BUYER-SUPPLIER RELATIONSHIP AND SUPPLIER RESPONSIVENESS: A CASE OF MANUFACTURING FIRMS LISTED IN NAIROBI STOCK EXCHANGE, KENYA

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Abstract
This study sought to examine the influence of buyer-supplier relationships on the supplier responsiveness. The population of this study was manufacturing firms in Kenya, forming a total of 90 respondents. The sample size resulted to 48 respondents. Questionnaires were issued out to the respondents in their respective departmental functions. Stratified random sampling technique was used. Primary data was collected using the questionnaires and analyzed using both descriptive analysis and correlation techniques. Findings from the study revealed that buyer and suppliers in the manufacturing sector are in collaborative relationships which have enhanced the ability to respond fast and in conformance to the products and service requirements of the buyer. The study recommended that all firms in other sectors should embrace this nature of relationships. Also all firms should try to optimize their information systems in order to enjoy the full benefits of sharing information and hence improved supplier’s ability to respond to needs.

Keywords: Buyer-supplier Relationships, Transaction cost theory, Supply chain, Kenya
INTRODUCTION

Relationships emerged during early 20\textsuperscript{th} Century in Japan (Nishiguchi, 1994). Excessive demand for parts of goods after World War I urged many companies to utilize suppliers following the temporary increase in productions (Nishiguchi, 1994). In 1960s and ’70s relationships were characterized by an adversarial, arm’s-length approach suiting price oriented buying. At the beginning of the ’90s, relationships required an even greater degree of interaction due to the added need for product innovation and cooperation in technological developments, and this high level of interaction is termed partnership (Lamming, 1993).

However, many organizations are now moving towards more cooperative relationships with suppliers (Spekman, 1988). Buyer-supplier relationships play a very crucial role in an organization’s ability to respond to dynamic and unpredictable changes in the industry operating in. If the relationship is too restrictive, flexibility will be difficult to achieve and if it is too lenient the risk of opportunism will crop in (James, H., & Faizul, H., 2000). In Kenya, relationships gained attention early 2000, although having good suppliers is important, surveys shows that Kenyan organizations continue to struggle with buyer-supplier management. A study on the Ministry of Special Programs shows that it has not achieved high levels of supplier’s performance necessary for delivering competitive market advantage (G.o.K., 2006). Because it does not have one system to periodically evaluate the performance of its suppliers. Identification of when these relationships are appropriate, the dimensions of effective relationships and how relationships can be a source of competitive advantage have received considerable attention in the literature (Ellram, 1995).

Firms compete in head-to-head battles for market share and position with other organizations in their competitive sets. Here suppliers are often treated in an adversarial manner by buyers, as the relationship between buyers and suppliers are viewed in a win-lose situation (Shapiro, 1999). It is imperative, therefore for firms to appreciate that supply chain relationships are not simple to cultivate and maintain collaborative efforts. The relationships should be for a strategic subset of suppliers and customers of the supply chain. These subsets of suppliers are firms that provide strategic products, or services, or who purchase large quantities of finished goods. This has brought about the concept of supplier positioning where suppliers are classified in different categories based on the product value and risks (Spekman, 1988).

However, many forward-looking firms have found it more effective to work collaboratively with their suppliers to serve the ultimate customer. Terms such as alliances, partnerships and collaborations have been used to describe these new buyer-supplier relationships (Crotts, Buhalis, & March, 2000). Recent trends to buy instead of make, to outsource instead of
continue to make, to improve quality, to lower inventories, to integrate supplier and purchaser systems and to create cooperative relations such as partnerships have underlined the need for outstanding performance and that calls for negotiation. For good supplier relationship management, the members of the internal team have to deal directly with their appropriate counterparts on the supplier side (Leenders et al., 2006).

A closer and stronger relationship allows the channel members to achieve quality improvements, cost reductions and revenue growth. As well they provide capability to deal with demand and supply uncertainties (Lee et al., 1997). The determination of the knowhow of supplier processes and the total cost structure helps to develop supplier relationships (Liker et al., 2004). Effective supplier management can make the procurement process more cost and time efficient. Having supply market intelligence and applying a correct competition situation are ways to implement a good supplier management strategy. Other issues that should be accounted are a reliable source for supplier performance, evaluation and developing the suppliers. With the help of common procurement approaches and development projects the supplier relationship is utilized to the maximum (Iloranta, 2008.)

Information systems refers to a system of interrelated components working together in order to collect, process, store and disseminate information to support decision-making, control and analysis in an organization (Laudon and Laudon 2005). The Internet can change the role and type of relationships between the various players, creating new value networks and developing new business model (Muffatto and Payaro, 2004). When information systems are used in managing the supply chain, conflicts may arise between organizations that are part of more than one supply chain, with varying strategic directions. These systems must fit within the organizational requirements of the supply chain members, or else the overall acceptance may not be adequate for the system’s use (Volkoff et al., 1999). This is managed by cross-functional teams.

Supplier development is any activity undertaken by a purchaser to improve a supplier’s performance or capabilities to meet the purchaser’s short and long-term supply needs. Organizations rely on a variety of activities to improve supplier performance, including sharing technology, providing incentives, providing capital, and direct involvement of personnel with suppliers through activities such as training Krause and Handfield (1999). There is ample subjective evidence in corporate practice and academic research that supplier development helps improve supplier performance and or supplier capabilities (Krause et al., 2000). This helps them meet supply needs and generate favorable results for the buying firm. Recognizing the long-term and strategic benefits of supplier development, many companies have established supplier development programs and teams (Krause and Handfield, 1999).
According to Kohli et al. (1999), responsiveness is the action taken in response to the relevant information generated and subsequently filtered between buyers and suppliers. They propose that a firm's responses need to be aligned with its customers' needs. A responsive organization knows how to execute its strategy and day-to-day options, make the constant adjustments to customer, market and internal changes and thrive in an environment of dynamic competition. Responsive companies do not lag the market; rather they act on decisions with focus, speed and scale. They know what they are, and more importantly what they are not. As markets and technologies change, more and more rapidly suppliers must respond quickly and frequently to strategic moves if they are to sustain competitive advantage (Walker, 2005). Hence, supplier responsiveness is a necessity to manufacturing firms.

The supplier positioning model is a way that businesses rank their sources of supplies based on the amount of money spent with the supplier and the level of vulnerability a business has if that supplier fails. According to Kraljic (1983), supply positioning is a process of measuring spend or profit impact via volume purchased, percentage of total cost and impact on product quality or business growth by supply risk via availability, number of suppliers, competitive demand, storage risks and substitution opportunities (Kraljic, 1983). Many large companies specify which suppliers are to be used by their first-tier suppliers, mainly because particular critical components have to fit with other critical components (Johnsen, 2000).

Manufacturing is an important sector in Kenya and it makes a substantial contribution to the country's economic development. The manufacturing firms depend largely to their suppliers to avail quality raw materials at the right time. The Nairobi Securities Exchange (NSE) is the main securities exchange of Kenya and the heading securities exchange in East Africa constituted in 1954. Of real concern in the financing posting in this study are the manufacturing and allied firms. The manufacturing and Allied firms recorded in NSE incorporate; B.O.C Kenya Ltd, British American Tobacco Kenya Ltd, Carbacid Investments Ltd, East African Breweries Ltd, Mumias Sugar Co. Ltd, Unga Group Ltd, Eveready East Africa Ltd, Kenya Orchards and A.baumann CO Ltd (NSE, 2013). This forms the target population and procurement, finance and Production staff will be target respondents. Manufacturing firms depend to a larger extent on their suppliers to avail the right products, in the right quality, quantity and in the right time. Ideally suppliers ought to be fast in responding to their buyer's needs. However, in many cases, supplier slackness and laxity in responding to buyers needs has been a common occurrence characterized by increased lead times and cycle time. This has a negative impact to the buyers causing them to keep large buffer stock to cater for supplier uncertainty. Hence, it is paramount for firms to create relationships that boost the way suppliers respond to them. In addition, many researchers have focused on the supplier relationship subject leaning towards the buyer
organizations performance without looking at the influence of any relationship on how the suppliers will respond. In addressing the knowledge gap on supplier responsiveness subject, the researcher looked at the following variables in Buyer-supplier relationship and how they relate to supplier responsiveness; Supplier positioning, nature of relationships, Information systems adoption in existing relationships and supplier development.

**Research Objectives**
The general objective of this study was to examine the relationship between the supplier relationships and supplier responsiveness. Arising from this, the following were the specific objectives:

(a) To examine the influence of nature of buyer-supplier relationships on Supplier responsiveness in manufacturing firms.
(b) To examine the relationship between information system adoption and Supplier responsiveness in manufacturing firms.
(c) To find out the extent to which supplier positioning is embraced in the existing relationships in manufacturing firms.
(d) To find out the relationship between the supplier development and Supplier responsiveness in manufacturing firms.

**Research Questions**
(a) What is the influence of nature of buyer-supplier relationship on supplier responsiveness in manufacturing firms?
(b) What is the relationship between information systems adoption and supplier responsiveness in manufacturing firms?
(c) To what extent has Supplier Positioning been embraced in existing relationships manufacturing firms?
(d) How does development of existing suppliers relate to suppliers responsiveness in manufacturing firms?

**REVIEW OF EXISTING THEORIES**

**Resource- Based Theory**
This theory analyses long-term relationships with a group of key suppliers on the basis of a win-win philosophy, which can result in a longer lasting competitive advantage than provided by a system of competitive bidding (Harrison and John, 1996). This theory is based on assumption that supplier firms are bundles of resources and if these resources are valuable, rare, unique,
and un-substitutable, sustaining competitive advantage can be achieved (Barney 1991). Trust; the desire to work together and the efficient flow of information allow creation of a sustainable competitive advantage (Hoyt and Huq, 2000). Companies in the same industry may select a completely different organizational structure, but be equally successful. The more these resources are the basis for success, the more the firm depends upon them. RBV is a theoretical framework for understanding how competitive advantage is achieved by focusing on the external organization (Barney, 1991).

**Relationship Marketing Theory**
This theory offers various dimensions such as commitment and cooperation that are useful in studying the various relationships that exists between different phenomenon that are related to the relationship between the buyer and the seller especially in aspects of information sharing and supplier responsiveness (Wilson, 1995). The relationship marketing theory explains the various buyer-supplier relationships and its information sharing aspects (Toften & Olsen, 2003). As well it offers explanation of the various streams in the relationships, the various dimensions in the relationship as well as the rationale or the justification for the relationship such as the structure and the process of the relationship. Hence, it will be used in this research to show nature of relationships among firms (Olsen, 2003)

**Nature of Buyer-Supplier Relationships**
From the literature it can be seen that the relationship between buyers and suppliers falls along a spectrum, with adversarial being at one end and collaborative relationships at the other.

<table>
<thead>
<tr>
<th>Collaborative partnership approach</th>
<th>Adversarial arm’s length approach</th>
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<tr>
<td><strong>Spectrum of Types of Buyer-Supplier Relationship</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: (Harland, 1996)

According to McGinnis and McCarty (1998), in an effort to optimize buying externally, companies are instituting sophisticated new buying processes and changing the relationships they have with their suppliers. Traditional relationships in the 1960s and ’70s were characterized by an adversarial, arm’s -length approach. This suited traditional purchasing, which is primarily price-oriented. At the beginning of the ’90s, relationships required an even greater degree of interaction due to the added need for product innovation and cooperation in technological developments and this high level of interaction is termed partnership (Lamming, 1993).
According to Petison and Johri (2007), relationships can be categorized into two major categories: adversarial and collaborative.

**Adversarial Relationships**
This is a traditional view of relationship. According Lamming (1993), the adversarial type encompass relationships that other cited authors called adversarial, competitive, transactional, contractual or arms-length (Humphreys et al., 2001). They state that this type of relationship assumes no real difference in ability among suppliers and is characterized in terms of short-term based contracts, in which each buyer purchases among many suppliers in order to create price competition among the suppliers (Kim and Michell, 1999). Aim is to minimize the purchase cost of supplies, and generally to undertake the transaction successfully without focus on long lasting relationships. The Relationships is characterized by lack of trust, little co-operation, lack of shared mutual goals as well as little information sharing (Humphreys et al., 2001).

**Collaborative Relationships**
Collaborative were cited to have been named the same as partnership, closed, relational or collaborative (Humphreys et al., 2001). This category is characterized by relationships in which suppliers typically are subsidiaries or affiliates of the buyer (Lamming, 1993). These relationships are based on having long term relationships with a few selected suppliers. Besides saving costs, collaborative relationships also aim to, among others, improve the ability to produce technologically sophisticated products and to achieve more effective communication flow, more reliable delivery and better quality (Szwejczewski et al., 2005). The antecedents this relationship have been denoted by researchers to be commitment (Petison and Johri, 2007), trust, joint action and flexibility and specific transaction investments (Claro et al., 2004).

Other authors categorized three different types of relationships after they had reviewed the numerous research works that had given between seven and eight varying relationship dimensions that could be explored: arm’s length, cooperative relationships and integration. Arm’s-length transactions neither provide time for personal relationships within the business framework, nor do they require any shared trust or extensive personal communication beyond the transactions themselves (Drake and Schlachter, 2008). Co-operative relationships promote the sharing of knowledge, which is considered a source of competitive advantage. Integration describes nature of SCM as it includes the entire value chain and performs each of the channel functions (Mentzer et al, 2001).
Supplier Positioning

The supplier positioning model is a way that businesses rank their sources of supplies based on the amount of money spent with the supplier and the level of vulnerability a business has if that supplier fails. According to Kraljic (1983), is a process of measuring spend or profit impact via volume purchased, percentage of total cost and impact on product quality or business growth by supply risk. Many large companies specify which suppliers are to be used by their first-tier category, mainly because particular critical components have to fit with other critical components (Johnsen. 2000). Because the purchasing and supply strategies have to support the overall business strategy that focuses on the demands and requirements of the major customers, firms are forced to enter into relationships (Johnsen. 2000)

Figure 1. Kraljic Supplier Positioning Matrix

The four types of relationships strategies are: Acquisition which means many suppliers, buyers dominates (Kraljic, 1983). Focus on supply chain optimization, efficient procurement processes, and receiving bids from many suppliers. Profit positioning requires Lots of suppliers, but big impact on company if supply is disrupted; so, consider target pricing strategies and umbrella contracts with preferred suppliers. Security: Few suppliers, but not a lot of financial risk from supplier failure; so, consider volume insurance contracts, maintaining buffer stock, and always be on lookout for alternative suppliers (CIPS 2009). Critical: The Company depends on the suppliers. The company will look for performance-based partnerships, with market and technology leaders, owning specific know-how. The position can result to strategic alliances, building close relationships, even vertical integration (Steel and Court 1996).

Information Systems

Refers to a system of interrelated components working together in order to collect, process, store and disseminate information to support decision-making, control and analysis in an organization (Landon and Landon 2005). Information technology and in particular the Internet,
have played a fundamental role in helping companies reach the goals of supply chain integration. The Internet can change the role and type of relationships between the various players, creating new value networks and developing new business model (Muffatto and Payaro, 2004). These systems must fit within the organizational requirements of the supply chain/network members, or else the overall acceptance may not be adequate for the system’s use (Volkoff et al., 1999).

Information systems in particular have contributed to the establishing of Supply chain management systems which link suppliers to the buyer organization promoting supplier intimacy (Landon and Landon 2005). It has also led to the application internet in the application of Electronic data exchange systems. The Internet has given companies even greater tools for tightly orchestrating relationships across the entire supply chain and creating strategic partnerships and operational linkages with a dynamic web of large and small firms spanning all continents. Internet-enabled shared information helps break down organizational policies and functional fences, helping supply chain alliance members develop a common understanding of the competitive environment (Boyson et al., 1999).

Information Systems researchers have mainly focused on the impact of IT in reducing coordination costs. This includes the cost of exchanging information and incorporating that information into decision processes as well as the cost incurred by the firm due to delays in the communication channel (Clemons et al. 1993). Within the context of transaction cost theory, this is a major component of transaction costs. However, the other major component, transaction risk, includes the risk of opportunistic behavior as well as the risk due to information asymmetry among the parties. One party could avoid responsibilities due to the inability of the other party to monitor. In addition, as indicated earlier, one party could take advantage of the relation-specific investments of the other. In addition to coordination cost, IT can reduce transaction risk by providing effective monitoring capabilities (Clemons et al. 1993).

**Supplier Development**

Supplier Development is the process of collaborating with suppliers to improve their processes and product manufacturing capabilities. In the literature Krause et al. (2007) the concept of supplier development is advocated as a means to transfer knowledge between the firm and its suppliers. Visiting suppliers is good for your knowledge. Firms should not only let the supplier to deliver the products, but must also know what more or else he can make right products (Cousins et al. 2008). In long-term relationships, it would be important to consider not just the current supplier capabilities, but also their potential capabilities. The concept of supplier
development was especially relevant to my research because it is a form of supplier relationship which assumes trust and reciprocity in information exchange (Handfield et al., 2000).

According to Hartley and Jones (1997) supplier development is composed of related processes; assess the supplier's readiness for change, build commitment through collaboration, implement system-wide changes, transition out of the suppliers organization, establish follow-up and recognition procedures. Handfield et al. (2000), proposed a process map for supplier development: such as identify critical commodities, identify critical suppliers, form a cross-functional team, meet with supplier's top management, identify key projects, define details of agreement, monitor status and modify strategies. Strategic planning and risk definition, engagement, collaboration and project management, process and controls, training and facilitation and continuous improvement and Surveillance (Handfield et al., 2000).

Supplier development is any effort of a buying firm to increase the performance and capabilities of the supplier and meet the buying firm’s supply needs (Krause & Ellram, 1997). Due to long term strategic benefits from supplier development, major global entities have implemented supplier development programs to support suppliers. Most of them have resulted in product quality improvement and reduction of cost (Krause et al, 2007). In view of this fact, the performance of suppliers has significant effect on many production dimensions of the firm such as delivery and quality (Krause et al, 2007). Manufacturing and service companies are trying to work effectively with suppliers through sharing information, technical knowledge and schedules of production (Vermin, 2003).

Basic activities require limited buying firm’s involvement and are likely to hold a low implementation complexity (Sanchez-Rodriguez et al., 2005). These include supplier evaluation and feedback, sourcing from a limited number of suppliers, parts standardization and supplier qualification. Moderate activities refer to those demanding moderate levels of buyer’s involvement characterized by visiting suppliers to assess their facilities, recognizing and rewarding supplier improvements, collaboration with suppliers in terms of components improvement and supplier certification (Sanchez-Rodriguez et al., 2005). Advanced activities call for more resources to be allocated which is caused by high levels of buying firm’s involvement and implementation complexity (Sanchez-Rodriguez et al., 2005). Activities here consist of personnel training, new product development supplier involvement and sharing of vital data by the supplier, including financial, cost and quality related data.

According to Hartley, supplier development programs can be either results or process-oriented. Results –oriented programs focus on solving specific problems for suppliers and normally involve step-by-step changes relating to suppliers’ costs, quality and delivery (Hartley et al. 1997). Three characteristics of results oriented supplier development identified: the
process is standardized and buyer-driven, the changes made are primary technical and the process is of short duration and requires limited follow up. Process-oriented programs focus on increasing the supplier’s ability to make production improvements without hands-on assistance from the buyer. This requires the supplier to learn the problem solving techniques required for continuous improvements (Hartley et al. 1997).

**Supplier Responsiveness**

Responsiveness is defined as the capability of promptness and the degree to which an entity can address changes in customer demand. Supplier responsiveness is defined as the ability of a firm’s major suppliers to address changes in the firm’s demand (Peck, 2004). A key to responsiveness is the presence of responsive and flexible partners downstream of the focal firm (Christopher and Peck, 2004). Whenever disruptive causes such as new technology, substitutes threats (Walker, 2005) or cut-throat competition tend to throw the supply chain haywire, the supply chain networks must be ready to react to any ripple effect. The type of buyer-supplier relationship therefore affects the supplier responsiveness. This hence requires buyers to ensure good relationships in practice (Christopher and Peck, 2004).

Supplier responsiveness is a boundary-spanning course of action facilitating reconfigured resources and sourcing activities in response to global threats and opportunities in the market place (Tsai et al., 2009). It has been clearly established that, buyer-supplier network ties and alliances in terms of production and distribution plans are positively associated with responsiveness (Dong et al., 2007 and Danese, 2011). So also it’s evident that, coordinated ability to effectively link and developed dispersed location networks is an integral tool multinationals firm’s world class responsiveness (Kim et al., 2003). While other postulate that, inward and outward cross functional teams knowledge spill over is greatly associated with responsiveness (Kohli et al., 1993). Hence, organizations need to check how their suppliers respond to their needs always.

Supplier responsiveness is critical in new product development and can directly affect the time-to-market of a firm. It’s suggested that failure to include suppliers’ inputs in product development is a vulnerable aspect of supply chain management. McGinnis and Vallopra (1999) found that involving suppliers could make new product development a success. For short lifecycle products retailers are most successful if they can work with suppliers who can provide initial shipments of product based on forecasts, but then rapidly increase production based on actual sales (Fisher et al, 2000). These researchers note that fast supply chains can produce products as they sell rather than worrying about accurate forecasts. These studies suggest that
supplier selection based on product development capabilities and rapid deployment capabilities positively impact the delivery time of new products (McGinnis and Vallopra, 1999).

Notably, buyer-supplier ability to collaboratively solve problem will in turn enhance responsiveness, shorter lead time, reduced cost and improve quality performance (Takeishi, 2001). Thus, social interactions aid noticeable environmental solutions in influencing organizational responsiveness (Liao et al., 2003) and significantly pose as a critical component in firm performance (Hult, 2005). Of particular interest is the anecdotal empirical evidence gathered and revealed that supplier power and trust serve as a key for responsiveness (Handfield, 2002). It is evident firm’s successful responsiveness performance is largely dependent on how to manage external ties effectively (Kotabe and Murray, 2004).

In the supply chain relationships, cycle time decrease has been viewed as a standout amongst the most imperative result variables (Hult, et al, 2007). Today’s complicated and dynamic business environment obliges suppliers to create process duration based capacity to manage focused and changing circumstance to fulfill requesting worldwide clients (Handfield and Bechtel 2002). Responsiveness could be standouts amongst the most essential element abilities which help firms accomplish more prominent competitiveness in front of rivalry in production network connections. Higher supplier responsiveness is emphatically identified with enhanced client fulfillment and upgraded business sector execution (Kim et al, 2006). Thus it is central that the exercises which can advertise better connections and thus better supplier responsiveness ought to be placed set up (Holweg, M. 2005).

According to Irene (2010) in research on buyer-supplier relationship and organizational performance, the study shows that 72.3% of respondents in manufacturing firms were using supplier relationships. The research shows that the following factors have been adopted by many large manufacturing organizations to a large extent: Communication between company and suppliers, Trust between company and suppliers, Maintenance of long term relationships, Commitment between company and suppliers, Mutual information sharing between company and suppliers, Responsiveness to each other’s needs and Understanding of each other’s roles and responsibilities. All of the above factors had 55% of the total respondents view.

Research on relationship between supply chain performance and supply Chain responsiveness of supermarkets in Nairobi was viewed (Joash Et al, 2012). The study focussed on the respondent’s response on how often suppliers meet delivery timeliness. From the research findings 79.2 % of the suppliers meet always, 20.8 % meet occasionally while there are no suppliers who do not meet their delivery timeliness. However online ordering has not gained popularity most suppliers do meet delivery timeliness.
Conceptual Framework

Conceptual framework shows the relationship between two variables; the independent and the dependent variable. According to Mugenda, (2003) an independent variable is a property of phenomenon where their effect influences the other. Dependent variable is the one that is influenced by the independent variable. Supplier responsiveness will depend on the following independent variables as illustrated in figure below

Figure 2. Conceptual framework

In the conceptual Framework shown above, buyer-supplier relationship is hypothesized to influence Supplier responsiveness. Where buyer-supplier relationship is defined from the nature, information sharing, supplier positioning and development perspective while Supplier responsiveness here is measured in relation to key aspects; in terms of speed of responding to both information and materials needs and the other aspect is response based on how suppliers conform to products and services requirements as under buyer specifications

METHODOLOGY

The study was conducted through descriptive research design. According to Pinsonneault and Kraemer (2002), the major purpose of descriptive research is to provide information on characteristics of a population or phenomenon. The target population was comprised of 4 Procurement, 3 Finance department and 3 production Department staff members in each of the 9 firms listed in Nairobi Stock Exchange and which are members of KAM. This resulted to 90 respondents in total. The main reason for this choice was that these firms were likely to exhibit
an elaborate buyer-supplier relationship philosophy and make use of best practices in this relationship (Awino, 2009).

Using Naissuma (2000) formula with a confidence level of 95%, coefficient of variation of 0.5 and precision level of 5%, the sample size of this study is 48 respondents. The study employed both stratified random sampling to select the sample. The subgroups will be the 3 departments and the technique aims at proportionate representation with a view of accounting for the difference in subgroups characteristics.

Primary data was gathered from the three department staff members of the 9 large manufacturing firms in Nairobi. Secondary data was also collected from journals, books and article publications. The above personnel were considered appropriate since they understand better the influence of buyer - supplier relationships on the Supplier responsiveness. The data was collected by use of a structured questionnaire that was administered by “drop and pick” method. Questionnaires were preferred because of their quickness and efficiency in obtaining information from a large number of respondents offers a sense of security (confidentiality) to the respondent and it is objective method since no bias resulting from the personal characteristics as in an interview, (Owens, 2002). Likert scale was used in preparing the questions to get the respondents opinions concerning the variables under study. The test re-test technique was used to estimate the reliability of the instruments. This involved administering the same test twice to the same group of respondents who have been identified for this purpose. Data analysis was conducted using both descriptive and inferential Analysis that is correlation analysis. Since the objectives are based on finding the relationship between the independent variable and the dependent variable, this analysis was necessary to establish the relationships. Correlation was used because correlations investigate the strength of relationship between two variables consisting of interval or ratio data. In this case, Pearson Correlation Coefficient was determined with the main objective of establishing the nature and strength of relationship between the dependent variable and all the independent variables. Data was presented using Frequency bars.

ANALYSIS AND FINDINGS

This study was carried out to establish the effect of buyer supplier relationships on Supplier responsiveness among large manufacturing firms (N.S.E 2013 List) in Kenya. A total of 48 questionnaires were distributed to large manufacturing firms in N.S.E list 2013. Out of the 48 questionnaires, 36 were returned to the researcher. This represents a response rate of 75%. This percentage was considered sufficient for this study. This response rate was excellent and representative and conforms to Mugenda and Mugenda (1999) stipulation that a response
rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. The 25% who never returned the questionnaires cited busy schedules as the main reason for lacking time to fill them.

**Nature of Buyer-Supplier Relationships**

Different manufacturing firms enter into different nature of relationships depending on the type of transaction either repetitive or one-off. The determinants of the nature of the relationships are trust, commitment level, co-operation, having shared mutual goals and long/short term interaction. The suppliers play a key role in ensuring materials are availed as and when they are required hence a cordial relationship become a necessity. The relationships were categorized into collaborative and adversarial natures.

<table>
<thead>
<tr>
<th>Nature determinants</th>
<th>SD %</th>
<th>D %</th>
<th>N %</th>
<th>A %</th>
<th>SA %</th>
<th>MEAN</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>We have high trust with our suppliers.</td>
<td>0.0</td>
<td>8.3</td>
<td>5.6</td>
<td>47.2</td>
<td>38.9</td>
<td>4.17</td>
<td>0.878</td>
</tr>
<tr>
<td>There is a high level of commitment between our company and our suppliers.</td>
<td>0.0</td>
<td>2.8</td>
<td>19.4</td>
<td>50.0</td>
<td>27.8</td>
<td>4.03</td>
<td>0.774</td>
</tr>
<tr>
<td>We maintain long-term relationships between our company and our suppliers.</td>
<td>0.0</td>
<td>2.8</td>
<td>13.9</td>
<td>55.6</td>
<td>27.8</td>
<td>4.08</td>
<td>0.732</td>
</tr>
</tbody>
</table>

The above table provided information necessary in establishing the nature of buyer-supplier relationships the respondents firm have formed.

The variables used here were trust, commitment and long-term interaction. The mean of high trust, commitment and long-term being 4.17, 4.03 and 4.08 hence to large extent the relationships are collaborative in nature as a range of above 4 reveals to above moderate extent the respondents agree with the research question. This information will also form basis of analyzing the relationship between this nature and supplier responsiveness. The above information reveals that most firms have embraced collaborative relationships with their existing suppliers.
Supplier Positioning in Buyer-Supplier Relationships

Supplier positioning concept in existing suppliers was analyzed based on the profit impact and supply risk. Profit factor is necessary as every firm aims at maximization of its profits. Market supply risk implies the level of uncertainty in the supply of products by suppliers. The table below shows the extent this concept is practiced in large manufacturing firms. The scale below will be applicable:

<table>
<thead>
<tr>
<th>Supplier positioning elements</th>
<th>VSE</th>
<th>SE</th>
<th>ME</th>
<th>LE</th>
<th>VLE</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>We have preferred suppliers based on market supply risk.</td>
<td>0</td>
<td>5.6</td>
<td>16.7</td>
<td>63.9</td>
<td>13.9</td>
<td>3.86</td>
<td>0.723</td>
</tr>
<tr>
<td>We treat our suppliers depending on the profit impact of their products.</td>
<td>0</td>
<td>2.8</td>
<td>11.1</td>
<td>72.2</td>
<td>13.9</td>
<td>3.97</td>
<td>0.609</td>
</tr>
</tbody>
</table>

Therefore to a moderate extent preferred suppliers are positioned based on the market supply of their products and also the suppliers are treated to an almost large extent based on the profit impact of their products. From table 2, to a moderate extent supplier positioning is applied. This implied that in selecting supplier to position in the existing relationships organization focus on the market supply risk and product profitability. Therefore supplier positioning is highly embraced in the manufacturing firms.

Supplier Development Practices in Existing Relationships.

Supplier Development is the process of collaborating with suppliers to improve their processes and product manufacturing capabilities. Due to long term strategic benefits from supplier development, major global entities have implemented supplier development programs to support suppliers. Different elements are manifested in the case of undertaking supplier development, such include having joint venture with suppliers, supplier employee trainings, funding for benchmarking with best in class suppliers and resource availability. The researcher sought to find out the extent to which supplier development is undertaken in manufacturing firms.
Table 3: Frequency Distribution Table of Supplier Development Activities.

<table>
<thead>
<tr>
<th>Supplier Development Activities</th>
<th>SD %</th>
<th>D %</th>
<th>N %</th>
<th>A %</th>
<th>SA %</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our firm undertakes Training of employees from Supplier</td>
<td>0</td>
<td>2.8</td>
<td>11.1</td>
<td>72.2</td>
<td>13.9</td>
<td>3.97</td>
<td>0.609</td>
</tr>
<tr>
<td>Our firm undertakes joint venture with suppliers in research and development programs.</td>
<td>0</td>
<td>5.6</td>
<td>8.3</td>
<td>63.9</td>
<td>22.2</td>
<td>4.03</td>
<td>0.736</td>
</tr>
</tbody>
</table>

The above table shows that the supplier development is embraced based on the two factors employee training and joint venture which have a mean of 3.97 and 4.03 respectively. A mean of 4-5 shows agreement to the objective that the firms develop their suppliers. This information will be used in finding the relationship between supplier development and supplier responsiveness. Therefore, developing suppliers is key for organizations which aim at having a competitive advantage over their competitors in the market.

**Information Technology Adoption by Buyer and Suppliers**

The trend nowadays is to integrate information technology systems in order to ensure information sharing, marketing and online transactions are undertaken. Suppliers and manufacturers have been forced to consider these changes as they do not operate in isolation. This has called for all firms to embrace technology and as such the researcher sought to examine the extent of adoption of technology and its relation to supplier responsiveness.

Table 4: Frequency Distribution of Information Technology Adoption.

<table>
<thead>
<tr>
<th>IT Adoption areas</th>
<th>SD %</th>
<th>D %</th>
<th>N %</th>
<th>A %</th>
<th>SA %</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our suppliers have proper information technology such as websites and ERPs. As well as the Buyer firms have.</td>
<td>0</td>
<td>0.0</td>
<td>13.9</td>
<td>72.2</td>
<td>13.9</td>
<td>4.00</td>
<td>0.535</td>
</tr>
</tbody>
</table>

From the above table, the respondents seem to agree with the objective that their suppliers have invested in the technological aspect. This is so because the mean of their response is above 4 where 1-3 from the Likert scale shows that respondents disagree while from 4-5 indicates they agree. This information will be used in assessing the influence of information technology on supplier responsiveness.
systems on the supplier’s responsiveness. The information implies that most suppliers as well as the manufacturers have embraced adoption of technology in their processes and transactions.

**Supplier Responsiveness to Buyer-Firms Requirements**

Supplier responsiveness refers to the ability of suppliers to avails goods and services as and when required both in right quality and quantity. Time and goods compliance were the indicators used to ascertain the supplier responsiveness. Short lead time implies that suppliers respond with a short period. Supplier responsiveness is key to the manufacturers as it enables them to meet dynamic customer markets characterized by continuous customer expectations and gradually shifting customer preferences.

<table>
<thead>
<tr>
<th>Supplier responsiveness element</th>
<th>VSE %</th>
<th>SE %</th>
<th>ME %</th>
<th>LE %</th>
<th>VLE %</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our suppliers respond fast (shorter lead times)</td>
<td>0</td>
<td>5.6</td>
<td>8.3</td>
<td>69.4</td>
<td>16.7</td>
<td>3.97</td>
<td>0.696</td>
</tr>
<tr>
<td>Our suppliers comply with our goods and service requirements.</td>
<td>0</td>
<td>2.8</td>
<td>13.9</td>
<td>66.7</td>
<td>16.6</td>
<td>3.97</td>
<td>0.654</td>
</tr>
</tbody>
</table>

From the above table, 65% respondents in the firms agree that to a nearly a large extent that their supplier are quite responsiveness in the sense that they avail goods and services within the shortest possible time that is short lead time as well as that they avail; products and services which comply with their needs or as specified. This is shown by a mean of 3.97 and a standard deviation of less than one. Hence, in large manufacturing firms it is key to have responsive suppliers who can meet needs promptly, this enhances improved performance and a competitive advantage no wonder the increased attention to supplier performance.

**Correlation between Buyer-Supplier Variables and Supplier Response Speed**

The nature of buyer-supplier relationships based on the key variables trust, commitment and cooperation can either be collaborative or adversarial. The researcher aimed at finding the relationship between this nature and how supplier responded fast. Supplier development mainly the employee training or having joint venture was also researched on its relationship with supplier fast response. Adoption of information technology basically application of enterprise resource planning software’s, internet and website. This covered the dependent and
independent variables. The relationships under Pearson’s product moment correlation analysis is presented in the table below

Table 6: Correlation Table between Buyer-supplier Relationship and Supplier Responsiveness

<table>
<thead>
<tr>
<th>Variables</th>
<th>Pearson’s Correlation r</th>
<th>Significance t</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplier responsiveness based on fast response</td>
<td>0.475**</td>
<td>0.003</td>
</tr>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Trust- Collaborative relationship</td>
<td>0.475**</td>
<td>0.003</td>
</tr>
<tr>
<td>Joint venture- Supplier development activity</td>
<td>0.447**</td>
<td>0.006</td>
</tr>
<tr>
<td>Information technology adoption</td>
<td>0.384*</td>
<td>0.021</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed)
*. Correlation is significant at the 0.05 level (2-tailed)
n=36

From the table above, in the case of collaborative buyer-supplier relationships characterized by high trust, suppliers seem to respond fast. This is shown by the above findings that the correlation factor r is 0.475** and the significance level 0.03 where the levels below 0.05 are statistically significant related level. This implies that High trust under collaborative relationship is statistically related to the ability of suppliers to respond fast to buyer’s needs. Hence, firms that maintain good relationships with their suppliers; collaborative relationship with high trust will encounter improved suppliers speed.

The findings show that supplier development through joint venture activity has a correlation factor r 0.447** and significance level 0.006 hence this implies that supplier development is statistically related to supplier responsiveness. That is, when buyers and suppliers undertake supplier development programs or activities respond fast. Hence, it is necessary to develop suppliers if a firm wants them to improve their speed of responding to material and service needs.

The findings on the relationship between Information technology adoption and supplier responsiveness shows a correlation factor r 0.384* and a significance level 0.021. Hence, adoption of information technology is statistically related to fast responses of suppliers. This implies that it is necessary for firms to adopt information technology in their operations if they want their suppliers to respond fast. This contributes to proper communication eliminating task duplication and accountability reinforcement.
Correlation between Buyer-Supplier Relationship Variables and Response to Products and Service Conformance.

The correlation Analysis was based on two areas of the Supplier responsiveness, speed hence fast response and response in terms of products and service conformance. Hence, the table below presents the relationship between the independent variables; nature of relationships, supplier development and Information technology adoption and dependent variable Supplier responsiveness-products and service conformance. The researcher aimed to establish how supplier responsiveness under conformance to products and services is influenced by the aforementioned independent variables. This is key to knowing the importance of having a good supplier base which is not only response in speed but also in conformance.

Table 7 Correlation between Buyer-Supplier Relationship and supplier Response to Product and service Conformance

<table>
<thead>
<tr>
<th>Variables</th>
<th>Pearson’s Correlation r</th>
<th>Significance t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplier responsiveness based on product and Service conformance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Trust- Collaborative relationship</td>
<td>0.506**</td>
<td>0.003</td>
</tr>
<tr>
<td>Supplier Employee training A Supplier development activity</td>
<td>0.429**</td>
<td>0.009</td>
</tr>
<tr>
<td>Information technology adoption</td>
<td>0.163</td>
<td>0.341</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed)
*. Correlation is significant at the 0.05 level (2-tailed)

From the above table, Collaborative relationships are related to supplier responsiveness. As the Pearson’s correlation r is 0.506** and significance level 0.003. This level is below the 0.01 level hence this implies that when suppliers and buyers are having collaborative relationships characterized by high trust, their suppliers will respond well to products and service conformance. This means that the products and services delivered will be in line with the buyer specifications.

When Suppliers employees are trained then the suppliers will provide products and services which conform to the buyer specifications. This is shown by the above table findings that the correlation r 0.428** and significance level 0.009 in comparison to the required level of 0.01. Hence, training of suppliers’ employee is significantly related to conformance to products and services specifications. This is because when employees are trained their skills and expertise is improved hence their productivity improves causing the conformance.
Adoption of Information technology is not statistically significant to the conformance of products and services by suppliers. This is because, the correlation r is 0.163 and significance level 0.341. This is because the significance level is larger than the accepted level of 0.01. Hence, Information technology adoption doesn't result to supplier responsiveness. However, it is necessary to have in place integrated systems which enable buyers and suppliers to share information through such avenues as websites, emails, electronic data interchange or instant messaging.

**CONCLUSION**

The researcher established that most large manufacturing firms doing their business in Kenya have embraced buyer-supplier relationships which are collaborative in nature. This is characterized by high trust, increased commitment and long term interaction. The study confirms that collaborative relationships are key to fast supplier responsiveness. This is because they create an environment where there buyer doesn’t see the supplier as an opponent but a partner and the same case applies to the supplier. Hence, the suppliers respond fast to buyer needs through short lead times. The researcher also looked at the influence of supplier development and information technology on supplier responsiveness.

The researcher confirmed that most firms undertake supplier development through such avenues as supplier employee training and joint ventures, also information technology or systems have been adapted to a moderate extent by suppliers. Supplier development is seen to lead to improved responsiveness but mainly in the case of joint ventures and supplier employee trainings. Information systems adoption has not been fully embraced by the suppliers and hence their responsiveness based on this variable is not that significant. But with advent of new technologies the suppliers will be in better position to harness the resultant benefits and consequently have improved response to their buyers. It was clear from the research that the buyer firms position their suppliers in different categories based on the profit impact of the products they offer as well as the market supply risk. Hence, the nature of relationships formed with suppliers will be influenced by the above mentioned factors.

Embracing buyer-supplier relationships which are collaborative in their nature by large manufacturing firms has assisted improve the supplier responsiveness. These relationships are characterized by such elements as trust, commitments while ensuring adoption of Supplier development and Information systems adoption. This is supported by the results from the inferential analysis conducted that indicated that there is a strong relationship between buyer-supplier relationships and supplier responsiveness.
Suggestions for further research

The study has confirmed the significance of using buyer-supplier relationship to enhance the supplier responsiveness. It is paramount in regard to this for the manufacturing firms to embrace the collaborative relationships with their suppliers in order for them to enjoy mutual benefits. This is because there are a myriad of benefits which accrue to the kind of relationships. The researcher recommends further research on the same topic but in other organizations in different industries both within and outside the country. This will be necessary to help establish whether the same effects will be found when the research is done on different firms. This will assist in providing concrete facts upon which reliable conclusions can be made.

REFERENCES


