BUYER-SUPPLIER RELATIONSHIPS AND ORGANIZATIONAL PERFORMANCE
OF PHARMACEUTICAL MANUFACTURING FIRMS IN KENYA

BY

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DECLARATION

I declare that this research project is my original work and has never been submitted to any other university for assessment or award of a degree.

Signature……………………………..   Date………………………………

VIRGINIA NDUKU MUTIO
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This research project has been submitted with my authority as the university supervisor.

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DEDICATION

This study is dedicated to: my family members, for their support and encouragement throughout this project: my friends and colleagues, I appreciate them for their guidance and support: To God Almighty, thank you and to my Mother, thank you for being there when I needed you most.
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LIST OF ABBREVIATIONS AND ACRONYMS

COMESA - Common Market for Eastern and Southern Africa

KAM – Kenya Association of Manufacturers

KEMSA - Kenya Medical Supplies Agency

KSE – Karachi Stock Exchange

TCE – Transaction Cost Economics

UNIDO – United Nation Industrial Development Organization
ABSTRACT

This study was carried out to establish the effect of buyer – supplier relationships on organizational performance among pharmaceutical manufacturing firms in Kenya. Pharmaceutical industry in Kenya has been expanding overtime driven by the government’s efforts to promote local and foreign investment in the sector. This has resulted in Kenya being currently the largest producer of pharmaceutical products in the Common Market for Eastern and Southern Africa (COMESA) region. The study had three objectives, to determine the extent to which pharmaceutical manufacturing firms in Kenya have adopted the concept of buyer-supplier relationships, to determine the effect of these buyer – supplier relationships on organizational and to determine the challenges facing pharmaceutical manufacturing firms in Kenya as they implement these buyer-supplier relationships. The research design involved a cross sectional survey of 30 pharmaceutical manufacturing companies in Kenya. A survey was done because the target population is quite small, that is only thirty firms operating in Kenya. Data was collected using a questionnaire that was administered through “drop and pick” method. Percentages and frequencies were used to analyze objective one and objective three whereas correlation and regression analysis was used to analyze the relationship between buyer – supplier relationships and organizational performance among pharmaceutical manufacturing firms in Kenya. The findings are presented in tables. It is clear that there is a significant relationship between buyer – supplier relationships and organizational performance and can be explained by the five independent variables of trust, communication, co-operation, commitment and mutual goals. Lack of mutual goals between buyers and suppliers was the major challenge identified by the respondents. The study only focused on the pharmaceutical manufacturing companies in Kenya. Therefore, the researcher recommends further research on other firms that are not in pharmaceutical sector and also those not in the manufacturing industry. The researcher has also recommended that all manufacturing companies and other organizations embrace buyer – supplier relationships so that they can reap the benefits. Pharmaceutical manufacturing companies highly rely on their suppliers for their raw materials for use in their production. Therefore, having good relationships with the suppliers is highly recommended for manufacturing companies to achieve competitive advantage.
CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The need to be competitive, flexible and efficient has forced companies to enter into more closer relationships with their suppliers coupled with the realization that true competitive battles are fought along a network of cooperating companies (Ntayi and Eyaa, 2012). Traditional relationships no longer suffice, hence adversarial buyer-supplier relationships have since been promoted in a more positive frame encompassing collaboration, joint problem solving, and strategic supplier integration. Stuart, Verville and Taskin (2009) argue that part of this new approach can also be traced to a reassessment of what constitutes best supply management practice, a more holistic and multi-dimensional view of value based purchasing and highly influenced by notable industry exemplars such as Toyota. Terms such as alliances, partnerships, collaborative relationships, and boundary less organizations have been used to describe these new buyer-supplier relationships (Kamau, 2013).

Waithaka and Waiganjo (2015) argue that inter-organizational transactions have always been important in purchasing practice but, it is only comparatively recently that interest in buyer-supplier relationships has spread across a range of management disciplines. This reflects global changes in production methods and work organization in the late 20th century that have made the management of external relationships central to understanding contemporary organizational practices and performance. It is about working together to bring resources into a required relationship to achieve effective operations in harmony with the strategies and objectives of the parties involved thus resulting in mutual benefit. Both commitment and trust influence the level of collaboration between parties, which in turn contributes to better performance in the buyer-supplier relationships (Frödell, 2014).

Many firms are beginning to realize the potential benefits and importance of strategic and cooperative buyer supplier relationships. This includes improved quality of products and services, reduced cost and reduced lead-time or service completion time at the operational level and enhanced competitiveness, increased market share and innovation at
the strategic level. Hassan, Habib and Khalid (2014) argue that purchasing plays an important role in earning competitive advantage for a firm and for that reason, it needs to strengthen its cords with its various suppliers for it to reap long-term rewards. According to Bailey, Farmer, Jessop and Jones (2005) mutual buyer-supplier relationships provide benefits in terms of sharing and exchanging information, with the emphasis on building a ‘satisfactory outcome together’ in a range of areas.

1.1.1 Buyer-Supplier Relationships

Within purchasing literature, the types of buyer-supplier relationships range from arm’s length transactional relationships where two parties engage in a transaction isolated in time, to collaborative relationships which span over extended periods reaching beyond any one specific transaction. Uncertainty in supply and demand and more dependency on external resources justify the appropriateness of the formation of a close long-term cooperative relationship in inter-firm relationships. Individual firms cannot control the issue of uncertainty and technological changes (Adhaya, 2013). There is pressure to increase quality, reduce inventory, develop just-in-time systems and decrease time to market (Kamau, 2013). By encouraging collective strategies to reinforce collaborative coordination and by recognizing resource dependency, firms engage in a joint and collaborative endeavor to reduce impacts of technological change and uncertainty (Kim, 2010).

Collaborative relationships are best suited where customer faces high risk; the product supplied is technically complex leading to high switching costs; supply of new product/service and new supplier may be required; where supply market for the product is fast changing; in terms of technology and legislation or supply market is restricted, i.e. there are few competent and reliable supplier firms. A collaborative environment requires mutual trust and inter-firm dependency, both formal and informal communication, strong commitment towards same goals, inter-organizational capability and the management creating a network culture (Adhaya, 2013). The underlying objective of these long-term relationships is delivery of substantial benefits and advantages to the involved supply chain partners.
Cost effective design choices, improved product quality and reduction in lead time can be made possible by adopting practices such as early supplier involvement on operational activities such as product development projects. Through strategic supplier relationships, organizations can work closely with suppliers who can share responsibility for the success of the products (Li, Nathan, B., Nathan, T., and Rao, 2006). A result of increasing reliance on suppliers has been that shortcomings in supplier performance and/or competency may present buying firms with problems such as delays in delivery and inferior quality levels. For other companies however, superior supplier performance or capability may lead to superior quality and/or rapid integration of the latest technological breakthroughs into the buying firm’s own products through early supplier involvement (Kilonzo, 2014).

1.1.2 Organizational Performance

Organizational performance is the final achievement of a firm and contains; existence of certain targets to be achieved, has a period of time in achieving the targets and the realization of efficiency and effectiveness (Griffin, 2010). It can also be viewed as the ability of an enterprise to achieve such objectives as high profit, quality product, large market share, good financial results, and survival at pre-determined time using relevant strategy for action (Koontz and Donnell, 2003). Organizational performance is used to gauge how an enterprise is doing in terms of level of profit, market share and product quality in relation to other enterprises in the same industry. Consequently, it is a reflection of productivity of members of an enterprise measured in terms of revenue, profit, growth, development and expansion of the organization.

Kilonzo (2014) defines organizational performance as the ability of an organization to fulfill its mission through sound management, strong governance and a persistent rededication to achieving results. When defining organizational performance it is important to consider a wide variety of potential organizational performance measures. Corina, Liviu and Roxana (2011) defined performance as a set of financial and non-financial indicators which offer information on the degree of achievement of objectives and results. In same spirit, Kaplan and Norton (1996) came up with the Balanced Scorecard which translates an organization’s mission and strategy into a comprehensive
set of performance measures that provides the framework for a strategic measurement and management system. It uses four ‘balanced’ perspectives which are; accounting measures, operational performance measures, market based measures and economic value measures.

Contemporary research has examined the linkages between relationships and performance and emphasized on the need for organizations to move toward closer, more cooperative relationships. Johnson, Wood, Wardlow and Murphy (2006) demonstrate gains of these relationships such as: financial performance, lead time reduction, improved responsiveness, customer loyalty, innovation, quality products, reduction in inventory and improvements in product or process design. Business owners and executives are beginning to realize that buyer supplier relationships, if successful, can result in better market penetration, access to new technology and knowledge, and higher returns on investment than those competitors who do not have such close relationships (Fawcett, 2012).

Lau and Lee (2000) measured organizational performance using both financial and market criteria, including return on investment (ROI), market share, profit margin on sales, the growth of ROI, the growth of sales, the growth of market share, and overall competitive position. In line with the above literature, operational performance measures were adopted to measure performance in the study. This research considered organization performance relative to competition from multiple organizational perspectives including quality product, productivity, quality service delivery and cost reduction.

### 1.1.3 Pharmaceutical Manufacturing Firms in Kenya

The number of companies engaged in manufacturing and distribution of pharmaceutical products in Kenya continue to expand, driven by the Government’s efforts to promote local and foreign investment in the sector (Economic Survey, 2004). This has resulted in Kenya being currently the largest producer of pharmaceutical products in the Common Market for Eastern and Southern Africa (COMESA) region, supplying about 50% of the regions’ market (KAM 2014). Out of the region’s estimated fifty recognized pharmaceutical manufacturers approximately thirty are based in Kenya. The key players
in the industry include multinational corporations like GlaxoSmithKline, Bayer, Aventis, Pfizer and local establishments like Dawa Pharmaceuticals Ltd, Cosmos Pharmaceuticals among others.

Kenya spends about 8% of its GDP on health according to UNIDO report 2012. Sales of over-the-counter and prescription drugs clocked up sales of 17.7 billion Kenyan shillings (USD 234.6 million) in 2008, up 22.9% from Sh14.4 billion the previous year, according to the Kenya pharmaceutical and health report 2010. Local production of pharmaceuticals has reduced import dependence and related problems of regulatory load and access. It also provides other economic benefits such as job creation; skills upgrading of nationals working in the sector; reduced expenditure of foreign exchange on imported medicines; and the opening up of avenues for exports of pharmaceuticals and increased foreign exchange earnings.

The pharmaceutical industry in Kenya consists of three segments namely the manufacturers, distributors and retailers making it a complex supply chain considering its major role in supporting the country’s health sector. There is also need to build closer ties between the manufacturing firms and their suppliers to improve on lead time, product quality and meet the ever increasing demand of these products (UNIDO 2014). The bulk of locally manufactured preparations are non-sterile, over-the-counter products. There is potential for Kenya to establish itself as a major source of pharmaceutical products in the region. For example, South Sudan and the Democratic Republic of Congo are emerging as important markets and there may be considerable scope in the future for sales to Somalia.

Pharmaceutical manufacturing industry in Kenya is very competitive and is characterized by price wars, this makes it very important for firms to manage their supply chains well to ensure least cost is incurred. This industry is highly regulated and the State is not only the control mechanism but also the most important customer through Kenya Medical Supplies Agency (KEMSA). While Kenya’s pharmaceutical exports to the region have been on an upward trend, in 2008 they still amounted to only 56% of the value of exports from South Africa to COMESA of these same products (UNIDO, 2012). This clearly
shows that there is considerable room for Kenyan exports of pharmaceutical products to grow. Quality is also a key issue given the implications to public health of substandard products as is the issue of affordability.

1.2 Research Problem

Effective buyer-supplier relationships help both parties manage uncertainty and increase efficiency of their supply chains (Fawcett, 2012). There is need to have mutual cooperation between buyers and suppliers which is essential to achieve better supply chain performance in terms of increasing sales with fewer inventories in the total system and matching supply and demand as lack of cooperation can lead to delays and poor quality of goods distributed. This in turn translates to better organizational performance because costs are kept at minimum, speedy response to customer demands with flexibility, customer loyalty and good corporate image in the long run (Spekman, 2004).

The manufacturing sector has a key role in the implementation of Kenya Vision 2030, which is the country’s socio-economic development agenda. This recognizes important role played by the pharmaceutical manufacturers in creating jobs, generating wealth, and attracting both local and foreign direct investment especially as part of the post-2015 development agenda (UNIDO, 2014). With 30 local pharmaceutical manufacturers now engaged in the formulation and packaging of pharmaceutical products, it offers great potential for Kenya to attain self-sufficiency in essential medicines and to serve the export market but care need to be taken not to compromise on quality of these products. Kenya's pharmaceutical industry is on a rebound, riding on the back of increased expenditure in healthcare and general economic growth over the years but affordability still remains key issue.

Bart and Akkermans (2009) carried out a study on collaboration in buyer-supplier relationships. The study concluded that there are five relationship variables (commitment, conflict, economic and non-economic satisfaction, and trust) that are important in developing and maintaining good buyer-supplier relationships. However, the research did not look at the effect of these relationships on organizational performance.
Hassan, Habib and Khalid (2014) carried out a study on the role of buyer-supplier relationship on buying firm’s performance in chemical sector of Pakistan. It focused on the companies listed at chemical sector in Karachi Stock Exchange - KSE 100 index of Pakistan. They concluded that by ensuring timely supplier payment, information sharing and being friends with suppliers, buyers can easily make their profits reach the sky. However, the data was not representative because only six companies filled the questionnaires out of the total thirty companies listed in the KSE 100 chemical sector of Pakistan.

Buyer-supplier collaboration is key in bringing about adaptation, trust and commitment between buyers and suppliers and this eventually leads to continuance of relationships. These were the findings of a study done by Mugarura (2010) which examined effect of buyer-supplier collaboration on relationship continuity in manufacturing firms in Kampala. Dimensions used were incentive alignment, joint decision making and information sharing in relation to adaptation, commitment, trust and relationship continuity most of which were found to have a positive and significant relationship. The study fall short of answering the question of what business continuity brought about by collaborative buyer-supplier relationship, would mean to a firm’s performance.

Kamau (2013) conducted a study on buyer-supplier relations and organizational performance among large manufacturing organizations in Nairobi-Kenya. Five variables which result to successful buyer supplier relationships were identified and they include: Trust, communication, commitment, cooperation and mutual goals. The study concluded that most large manufacturing companies in Kenya have been embracing buyer-supplier relationships for more than ten years. Buyer-supplier relationships have assisted these companies to enhance the performance of their organizations. The study focused on large manufacturing firms in Nairobi-Kenya only and not all over the country.

To the best of the researcher knowledge no study has been done on buyer-supplier relationships linked with its impact on organizational performance on pharmaceutical manufacturing firms in Kenya. The study sought to answer the following research questions: what is the extent of adoption of buyer-supplier relationships by the
pharmaceutical manufacturing firms in Kenya? What is the relationship between buyer-supplier relationships and organizational performance in pharmaceutical manufacturing firms in Kenya? And what are the challenges that face these firms in the implementation of buyer-supplier relationships?

1.3 Research Objectives

This study sought to achieve the following objectives:

i. To establish the extent to which pharmaceutical manufacturing firms in Kenya have adopted buyer-supplier relationships.

ii. To determine the effect of buyer-supplier relationships on organizational performance among pharmaceutical manufacturing firms in Kenya.

iii. To establish the challenges facing pharmaceutical manufacturing firms in implementation of buyer-supplier relationships in Kenya.

1.4 Value of the study

The findings from this study will provide an insight on the importance of buyer-supplier relationships on organizational performance among pharmaceutical manufacturing firms in Kenya.

Other non-manufacturing institutions will also benefit from the findings of this study since it will shed more light on the effect buyer-supplier relationships on organizational performance.

Academicians and researchers may use the findings from the study as a source of reference. Besides; the study will be a basis for further research.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature related to the study. It includes a review of the various studies that have been conducted by other researchers on buyer-supplier relationships. Among the areas reviewed include: Theories relating to the study, empirical studies done previously, buyer-supplier relationship variables and challenges faced while managing these buyer-supplier relationships. The chapter also provides the research gaps identified and a conceptual framework to show the relationship between the dependent and independent variables.

2.2 Theoretical Literature Review

Business relationships stand on understanding of mutual business needs, benefits and sincere wish to continue relationship for the common shared objective. The most important element of the supply chain is buyer-supplier relationship. A sustainable and effective relationship is a prerequisite for organizational success. Several theories have been applied to explain the rationality of these buyer-supplier relationships with most important and vibrant theories being: transaction cost economics, relationship marketing, resource based view, network theory and systems theory (Manoj and Gahan, 2012). These theories propose very different forms of relationship, from a situation where the parties are independent and pursue their own goals to one where there is a high degree of interdependence and common goals.

2.2.1 Transaction Cost Economics (TCE) Theory

This theory is built on the premise that optimal buyer-supplier relationship is one based on the lowest possible total cost, where internal operations costs are balanced with the costs of purchasing, planning, adapting and monitoring externally transacted operations (Williamson, 2010). Williamson (1996) also outlined three dimensions of transaction relations, namely: transaction-specific investments, uncertainty and frequency. Grover & Malhotra (1997) argued that TCE perspective to buyer supplier relationship governance was particularly useful in connection to efficiency, flexibility and overall performance.
issues. The main critique of this theory is the need to shift from a narrow cost perspective to a wider transaction benefits-based analysis and also a question of actors being only opportunistic (Mateyz and Maja, 2013).

2.2.2 Relationship Marketing Theory

It focuses on long-term and value-adding relationships. According to Sheth & Parvatiyar (1995) the emergence of the relationship marketing perspective was marked by a paradigm shift to relationships because it is interested not only in classic underlying parameters of economic exchanges, but also takes into account non-economic characteristics, especially trust and commitment. Veloutsu, Saren & Tzokas (2002) view relationship marketing as a philosophy for re-orientating buyers and suppliers through a business strategy bringing them together in collaborative and cooperative ways, ensuring synergetic, trusting and mutually beneficial relationships. The reason relationship marketing theory is particularly applicable to buyer-supplier contexts is because it focuses on “close interactive long-term relationships with particularly suppliers” from competition, conflict and choice independence to mutual cooperation and mutual interdependence (Shet & Iyar, 1995).

2.2.3 Network Theory

In the current competitive business environment, a single enterprise acting alone cannot fully achieve all management goals. As customer demands increase and become more specific, firms must undertake initiatives to coordinate responsibilities across the supply chain in order to improve service and lower costs. Network theory is built on the same premise that firms rely not only on their relationship with direct partners but with the extended network of relationships with supply chain firms, that competitive advantage can only be achieved through efficiently and effectively coordinated supply chains (Ullah, 2012). Network relations create information sharing that enables buyers and sellers to have access to resources and knowledge beyond their abilities hence the need for long-term, trust based relationship between supply chain firms.
2.2.4 Systems Theory

Systems theory brings together various components of a complex supply chain (that is the human, capital, information, materials and financial resources etc.) to form a subsystem which is then part of a larger system of supply chains or network. The theory argues that for a holistic perspective systems theory must be employed to understand the internal and external factors that shape an organization’s performance. The business environment is becoming very uncertain, buyer and supplier systems are closely linked more than ever before hence operating as a single unit with sub-systems. This is more consistent with relationship marketing as a synonym for a network perspective on buyer-supplier relationships (Gummeson, 2000).

2.2.5 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 long lasting competitive advantage than provided by a system of competitive bidding (Harrison and St. John, 1996). This theory established unique organizational resources as the bedrock of organizational competitiveness. According to Ni (2006) viewing relationships as resources satisfies all four resource criteria in the resource-based perspective, namely (Barney, 1991): value; rareness; uniqueness (inimitability); and non-substitutability. Capabilities can’t be bought; rather, they must be built; with internal capabilities and combined with external partnerships (Su et al., 2009).

2.3 Buyer-Supplier Relationship Variables

Empirical models of buyer-supplier relationships while divergent in many respects complement each other in terms of the relationship dimensions considered. In their review of seven of the most influential studies of the “relational paradigm”, Wilson and Kristan Moller (1991) identify trust as the most frequently used dimension. Other frequently cited dimensions were satisfaction, adaptation/transaction specific investments, power/dependence, communication, commitment and co-operation (Brian & Chris 2002).
2.3.1 Trust

Trust is a condition in which each partner is convinced that the other is fully committed to the common goals (Inayat et al., 2012). Dyer (1997) defined buyer-supplier trust as a construct based on three components: reliability, fairness, and goodwill. Mugarura (2010) observed that trust is built up over time through repeated interactions and acts of good faith. Sometimes buyers and suppliers hesitate in delivering the required information, because they think, it will increase their vulnerability. These unsatisfactory relationships must be changed to improve the performance of both buyer and supplier and this can be done only by development of trust. Paulraj, Lado & Chen (2008) state that long-term relationships can be built only when there is mutual wish to work together and the partners should agree to share information.

Literatures witnessed decrease in product cost, risk reduction and sharing, long term relationships, investment opportunities and further expansion of business relationships through trust (Manoj et al., 2012). This provides an ease to business transactions, it boosts creativity, innovation, knowledge sharing (Politis, 2003), and enhances cooperative behavior within the organizations (Osterloh & Frey, 2000). An interesting perspective on trust is that long-term relationships may not require trust; rather the relationship may be based on the necessity of having a supplier or distributor (Kumar, 2005). Although trust can be important at all stages of the relationship, the measurement of trust can only occur after a partner has been in a relationship long enough to evaluate this dimension.

2.3.2 Communication

Communication is one of the essential components in the buyer-supplier relationship and may be related to product price, contractual agreements, technical specifications, organizational strategy and market related know-how. Communication can only be effective if both parties understand the requirement of each other and in the same level of thinking & understanding. The relationship literature identifies three aspects of communication behavior that are important to successful relationships: communication
quality, extent of information sharing between partners and participation in planning and goal setting.

Simatupang and Sridharan (2002) defined information sharing as the access to private data between business partners thus enabling them to monitor the progress of products and orders as they pass through various processes in the supply chain. Communication quality includes the accuracy, timeliness, adequacy, and credibility of information exchanged, participation refers to the extent to which partners engage jointly in planning and goal setting. When one partner’s actions influence the ability of the other to effectively compete, the need for participation in specifying roles, responsibilities, and expectations increases. Input to decisions and goal formulation are important aspects of participation that help buyer-supplier relationship succeed (MacNeil, 1981).

2.3.3 Commitment

Commitment is the belief that trading partners are willing to devote energy to sustaining the relationship meaning an enduring desire to maintain a valued relationship (Moorman, Zaltman and Deshpande, 1992). It is the desire to continue the relationship and to work to ensure its continuance. Reflects a committed partner who wants the relationship to endure indefinitely and is willing to work at maintaining it (Morgan and Hunt, 1994). Commitment assumes that the relationship will bring future value or benefits to the partners. There is little doubt that commitment is a critical variable in measuring the future of a relationship.

2.3.4 Cooperation

Cooperation has been defined as, “similar or complementary coordinated actions taken by firms in interdependent relationships to achieve mutual outcomes or singular outcomes with expected reciprocation over time” (Anderson and Narus, 1990). Morgan and Hunt (1994) seem to accept the above definition of cooperation but continue to expand the definition by emphasizing the proactive aspect of cooperation versus being coerced to take interdependent actions. The interaction of cooperation and commitment results in cooperative behavior allowing the partnership to work ensuring that both parties receive the benefits of the relationship.
2.3.5 Mutual Goals

Mutual goals refer to the degree partners share goals that can only be accomplished through joint action and the maintenance of the relationship. These mutual goals provide a strong reason for relationship continuance. Wilson, Soni and O’Keeffe (1994) suggest that mutual goals influence performance satisfaction which in turn influences the level of commitment to the relationship. Shared values is a similar but broader concept as defined by Morgan and Hunt (1994) as, “the extent to which partners have beliefs in common about what behaviors, goals and policies are important, unimportant, appropriate or inappropriate, and right or wrong.” Norms are the rules by which values are operationalized.

Heide and John (1992) stated that individual goals create norms of competitive behavior whereas, relational exchange norms are based on the expectation of mutuality of interest, essentially prescribing stewardship behavior, and are designed to enhance the wellbeing of the relationship as a whole. Most likely, mutual goals encourage both mutuality of interest and stewardship behavior that will lead to achieving the mutual goals. It is easier to measure the degree to which the partners share the same goals than it is to measure values and norms.

2.4 Empirical Review of Buyer-Supplier Relationships and Organizational Performance

The Industrial Marketing and Purchasing Group (IMP Group), using an ethnographic methodology, developed an “interaction approach” which is described in their relationship model. They interviewed 878 buyers and sellers from 318 firms within France, Italy, Western Germany, Sweden and the United Kingdom. They concluded that a model based upon buyer-seller cooperation rather than the traditional buyer-seller as adversaries was a more real representation of the data that they collected. The IMP Group model provides a rich view of buyer-supplier relationships which they have continued to sharpen and develop (Wilson and Clemens, 1995).

Inayat, Rakesh, and Amar (2012) did a study on role of buyer-supplier relationship and trust in organizational performance. A survey of 54 Indian manufacturing companies was
carried out. The findings were that face to face communication and fair treatment of supplier by buyer is positively related to development of trust, development of trust has a positive influence on readiness of supplier to invest in the specific requirements of buyer, strong relationship between buyer and supplier positively affects supplier performance, and supplier performance is positively related to the organizational performance. Hassan et al. (2014) did a study on role of buyer-supplier relationship on buying firm’s performance in chemical sector of Pakistan and concluded that information sharing and being friends with firm’s suppliers leads to better organizational performance.

Kemunto and Ngugi (2014) carried out a study on influence of strategic buyer supplier alliance on procurement performance in private manufacturing organizations a case of Glaxo Smithkline. The conclusion of this study was that improvement of governance structure, technology, top management support and procurement policy and legal framework leads to better procurement performance. These findings echoed findings by Eyaa and Oluka (2011) who found out that procurement performance of pharmaceuticals in many developing nations is greatly influenced by the same variables.

Mugarura (2010) examined the relationship between buyer-supplier collaboration and relationship continuity of private manufacturing firms in Kampala. A quantitative cross-sectional survey was conducted using a sample of 260 private manufacturing firms from a population of 877. The results indicated a significant positive relationship between buyer-supplier collaboration and relationship continuity. The researcher also concluded that adaptation, trust and commitment are significant predictors of relationship continuity and collaboration also positively predicts adaptation, trust and commitment. The study failed to comment on whether business continuity which is derived from buyer-supplier collaboration has an impact on overall organizational performance.

Kamau (2013) did research on buyer-supplier relationship and organizational performance among large manufacturing organizations in Nairobi-Kenya. Five variables which result to successful buyer-supplier relationships were identified and they include: Trust, communication, commitment, cooperation and mutual goals. The study concluded that most large manufacturing companies in Kenya have been embracing buyer-supplier relationships for more than ten years. Buyer-supplier relationships have assisted the large
manufacturing companies to enhance the performance of their organizations. The study failed to check the collaborative type of buyer-supplier relationships specifically. As has also been noted, 'For many of the world's most successful corporations, the very things that made them great were neither developed nor owned in-house. They have been achieved through collaborative relationships' (Spekman and Caraway, 2006).

2.5 Challenges of Implementing Buyer-Supplier Relationships

Buyer-supplier relationships have been the subject of a great deal of debate in the academic literature for many years (Lambert et al., 2008; Barratt, 2004; Fawcett, 2012). Fawcett et al. (2012) notes that, highly collaborative initiatives are costly, resource intensive and their outcomes are often unpredictable. Further, barriers have been identified in the existing literature. They include the unwillingness to share information (Barratt, 2004), the lack of trust (Delbufalo, 2012), potential additional responsibilities and work (Merchant, 2011), perception of lack of mutuality and symmetry (Palmer et al., 2012), mistrust about the fairness of benefit, costs and risk sharing (Cruijssen, 2012; Rossi, 2012). All of these barriers depict a high level of complexity.

Another possible drawback of any buyer-supplier relationship is the amount of adaptive behavior that a company undergoes. Adaptive behavior is the evolutionary process that takes place as firms learn how best to do business with each other (Brennan and Turnbull, 1999). Investments in resources and time may be formal or informal, minor or significant, and can even occur without a conscious effort by either party. Firms making incremental changes over time may become substantially adapted to the other firm, limiting their choice in developing future relationships (Han, Wilson and Dant, 1992). In buyer-supplier relationships where the power balance is not equal, the firm with the greater relative power can exploit this imbalance to force adaptive behavior on its weaker trading partner (Cox, 2001).

As markets become tighter, energy and raw materials prices increase, and as working capital becomes harder to procure, more close buyer-supplier relationships are inevitable than ever before. Though faced with these challenges waste reduction and more innovative ways of doing business can only be developed through collaboration. Inyat et.
Ali. (2012) concluded that many companies credit their own survival largely to their working relationships with buyers and suppliers.

2.6 Summary of the Literature and Knowledge Gap

The literature review confirms that a lot has been done on buyer-supplier relationships but little on the effect of these relationships on organizational performance. There is even more limited research carried out on the same within the pharmaceutical industry. This study therefore seeks to bridge this knowledge gap by studying buyer-supplier relationships and organizational performance among pharmaceutical manufacturing firms in Kenya. The table in the next page shows a summary of the various studies discussed in the literature, the findings and knowledge gaps identified.
Table 2.1 Summary of Literature and Knowledge Gaps

<table>
<thead>
<tr>
<th>Scholar</th>
<th>Study</th>
<th>Major Findings</th>
<th>Limitations and Gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mugarura (2010)</td>
<td>Buyer supplier collaboration and relationship continuity of private manufacturing firms in Kampala.</td>
<td>Good buyer-supplier relationship has positive impact on relationship continuity</td>
<td>Failed to mention the impact of relationship continuity on firm’s performance</td>
</tr>
<tr>
<td>Inayat, Rakesh and Amar (2012)</td>
<td>Role of buyer-supplier relationship and trust in organizational performance</td>
<td>Good Buyer-supplier relationship leads to high levels of trust which in turn has a positive impact on Suppliers organizational performance</td>
<td>Essence of these relationships on buyer’s organizational performance</td>
</tr>
<tr>
<td>Kamau (2013)</td>
<td>Buyer-supplier relationship and firm’s performance among large manufacturing firms in Nairobi-Kenya</td>
<td>Positive impact of these relationships on organizational performance</td>
<td>Lack specific focus on pharmaceutical manufacturing firms in Kenya</td>
</tr>
<tr>
<td>Hassan, Habib and Khalid (2014)</td>
<td>role of buyer-supplier relationship on buying firm’s performance in chemical sector of Pakistan</td>
<td>Good buyer-supplier relationship led to better organizational performance</td>
<td>Data collected was not representative, only six companies filled questionnaires out of a total of thirty</td>
</tr>
<tr>
<td>Kemunto and Ngugi (2014)</td>
<td>Influence of strategic buyer-supplier alliance on procurement performance a case of Glaxo SmithKline (GSK)</td>
<td>Buyer-supplier alliance has positive impact on procurement performance at GSK</td>
<td>Impact of buyer-supplier alliance on overall organizational performance</td>
</tr>
</tbody>
</table>

Source; Author (2015)
2.7 Conceptual Model

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Buyer-Supplier</strong></td>
<td><strong>Organizational</strong></td>
</tr>
<tr>
<td><strong>Relationship Variables</strong></td>
<td><strong>Performance</strong></td>
</tr>
<tr>
<td>Trust</td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td></td>
</tr>
<tr>
<td>Cooperation</td>
<td></td>
</tr>
<tr>
<td>Mutual Goals</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author (2015)
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This section discusses the design and the methodology that was applied in conducting the research study. Research design includes some of the major decisions in research methodology that the researcher made while carrying out the study. Some of the important decisions included data collection and data analysis. The methodology includes using logical methods in collecting data, determining a target population, data collection methods and techniques, determination of reliability and validity as well as data analysis techniques.

3.2 Research Design

This study employed a descriptive research design of cross sectional type. A descriptive research design attempts to describe or define a subject, often by creating a profile of a group of problems, people or events, through the collection of data and tabulation of the frequencies on research variables or their interaction (Katua, 2014). A descriptive research defines questions, people surveyed and the method of analysis prior to beginning of data collection.

Tanur (1982) asserts that a survey is a means of collecting information about a large group of elements referred to as a population. A survey has three characteristics: to produce quantitative descriptions of some aspects of the study population in which case it is concerned either with relationships between variables, or with projecting findings descriptively to a predefined population; data collection is done by asking people structured and predefined questions and data is collected from a fraction of the target population (Pinsonneault and Kraemer, 1992).

3.3 Target population

The target population included all the 30 pharmaceutical manufacturing firms operating in Kenya. The researcher therefore focused on all the 30 pharmaceutical manufacturing companies as a census study because the study population was small.
3.4 Data Collection
The primary data was gathered from procurement managers, production managers, quality managers and financial managers of the 30 pharmaceutical manufacturing firms in Kenya. The procurement managers, production managers, quality managers and financial managers or their equivalents were considered appropriate since they understood better the effect of buyer-supplier relationships on the performance of their organizations. The data was collected by use of a structured questionnaire that was administered by “drop and pick” method.

The questionnaire was in the form of Likert scale where respondents were required to indicate their views on a scale of 1 to 5. The questionnaire contained 5 sections: Section A contained data on the company profile; section B had data measuring the extent to which pharmaceutical manufacturing firms in Kenya have embraced buyer-supplier relationships; section C contained data on the effect of buyer-supplier relationships on organizational performance among pharmaceutical manufacturing firms in Kenya. Section D contained data on the challenges facing Pharmaceutical manufacturing firms in the implementation of buyer-supplier relationships.

3.5 Data Analysis
The data collected was sorted and coded then entered into the Statistical Packages for Social Sciences (SPSS).

Section A, B and D
Descriptive statistics was used in the above three sections. The findings were presented in tables.

Section C
Correlation and regression analysis was used to show the effect of buyer –supplier relationships on organizational performance. The findings were presented in tables. The following model was used to show the effect of buyer –seller relationships on organizational performance \( Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + e \). Where: \( Y \) = organizational performance; \( a \) = the S intercept when \( x \) is zero; \( b_1, b_2, b_3, b_4 \) and \( b_5 \), are regression coefficients of the following variables respectively; \( x_1 \) = Trust; \( x_2 = Commitment; x_3 = Communication; x_4 = Co-operation \( x_5 = Mutual goals. \)
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This study was carried out to establish the effect of buyer-supplier relationships on organizational performance of pharmaceutical manufacturing firms in Kenya. Data was collected from procurement managers, production managers, quality managers and finance managers. The findings are presented next.

4.2 Response Rate

A total of 30 questionnaires were distributed to pharmaceutical manufacturing firms in Kenya. Out of the 30 Questionnaires, 24 were returned to the researcher. This represents a response rate of 80%. This percentage was considered sufficient for this study. The 20% who never responded on the questionnaires cited busy schedules as the main reason for lacking time to fill them.

4.3 General Information

The first part of the questionnaire contained general information regarding the organization and the respondent. The areas cited in this part were: duration the company has been in operation, the position of the respondent in the organization, the duration the respondent has worked in that position and the gender of the respondent.

Table 4.1: Duration of Operation

The table below shows the frequencies and percentages regarding information on the duration which the respondent firms have been in operation.

<table>
<thead>
<tr>
<th>Duration of Operation</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10 Years</td>
<td>9</td>
<td>37.5</td>
</tr>
<tr>
<td>10 or more Years</td>
<td>15</td>
<td>62.5</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Research data (2015)
The researcher sought to establish the duration the respective pharmaceutical manufacturing companies had been in operation. The findings as illustrated in Table 4.1 above show that 62.5% of the pharmaceutical manufacturing firms in Kenya have been in operation for more than 10 years. This is an indication that the companies have experienced buyer - supplier relationships during this period.

**Table 4.2: Position of the Respondent**

The table below shows frequencies and percentages of the various positions held by the respondents that took part in the study.

<table>
<thead>
<tr>
<th>Position</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Manager</td>
<td>8</td>
<td>33.3</td>
</tr>
<tr>
<td>Production Manager</td>
<td>4</td>
<td>16.7</td>
</tr>
<tr>
<td>Quality Manager</td>
<td>5</td>
<td>20.8</td>
</tr>
<tr>
<td>Finance Manager</td>
<td>3</td>
<td>12.5</td>
</tr>
<tr>
<td>Operations Manager</td>
<td>2</td>
<td>8.3</td>
</tr>
<tr>
<td>Human Resource Manager</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>General Manager</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Source: Research data (2015)*

The respondents were asked to indicate the positions they held in the respective companies and the duration they had served in those positions. They were provided with options to choose from. The findings in Table 4.2 confirm that 33.3% of the respondents who participated in the study were procurement managers, 20.8% were quality managers and 16.7% production managers and 12.5% finance managers. This confirms that they are well conversant with buyer – supplier relationships and their effect on organizational performance.
Table 4.3: Duration Served

The table below shows the data on the period in which the respondents have served in these positions.

<table>
<thead>
<tr>
<th>Duration Served</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 Years</td>
<td>14</td>
<td>58.3</td>
</tr>
<tr>
<td>5 to 10 Years</td>
<td>7</td>
<td>29.2</td>
</tr>
<tr>
<td>11 to 15 Years</td>
<td>2</td>
<td>8.3</td>
</tr>
<tr>
<td>Above 15 Years</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Research data (2015)

Table 4.3 reveals that majority of the respondents had served for less than 5 years (58.3%), while 29.2% had served for 5 to 10 years. On the other hand 8.3% of the respondents had served between 11 to 15 years while 4.2% had served for more than 15 years. 58.3% of the respondents have served in their respective positions for less than five years. The supply chain concept is relatively new in Kenya and this probably explains the reason why most of the respondents had served as procurement managers for such a short duration of time.

Table 4.4: Gender of the Respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>70.8</td>
</tr>
<tr>
<td>Female</td>
<td>29.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Research data (2015)

It was also evident from the findings of the study that most of the managers who participated in the study are male as represented by 70.8% while 29.2% of the
respondents were female. This is a clear indication that most pharmaceutical manufacturing companies in Kenya have more male managers than females.

4.4 Extent to which Pharmaceutical Manufacturing Firms in Kenya have Embraced Buyer-Supplier Relationships

The study sought to establish the extent to which pharmaceutical manufacturing firms in Kenya have embraced buyer-seller relationships. A number of questions were fronted to the respondents who gave their responses on a scale of 1-5 where 1 represents to a very large extent and 5 very small extent.

**Table 4.5 Extent to which Pharmaceutical Manufacturing Firms in Kenya have embraced Buyer – Supplier Relationships**

<table>
<thead>
<tr>
<th>The extent to which pharmaceutical manufacturing firms have adopted buyer-supplier relationships</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existence of mutual goals between company and suppliers</td>
<td>2.792</td>
<td>0.932</td>
</tr>
<tr>
<td>Mutual information sharing between company and suppliers</td>
<td>1.958</td>
<td>0.624</td>
</tr>
<tr>
<td>There is responsiveness towards each other’s needs</td>
<td>1.833</td>
<td>0.637</td>
</tr>
<tr>
<td>Clear understanding of each other’s roles and responsibilities between our company and suppliers</td>
<td>1.792</td>
<td>0.884</td>
</tr>
<tr>
<td>Long-term relationships between our company and suppliers</td>
<td>1.708</td>
<td>0.806</td>
</tr>
<tr>
<td>High level of commitment between company and suppliers</td>
<td>1.667</td>
<td>0.637</td>
</tr>
<tr>
<td>There is a high level of trust between our company and that of our suppliers.</td>
<td>1.625</td>
<td>0.576</td>
</tr>
<tr>
<td>Good communication between our company and that of our suppliers</td>
<td>1.583</td>
<td>0.717</td>
</tr>
</tbody>
</table>

Source: Research data (2015)
Table 4.5 shows the mean and standard deviation of factors that were used by the researcher to show the extent to which pharmaceutical manufacturing firms in Kenya had embraced buyer – supplier relationships. A mean of 1-3, shows that the factor in question has been adopted by the responding organizations to a large extent. A mean of 4-5, shows the factor in question has been adopted by the responding organizations to a small extent.

Table 4.5 shows that the following factors had been adopted by many pharmaceutical 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 a mean of between 1 and 3. Meaning that, many pharmaceutical manufacturing organizations have adapted to these factors to a large extent. This shows that most pharmaceutical manufacturing firms in Kenya had embraced the concept of buyer-supplier relationships as they had incorporated all buyer- supplier relationship variables in their operations.

4.5 Relationship between Buyer-Supplier Relationships and Organizational Performance

The study also sought to determine the relationship that exists between buyer–supplier relationships and organizational performance among pharmaceutical manufacturing firms in Kenya. Respondents stated that collaborative buyer-supplier relationships enable the company to reinvent its cost structures, support the company in achieving critical efficiency improvements in the short term direct or indirect manipulation of the key purchase levers of price of goods and volume of purchase. This implies that procurement teams in pharmaceutical manufacturing companies in Kenya have adopted a culture of closer buyer-supplier relationships which leads to improved organizational performance.

4.5.1 Correlations Analysis

Correlation analysis was used to establish the strength of association between variables.
Table 4.6: Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>Performance</th>
<th>Trust</th>
<th>Communication</th>
<th>Commitment</th>
<th>Co-Operation</th>
<th>Mutual Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Performance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Trust</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.658(*)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.001</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Commitment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.642(*)</td>
<td>.590(*)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.001</td>
<td>.007</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>24</td>
<td>24</td>
<td></td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.869(*)</td>
<td>.580(*)</td>
<td>430</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.002</td>
<td>.037</td>
<td>.003</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cooperation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.790(*)</td>
<td>.600(*)</td>
<td>-.704(*)</td>
<td>-.516</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.002</td>
<td>.001</td>
<td>.037</td>
<td>.003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td><strong>Mutual Goals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.737(*)</td>
<td>.650(*)</td>
<td>-.642(*)</td>
<td>-.704(*)</td>
<td>-.619</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.001</td>
<td>.001</td>
<td>.000</td>
<td>.002</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
</tr>
</tbody>
</table>

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

Source: Research data (2015)
The Pearson correlation analysis was done for all the study variables and showed that there existed a very strong positive correlation between organization performance and buyer-supplier relationships in pharmaceutical manufacturing firms in Kenya at 95% confidence level. The correlation between trust and organizational performance was significantly strong and positive ($r=0.658$, $P=0.001<0.05$). This implied that when the firms ensured trust with their suppliers, tangible benefits are experienced. The correlation between commitment and organizational performance was significantly strong and positive ($r=0.642$, $P=0.001<0.05$). The correlation between communication and organizational performance was significantly strong and positive ($r=0.869$, $P=0.002<0.05$). This clearly indicated that firm’s performance improved when good supplier partnering relations are maintained.

The findings in Table 4.6 revealed a strong, significant positive correlation between adoption of cooperation initiatives and organizational performance, ($r=0.790$, $P=0.002<0.05$). There was also a strong, significant positive correlation between firm’s having mutual goals with their suppliers and improved company performance, ($r=-0.737$, $P=0.001<0.05$). Ensuring closer ties between a firm and the supplier has a significant positive impact on organization performance. This is in line with Kamau (2013) who stated that buyer-supplier relationships have assisted the large manufacturing companies to enhance the performance of their organizations. Ullah (2012) stated that buyer-supplier relationships lead to improvement in quality and reduction in cost; it ensures proper allocation of firm resources, high quality and timely procurement and budgetary saving and overall improvement in organizational performance.

**4.5.2 T Test for Coefficients**

Table 4.6 presents the T-Test for the coefficients adopted in the study. Where: $x_1 = $ Trust; $x_2 = $ Commitment; $x_3 = $ Communication; $x_4 = $ Co-operation $x_5 = $ Mutual Goals. Using a significance level of 5%, any variable having a significant ($P$) value greater than 5% is not statistically significant.
Table 4.7: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-.402</td>
<td>.213</td>
<td></td>
<td>-1.877</td>
</tr>
<tr>
<td>Trust</td>
<td>.587</td>
<td>.135</td>
<td>.515</td>
<td>4.338</td>
</tr>
<tr>
<td>Commitment</td>
<td>.126</td>
<td>.157</td>
<td>.395</td>
<td>3.801</td>
</tr>
<tr>
<td>Communication</td>
<td>.512</td>
<td>.100</td>
<td>.471</td>
<td>4.847</td>
</tr>
<tr>
<td>Cooperation</td>
<td>.151</td>
<td>.052</td>
<td>.293</td>
<td>3.008</td>
</tr>
<tr>
<td>Mutual goals</td>
<td>.111</td>
<td>.049</td>
<td>.199</td>
<td>2.596</td>
</tr>
</tbody>
</table>

Source: Research data (2015)

The findings from Table 4.7 indicate that $x_1$ (Trust), $x_2$ Commitment, $x_3$ (Communication), $x_4$ (Co-operation) and $x_5$ (Mutual goals) are statistically significant being at 0%, 5%, 0%, 5% and 5% respectively. This is consistent with large t values as well ($t > 2$).

This means that trust, commitment, communication, co-operation and mutual goals in buyer–supplier relationships are suitable predictors of $Y$. This means that for every unit increase in measure of trust, the measure of organizational performance increases by 0.587 units. For every unit increase in measure of commitment the measure of organizational performance increases by 0.126 units. For every unit increase in measure of communication the measure of organizational performance increases by 0.512 units. For every unit increase in measure of co-operation, the measure of organizational performance increases by 0.151 units and for every unit increase in measure of mutual goals the measure of organizational performance increases by 0.111 units. The regression equation used: $Y = -0.402 + 0.587x_1 + 0.126x_2 + 0.512x_3 + 0.151x_4 + 0.111x_5 + e$. 
4.5.3 Coefficient of Determination, R²

Table 4.8: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.860a</td>
<td>.742</td>
<td>.694</td>
<td>.285</td>
</tr>
</tbody>
</table>

Source: Research data (2015)

Table 4.8 indicates that there is an R² value of 74.2%. This value indicates that the five independent variables explain 74.2% of the variance in organizational performance of pharmaceutical manufacturing firms in Kenya. These independent variables are the benefits that accrue as a result of good buyer-supplier relationships. It is clear that they contribute to a large extent to the level of performance that is achieved in the performance of pharmaceutical manufacturing firms in Kenya. It therefore suffices to conclude that buyer–supplier relationships are essential in enhancing organizational performance given that the unexplained variance is only 25.8%.

4.5.4 F Test for the Full Model

Table 4.9 further presents the ANOVA table on the F Test.

Table 4.9: ANOVA Table

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Regression 7.864</td>
<td>5</td>
<td>1.562</td>
<td>18.551</td>
</tr>
<tr>
<td>1 Residual</td>
<td>2.942</td>
<td>30</td>
<td>.081</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10.806</td>
<td>35</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research data (2015)
At 5% level of significance, the numerator df=5 and denominator df=30, critical F value is 2.942. Table 4.9 shows computed F value as 18.551. Hence, the regression model is statistically significant, meaning that it is a suitable prediction model for explaining how buyer–supplier relationships affect organizational performance, also the P = 0. This is consistent with a study done by Mugarura (2010) which concluded that adaptation, trust, commitment and cooperation are significant predictors of relationship continuity and collaboration. Kamau (2013) identified the same variables as suitable predictors of organizational performance among large manufacturing firms in Nairobi.

4.6 Challenges Facing Buyer-Supplier Relationships

The challenges facing buyer - supplier relationships were analyzed in this section. Statements were outlined in the questionnaire and the respondent was required to agree or disagree with the statements. The statements were in relation to the issues that are likely to pose a challenge in buyer – supplier relationships. The following table illustrates the mean and standard deviations of the results.

Table 4.10 Challenges facing buyer supplier relationships

<table>
<thead>
<tr>
<th>Challenges facing Buyer-Supplier Relationships</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-existence of mutual goals</td>
<td>2.250</td>
<td>0.944</td>
</tr>
<tr>
<td>Lack of trust</td>
<td>1.417</td>
<td>0.504</td>
</tr>
<tr>
<td>Lack of co-operation</td>
<td>1.375</td>
<td>0.495</td>
</tr>
<tr>
<td>Lack of commitment</td>
<td>1.292</td>
<td>0.550</td>
</tr>
<tr>
<td>Poor performance of suppliers</td>
<td>1.208</td>
<td>0.415</td>
</tr>
<tr>
<td>Absence of communication</td>
<td>1.167</td>
<td>0.381</td>
</tr>
</tbody>
</table>

Source: Research data (2015)

A scale was used to show the extent to which the respondent thought the statement affect buyer-supplier relationships was true. 1=strongly Agree 2= Agree 3= Undecided 4=Disagree 5=Strongly Disagree. Therefore a mean of 1-2 shows an agreement that the statement in question, affects buyer - supplier relationships. A mean of 3, shows that the
respondent is undecided. A mean of 4.5 shows that the respondent doesn’t agree that the factor in question affects buyer-supplier relationships.

Findings from table 4.10 shows that the majority of our respondents agreed that the following factors affect buyer-supplier relationships; lack of co-operation, lack of commitment, poor performance, lack of trust, non-existence of mutual goals and absence of communication. This is because their mean scores were between 1-2. This therefore means that all the above factors pose a challenge in buyer-supplier relationships with the major one being lack of mutual goals. Same barriers have been identified in the existing literature and they include; Unwillingness to share information (Barratt, 2004), lack of trust (Delbufalo, 2012), lack of mutuality and symmetry (Palmer et al., 2012) and lack of commitment and cooperation (Spekman and Caraway, 2006).
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This study was carried out to establish the effect of buyer–supplier relationships on organizational performance among pharmaceutical manufacturing firms in Kenya. The study had three objectives, to determine the extent to which pharmaceutical manufacturing firms in Kenya have adopted the concept of buyer-supplier relationships, to determine the effect of buyer–supplier relationships on organizational performance and to determine the challenges facing buyer–supplier relationships. This chapter presents the summary of findings for the three objectives mentioned above, the conclusions, recommendations made based on findings and the suggestions on areas that need to be researched on as far as this concept is concerned.

5.2 Summary of Findings

The study established that most pharmaceutical manufacturing firms that operate in Kenya have been in existence for more than ten years. The study confirmed that most pharmaceutical manufacturing companies in Kenya had embraced the concept of buyer-supplier relationships as they had incorporated all buyer-supplier relationship variables in their operations.

The research also looked into the challenges facing buyer-supplier relationships among pharmaceutical manufacturing firms in Kenya. The research confirmed that lack of communication, lack of commitment, lack of trust, lack of co-operation, non-existence of mutual goals and poor performance were some of the challenges that were facing buyer-supplier relationships. This is an indication, that for buyer-supplier relationships to be successful, companies have to ensure good communication, trust needs to be developed, there is need for cooperation, both parties need to be committed and there is need to develop mutual goals with suppliers.

It was also clear from the study that the five independent buyer–supplier relationship variables of trust, communication, co-operation, mutual goals and commitment improves organizational performance since they had a sig. value that is less than 5%. This study
concurs with an earlier study carried out by Barratt (2004) which concludes that buyer-supplier relationships actually affect a firm’s performance.

5.3 Conclusions

The study concludes that most pharmaceutical manufacturing companies in Kenya have been embracing buyer-supplier relationships for more than ten years. Buyer-supplier relationships have assisted these pharmaceutical manufacturing companies to enhance the performance of their organizations. This is supported by the results from the regression analysis conducted that indicated that there is a strong relationship between buyer-supplier relationships and organizational performance.

5.4 Recommendations

The study has confirmed that buyer-supplier relationships are very significant in enhancing the performance of organizations. All pharmaceutical manufacturing companies and other organizations are advised to embrace this concept so that they can be able to reap the benefits of developing buyer-supplier relationships. By maintaining good relationships with their suppliers, pharmaceutical manufacturing companies ensure that they perform well; they also help the suppliers themselves to perform well and also achieve their goals.

5.5 Limitations of the Study

The findings of this study and application therefore are limited to pharmaceutical manufacturing firms in Kenya. They may not be applicable directly to other organizations operating outside the Kenyan pharmaceutical manufacturing industry. It is therefore important to note that they can only be used for comparative purposes and not for any direct application in another industry or country. The research only focused on the pharmaceutical manufacturing firms in Kenya. It did not feature all the manufacturing firms in the country. This was because of limited time and resources.

It was such an uphill task for the researcher to convince the respondents to participate in the study. Pharmaceutical manufacturing companies are very busy organizations where by getting a respondent was challenging. Most of the respondents agreed to participate on
condition that the information will not be divulged to any other party other than for academic purposes only.

5.6 Suggestions for Further Research

The researcher recommends further research on the same topic not only on the overall Kenyan manufacturing industry but also on organizations other than manufacturing companies, both within the country and outside the country. This will help to establish whether the same effects will be found when the research is done on different organizations other than manufacturing organizations. This will assist in providing concrete facts upon which reliable conclusions can be made.
REFERENCES


Ntayi, J. & Eyaa, S. (2012). Collaborative relationships, procurement practices and


UNIDO. (2014). Strengthening the local production of essential medicines in developing
countries through advisory and capacity building support. *Kenya Goods Manufacturing Practices Roadmap*.


APPENDICES

Appendix I: Research Questionnaire

Research Questionnaire

This questionnaire has been designed for the sole purpose of collecting data on the effect of buyer – supplier relationships on organizational performance of pharmaceutical manufacturing firms in Kenya. The data collected will be treated with a very high degree of confidentiality and it is meant for academic purpose only.

You are kindly asked to fill out this questionnaire by putting an “X” in front of the applicable answer or in the applicable cell.

(Optional)

Name..............................................................................................................
Company.....................................................................................................

Section A: General Information

1. Duration company has been in operation ☐ Less than 10 years ☐ 10 or More years
2. What is your position in this organization
   a) Procurement manager ☐
   b) Production manager ☐
   c) Quality Manager ☐
   d) Finance manager ☐
   e) Other (specify).................................................................
3. How long have you been in this position?
   a) Less than 5 years ☐
   b) 5 to 10 years ☐
   c) 11 to 15 years ☐
   d) Above 15 years ☐
4. Gender
   a) Male
   b) Female

**Section B: Extent to which Pharmaceutical Manufacturing Firms in Kenya have embraced Buyer-Supplier Relationships**

Please indicate the extent to which you agree with the following statements on the extent to which pharmaceutical manufacturing firms in Kenya have embraced buyer – supplier relationships.

The scale below will be applicable:

1= to a very large extent 2= Large extent 3= moderate extent 4= small extent 5=very small extent.

<table>
<thead>
<tr>
<th>No</th>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>There is a high level of trust between our company and that of our suppliers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>There is mutual information sharing between our company and our suppliers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>There is a high level of commitment between our company and that of our suppliers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>We maintain long-term relationships between our company and our suppliers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>There is good communication between our company and that of our suppliers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>There exists clear understanding of each other’s roles and responsibilities between our company and our suppliers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>There is responsiveness towards each other’s and needs between our company and our suppliers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>There exists mutual goals between our company and our suppliers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section C: Relationship between Buyer – Supplier Relationships and Organizational Performance

Please indicate the extent to which you concur with the following statements concerning the listed variables and buyer – seller relationships.

The scale below will be applicable:
1= to a very large extent 2= Large extent 3= moderate extent 4= small extent 5=very small extent.

<table>
<thead>
<tr>
<th>No</th>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Trust in buyer – supplier relationships results in better organizational performance for our organization.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Commitment in buyer – supplier relationships results in better organizational performance for our organization.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Communication in buyer – supplier relationships results in better organizational performance for our organization.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Co-operation in buyer – supplier relationships results in better organizational performance for our organization.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Having Mutual goals in buyer – supplier relationships results in better organizational performance for our organization.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>In general, buyer-supplier relationships have helped improve performance in our organization.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section D: Challenges facing Buyer - Supplier Relationships

Please indicate the extent to which you concur with the following statements concerning Challenges facing buyer supplier relationships.

Use the scale of: 1= strongly agree 2= Agree 3= Undecided 4= Disagree 5= Strongly disagree

<table>
<thead>
<tr>
<th>No</th>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low levels of trust between buyers and suppliers leads to failure of buyer – supplier relationships</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Lack of commitment causes failure of buyer- supplier relationships</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Absence of communication leads to poor buyer - supplier relationships</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Lack of co-operation between buyers and suppliers leads to failure of buyer- supplier relationships</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Non-existence of mutual goals between the supplier and the buyer leads to failure of buyer supplier relationships</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Poor performance of suppliers leads to poor buyer supplier relationships</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Any other? Please indicate.

........................................................................................................................................................................
........................................................................................................................................................................
........................................................................................................................................................................

Thank you for participating.
## Appendix II: Pharmaceutical Manufacturing Firms in Kenya

<table>
<thead>
<tr>
<th>PHARMACEUTICAL MANUFACTURING FIRMS IN KENYA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  GLAXOSMITHKLINE LIMITED</td>
</tr>
<tr>
<td>2  BETA HEALTHCARE INTERNATIONAL LTD</td>
</tr>
<tr>
<td>3  BIODEAL LABORATORIES LTD</td>
</tr>
<tr>
<td>4  COSMOS LIMITED</td>
</tr>
<tr>
<td>5  ELYS CHEMICAL INDUSTRIES LTD</td>
</tr>
<tr>
<td>6  MAC’S PHARMACEUTICALS LTD</td>
</tr>
<tr>
<td>7  IVEE AQUA EPZ LIMITED</td>
</tr>
<tr>
<td>8  PFIZER LABORATORIES LTD.</td>
</tr>
<tr>
<td>9  ALPHA MEDICAL MANUFACTURERS LTD</td>
</tr>
<tr>
<td>10 NORBROOK KENYA</td>
</tr>
<tr>
<td>11 NORBROOK AFRICA EPZ LTD</td>
</tr>
<tr>
<td>12 NOVELTY MANUFACTURING LTD</td>
</tr>
<tr>
<td>13 HIGH CHEM PHARMACEUTICALS KENYA</td>
</tr>
<tr>
<td>14 COMET HEALTHCARE LTD.</td>
</tr>
<tr>
<td>15 INFUSION KENYA LIMITED</td>
</tr>
<tr>
<td>16 LABORATORY &amp; ALLIED LTD.</td>
</tr>
<tr>
<td></td>
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<tr>
<td>17</td>
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<td>18</td>
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<td>30</td>
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</table>