage for the negotiated delivery schedules:

“JIT is a Japanese management philosophy which has been applied in practice since the early 1970s in many Japanese manufacturing organisations. It was first developed and perfected within the Toyota manufacturing plants by Taiichi Ohno as a means of meeting consumer demands with minimum delays. Taiichi Ohno is frequently referred to as the father of JIT. JIT manufacturing has the capacity, when properly adapted to the organisation, to strengthen the organisation’s competitiveness in the marketplace substantially by reducing wastes and improving product quality and efficiency of production” (Monden 1993: 6; Mackelprang and Nair 2010: 284).

Researchers characterise the ‘buyer-supplier relationship’ as adversarial, based on an antagonistic arm’s length contractual relationship or competitive approach, or collaborative, also known as cooperative or obligational (Gules and Burgess 1996: 32-33). Most firms tend to adopt a Japanese approach which favours a collaborative relationship based on mutual benefit and trust (Gules and Burgess 1996: 33; Shou et al.
Integrated industrial relations between manufacturer and suppliers are critical success factor of Japanese manufacturing firms (Shin et al. 2000: 320). It is vital to institute strategic partnerships with suppliers in order to achieve a successful supply chain. Some firms limit the number of suppliers by implementing review programmes that assist them in scrutinising operational excellence of suppliers, with the best selected when found fit for purpose (Chandra and Kumar 2009:104-105). Identifying fewer suppliers enables smooth operation because it is easier to work with suppliers when a closer customer-supplier relationship (CSR) is maintained (Zhou et al. 2014: 625). A closer relationship with suppliers enhances communication and reduces the level of mistrust among parties involved, which may leverage performance on delivery services that adhere to minimum lead time (Day et al. 2013: 153). Towill et al. (2002: 86) postulate that best practice should be transferred to suppliers while excelling at value-added processes and firms should cooperate with customers to complete seamless operations. Supplies have a strong and significant impact on cost, quality, time, and responsiveness of the customer in the chain (Liao et al. 2010: 10), therefore it is important to have a supplier flexibility network that enhances communication for ideal plans, and collaboration on resolving matters that affect the SCM (Hoof and Thiell 2014: 241). Liao et al. (2010: 10) aver that supply network flexibility opens channels to a responsive supply base that guarantees an effective and reliable supply of commodities. Mikkola and Skjøtt-Larsen (2003: 34) and Chan and Qi (2003a: 209) in turn argue that long-term relationships with few suppliers enable a firm to cut costs while maintaining competitiveness.

Rationale of this paper stems from literature that emphasises SME’s lack of bargaining power with their suppliers. Unlike large counterparts, SMEs do not have strong relationships with their suppliers due to small scale orders. Researchers are of the view that if SMEs do not improve their relationship with suppliers, successful JIT implementation is a milestone. Therefore, it is deemed necessary to unpack the criticality and practicality of customer-supplier relationship towards the effectiveness and efficiency in the implementation of JIT.

The aim of this paper is to discuss the significance and impact of the relationship between customers and suppliers in a supply chain management (SCM) operation and its success towards the attainment of JIT production in relation to SMEs. The discussion will take the form of juxtaposition and proposition of the extent to which good relationship may impact on the implementation of JIT system. JIT can only be achieved or improve the effectiveness of SCM in SMEs if there are other measures already in place, such as identification of prominent suppliers, long-term relationship with suppliers, and a quality performance focus on suppliers that is significant to product quality and cost effectiveness. Despite the complexities of a dynamic supply chain, according to Stevenson and Spring (2007: 658), for a manufacturing firm to be in a competitive environment its customers must take priority in service delivery at a level that aims for shorter lead times.

In the following section the topics discussed are long-term relationship with suppliers, impact and benefits of the customer supplier relationship (CSR) towards the attainment of JIT system, and involvement in CSR by SMEs.

**Supply Chain Management**

SCM represents a set of approaches, which is used to effectively integrate suppliers, manufacturers, warehouses, and stores so that merchandise is manufactured and delivered in the right quantities, to the right places and at the right time, resulting in committed service in order to reduce system wide costs while fulfilling service level requirements (Branch 2009: 2; Simchi-Levi et al. 2003: 1). Burt et al. (2003: 13), in turn describe supply chain management as a “fraction of the organisations value chain, which is responsible for supplying the production and transformation process”. Burt et al. (2003: 7), illustrate that supply chain goes far beyond the last stage, which is the consumer and back to “Mother Earth” - the supplier. For the purpose of this paper SCM encompasses a holistic approach that commences with the supplier until commodities or services reaches the final destination. SCM evolved over the centuries from as far back as 1574. However SCM became popular in the 1980s when competition sky rocketed and compelled the world economy to cut cost, provide high quality, and reliable products which were achieved through flexible supply chain and design flexibility (Tan 2002: 43). Hereafter, man-
Manufacturers began to utilise JIT and other management systems to leverage their firm performance in efficiency, effectiveness and cycle time. Supply chain management is a dynamic concept that requires managing not only individual functions but also integrated management systems into key supply chain operation processes. To achieve a good relationship in an integrated supply chain a firm should maintain a continuous flow of information that assists in improved product flows (Lambert and Cooper 2000: 72). Timely and accurate data is useful to addressing prompt changes with regard to customer demands and attaining a good customer focused system. Further, effective SCM requires control and monitoring of uncertainties in customer demands and manufacturing processes.

Customer-Supplier Relationship

SME manufacturers are facing enormous difficulty in building a good relationship between buyers and suppliers involved in the value chain (Talib et al. 2011: 282). The CSR in SCM is key to an effective supply chain operation and successful implementation of JIT systems. It is believed that if both parties maintain flexible communication regarding matters that affect the value chain their relationship would rise to greater levels, and so may influence the implementation of JIT (Chenhall 2005: 401). However, the strategy of maintaining timely delivery may require suppliers of high eminence and on-time delivery.

It is necessary for SMEs manufacturing firms to aim to develop a seamless production process, coordinated suppliers and customer relationships. It is crucial to ensure that there are other measures in place before the implementation of a JIT production system, some of which are significant to product quality and cost effectiveness, including identification of prominent suppliers to work with, long-term relationships with suppliers, and quality performance that focuses on suppliers. JIT alone is not the ultimate solution towards a successful SCM entity, and may not add value if implemented without the assurance of reliable and trustworthy suppliers that commodities are at the most economical cost and scheduled delivery dates will be adhered to (Fawcett et al. 2008: 40-41). Mishra (2011: 31) asserts the need for buyer-supplier relationship due to acute competition, dynamic markets, customer demands and less tolerance of inferior quality.

Long-term Relationship with Suppliers

Long-term relationships with suppliers are vital to successful implementation of JIT. Mikkola and Skjoett-Larsen (2003: 34) and Chan and Qi (2003a: 209) argue that even with only a few suppliers they enable a firm to cut costs while maintaining a competitive environment. According to Choi and Hartley (1996, in Shin et al. 2000: 319), a well developed long-term relationship with suppliers results in part in a well managed supply chain and has an effect on the competitiveness of the entire supply chain. In addition, a long-term relationship with few suppliers that is well and strategically managed has a positive impact on the financial performance of a firm (Carr and Pearson 1999: 497). Koh et al. (2007: 109) aver that use of few suppliers enable effective communication and a supplier relationship that promotes the growth of SCM performance. Increased financial performance is a result of well integrated industrial relations that lead to speedy delivery and quality of goods. Furthermore supplier’s involvement in the design and development of new and existing products is easier when there are fewer suppliers as dealing with many suppliers for one product line is pricier than monitoring a single supplier. According to Kannan and Tan (2005: 158), involving suppliers early in the design and development of the product is essential towards enhancing the product development stage. The involvement of suppliers in the design and development leverages the level of communication between buyer and supplier, and is precarious for good relationships between these parties (Lee et al. 2007: 445). This involvement also leads to satisfied customers who are actually the main target in the value chain because without them SCM is not significant in terms of the success of the SME manufacturer. In order for a manufacturing firm to be in a competitive environment its customers must take priority at a service delivery level that aims for shorter lead times (Stevenson and Springs 2007: 685).

Reduced Number of Suppliers

A reduced number of suppliers will lower the level of mistrust between buyers and suppliers because when few partners are involved it is easy to enhance ways of communication. Communication improves as a result of fewer people
being involved; it allows for flexible and close contact that facilitates smooth processes in the value chain. When few suppliers are selected it is easy to negotiate special deliveries in periods of high demand. Furthermore, a reduced number of suppliers will help the buyer identify and monitor underperforming suppliers (Pedersen and Andersen 2006: 236). Promptness of delivery leads to smooth production processes, distribution of commodities and ultimately customer satisfaction. In addition, Koh et al. (2007: 109) aver that the use of few suppliers enables effective communication and supplier relationships, thus promoting the growth of supply chain management performance. There should, however be a close relationship with customers in order to ascertain the trends of customer demand changes, thus enable flexible and effective SCM. When multiple suppliers are used in a firm the risk associated with handling them becomes strenuous as they are operating in various turbulent environments (Trkman and McCormack 2009: 250). The optimal strategy utilised by these different suppliers, coupled with their associated problems, may erratically impact on the ability to implement a successful JIT production system and SC as a whole. Trkman and McCormack (2009: 250) warn that absorption of a firm’s suppliers by another company may compromise delivery and give rise to quality problems. Quality performance is the priority in identifying the best suppliers. Shin et al. (2000: 321) aver that the quality of supplier selected is significant to product quality and costs, that a quality control system of supplier information and quality performance assist in selecting the right price for components, and that a close buyer-supplier relationship acts as a prerequisite for information sharing. In their findings, Shin et al. (2000: 330) posit that the manufacturing firms with a high level of supply management orientation (SMO) have improved buyer-supplier relationships. For Kannan and Tan (2005: 159), when outsourcing and core competencies decrease the firms will be under pressure to improve the buyer-supplier relationship key to their success.

Impact and Benefits of Customer-Supplier Relationship Towards Attainment of a JIT System

Supplier partnerships must be maintained at elevated levels if there is to be a successful SCM operation and implementation of JIT production system. It is through close ties with suppliers that SMEs may achieve a smooth material flow, economical cost, and on-time deliveries. Furthermore, collaboration between only a few external suppliers and customers improves relationship, information sharing as well as process integration (Barratt 2004: 33). These may be only achieved as a result of smooth and flexible communication between the parties involved (Liao et al. 2010: 9) flexible communication enhances the production process, and enables firms to achieve a JIT production system which helps them avoid inventory piling and consequent increase in inventory holding costs. Stockpiling may lead to obsolete stock if there is lower demand for particular products. JIT, as defined by Kannan and Tan (2005: 158), is the use of techniques such as set up time and lot size reductions in order to improve the flow of material. Therefore, a JIT production system is best practice, which may be successful only if a secure relationship is maintained with suppliers. This is supported by Hashim et al. (2010: 384), who assert that JIT is the best manufacturing strategy that needs robust and timely information for decision making. With good relationships, SMEs may bargain from negotiated delivery dates to desired quantities of quality products targeted.

Firms who achieve successful negotiating power over their suppliers are likely to meet the demands of their customers. They enjoy the benefits of a large customer base because of reliability resulting from smooth production processes, delivery of quality goods on time, and responsiveness to customer queries. Customers play a significant role in SCM, thus it is pointless without targeting the end customer. Firms must engage their customers in the design of products by seeking information on current demands and trends in the market (Towill et al. 2002: 86). Communication is still vital to ensuring that customers receive their orders in time, in the right quantities and in good condition. Firms must keep up to date with competitive prices in order to attract new markets; however, this may be achieved with a team of people with the appropriate skills and attributes, and with the quality of leadership required to achieve a successful strategic alliance (Tan et al. 2006: 244). Furthermore, there should be a link between the customers and the firm to ascertain that orders are received and managed, and that proper en-
Cost Benefit Impact on JIT

The relationship in SCM between customers and suppliers may significantly impact the cost benefit of JIT implementation. When inventory is kept for longer periods in the business, the holding costs escalate. The rising prices then lead to lower profit margins as a result of slow movement of material to the customers. In an SCM, assets utilised encompass accounts receivables, property, plant and equipment and inventories. Owing to increased inflation and deterioration in liquidity it is crucial for firms to elevate the productivity level of their capital and ascertain the effectiveness and efficiency of assets. It is therefore important to determine how costs associated with each asset in conjunction with its turnover impacts on the total cash flow time. This can be measured by the average number of days required to convert cash invested in assets into the cash collected from a customer (Bhaghwat and Sharma 2007: 50; Gunasekaran et al. 2004: 338-339). Customer-supplier integration is viewed as a purchasing vital tool for a JIT production system (Kim and Ha 2003: 3), which enables the buyer to cut costs by spreading the lot sizes into small manageable quantities that could be placed when the demands arises. The small lot sizes save the buyer from incurring holding costs while fulfilling the benefit of JIT implementation. Otamendi et al. (2011: 4013) favours the lot size reduction by emphasising the simplicity and the need to perform many simple tasks in a series than one complex operation. Again improvement in SMEs manufacturing for a successful implementation of the JIT philosophy maybe lot size reduction, redesign of flow, reduce setup times, increase worker participation including supply chain members such as suppliers, and process design that is focused on product design (Mackelprang and Nair 2010: 284); However, this could be achieved when the two parties share the savings cost by identifying what is critical towards their improved performance management system (Kim and Ha 2003:8). Trust between buyers and suppliers is deemed important by offering SMEs with an alternative to manage inter-firm relationship particularly relationships with their suppliers (Mishra 2011: 33; Jean et al. 2010: 68).

When a good relationship is not maintained between customer and supplier the total supply cycle time is affected. Supply lead time refers to the time between commitment to product, which implies identifying the desired product, placing an order, and getting raw material from the supplier until goods reaches the final stage (the consumer) (de Trevill et al. 2004: 623). Supply lead time needs development to ensure reduced lead time in the production of goods to delivery, and is defined by Pearson and Ollager (2002: 232) as a “function of quality levels and of the supply chain structure”.

Purpose of JIT and SME Collaboration

The significance of JIT was recognised in the early 1980s (Kim and Ha 2003: 2), enhancing the effectiveness of quality control in the value chain (Zhou et al. 2014: 625). It reduces the set up time, improves quality, flexibility, and remarkable service delivery from suppliers by building a long-term relationship between suppliers and customers. The suppliers work in collaboration with the customer. However, this is only possible where there are few suppliers or even a single supplier, thus strengthening the relationship between buyer and supplier. On the contrary, some researchers argue that the CSR is more likely to be maintained in large companies as a result of more bargaining power in negotiations with their suppliers, which also enables them to implement and enforce the CSR standard required through the value chain (Jenkins 2004: 55; Pedersen and Andersen 2006: 239). When SMEs form collaborative partnership amongst themselves based on open systems and information sharing, while emphasising the relationship between co-operation and innovation, SMEs may experience improved performance and increased productivity (Casals 2011: 120-121; Hoof and Thiell 2014: 241). This may eventually lead to effectiveness and enable smooth implementation of JIT. Moreover; this collaboration is significant to the needs of SMEs to complement their internal knowledge with external sources. Collaborations among SMEs have been fostered by saving costs, gain buying powers with suppliers, permitting them to obtain better deals, enables access to big projects and funding, increases flexibility and performance among business as well as product quality and innovation towards business performance improvement (Casals 2011: 121).
Despite all the reasons for collaboration towards the growth and success of SMEs, there are envisaged problems that may impede the idea of maximisation of systems and efficiency which may lead to flexible implementation of a JIT production system. Some of the problems envisaged are lack of strategic co-operative planning as a result of unskilled personnel, scarcity of resources and inability to devise new business opportunities due to lack of time and knowledge know how (Casals 2011: 122). Urban and Mothusiwa (2014: 60) agree with Casals by postulating that improper planning and poor management are major concerns for SMEs due to their resource constraints.

Involvement in CSR by SMEs

Involvement is CSR is crucial in enabling a successful and effective environment in the value chain that strives to meet the demands of the customers. However, SMEs still lack proper involvement in CSR which is caused by deficiency of power, human capital, financial and bargaining power over their suppliers and inability to take charge of the entire supply chain process (Pedersen 2009: 113; Singh 2011: 620). Pedersen suggests joint ordering by SMEs to promote CSR. SMEs may not benefit fully from a JIT production system due to the nature of their clients, most of who buy in small quantities that would not necessarily require formal placement of orders. These clients are also known as ‘walk-ins’, who contribute greatly to the profitability and sustainability of SMEs. Therefore, JIT implementation may not be the ultimate since the SMEs would not have available stock for unplanned demand. SMEs need to cater for all types of customers, including ordinary and sophisticated clients from all walks of life, thus stockpiling may serve as the basis for meeting all customers demands, particularly in periods of high demand. They may not suffer from delayed deliveries from their suppliers and that may help them to cater for safety stock and maintain their re-order point to circumvent an out-of-stock situation. Furthermore, they may opt for Economic Order Quantity (EOQ), which enables SMEs to pay the lowest possible ordering and holding cost for their order quantities. Moreover, JIT may also be a threat to SMEs, resulting from fear of losing their customers during periods when delayed deliveries are experienced. High concentration on CSR by SMEs may also hamper other processes in the production and assurance of customer contentment from the value chain.

Due to the nature and size of SMEs, when more time is invested in building the relationship with suppliers, other obligations and responsibilities shared by few managers involved in the value chain may be ignored. Although CSR acts as a prerequisite for JIT, it is also a challenge for SMEs to maximise on this relationship building with suppliers, therefore other avenues may have to be aspired to strengthen the effectiveness of SCM and implementation of JIT.

METHODOLOGY

This is an exploratory study that involved purposively selected manufacturing SMEs. A literature review on customer-supplier relationship and JIT implementation was discussed as a preliminary investigation to provide an in-depth understanding of the significance of customer-supplier relationship towards a successful JIT implementation in SMEs.

OBSERVATIONS AND DISCUSSION

It is propounded that close ties with key customers and a good CSR is imperative for SMEs, just as in large corporations. Findings from the literature and the managers of SMEs in purposively selected businesses indicate that although SMEs claim to have a good relationship with their suppliers, they still do not have the negotiating power over their suppliers due to small scale orders (Pedersen 2009: 113; Singh 2011: 620). It is only through involvement with suppliers through flexible communication that JIT can be realised in SMEs (Day et al. 2013: 153; Hoof and Thiell 2014: 241). Most SMEs operate on a stockpiling basis to avoid stock shortages during periods of high demand. Some firms utilize multiple suppliers for different products (Singh 2011: 620). It is therefore evident from these findings that achieving a JIT manufacturing system is still a milestone for SMEs. SMEs lack the skills and techniques to successfully implement JIT in their organisations. However some firms indicated that JIT would be beneficial to their businesses thus help them to minimise unnecessary costs such as holding costs which concur with the literature (Liao et al. 2010: 9). The major problem is that of capital injection
to implement JIT in their operation systems and lack of knowledge know-how. With those that implemented JIT found it harder to succeed with inefficient technological equipment and lack of close relationship with their supplier due to small orders.

CONCLUSION

The aim of this paper was to discuss the impact of the CSR on the implementation of JIT systems in SME manufacturers and its significance. An exploratory study that involved a purposively selected SME manufacturer was adopted to understand the significance and impact of CSR in SCM towards the attainment of JIT production. Major findings in this study indicate that SMEs still do not have negotiating powers over their suppliers due to small scale orders. Again most of these businesses operate on a stock piling to elude stock shortages. Therefore it is evident that it’s still a milestone for SMEs to successfully implement JIT production in their businesses. Finally, for JIT to be successfully implemented in SME manufacturers, some measures which are significant to product quality and cost effectiveness should be put in place. Some of these which are significant to product quality and cost effectiveness include identification of prominent suppliers to work with, long-term relationship with suppliers and quality performance that focuses on suppliers.

RECOMMENDATIONS

Further studies may be carried out to identify what measures can be taken to improve the effectiveness of a CSR that leads to JIT operation system in SMEs. It is also necessary to establish the extent to which joint ordering will help the SME manufacturers achieve successful implementation of JIT and smooth material flow at the most economical cost.

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