

**ANALYSIS OF RELATIONSHIP BETWEEN SUPPLIER QUALITY
MANAGEMENT PRACTICES AND PROCUREMENT PERFORMANCE
OF SOUTH NYANZA SUGAR COMPANY LIMITED, KENYA**

BY

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DECLARATION

I certify that this project report has not been previously presented for a degree in any other University. The work reported herein has been carried out by me and all sources of information have been acknowledged by means of references.

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DEDICATION

This work is dedicated to my wife Ivy and my entire family for moral and financial support which they gave me during the research period.

ABSTRACT

Procurement performance has been identified as a key indicator to the overall organization's performance. By ensuring better procurement performance, most organizations would have a competitive edge over others. This is due to reduced lead time, cost savings and quick inventory flow. South Nyanza Sugar Company Limited is one such organization that has in place procurement department to ensure proper procurement function. To ensure efficient procurement performance, the company has put in place Supplier Quality Management (SQM) that ensures proper supplier appraisal, supplier selection and development. Despite investing in Supplier Quality Management, the Company still faces a number of problems like wastage of raw materials from downstream suppliers, low sugar processing capacity within the organization which is in most cases attributable to procurement procedures. Studies have been conducted on SQM on one hand and procurement performance on the other but none has concentrated in the relationship. The purpose of this study therefore was to analyze the relationship between supplier quality management practices and procurement performance of South Nyanza Sugar Company Limited. Specifically the study sought to: establish the relationship between Supplier appraisal and procurement performance, Supplier selection and procurement performance, Supplier development and procurement performance; of South Nyanza Sugar Company Limited. It was guided by a conceptual framework in which the independent variable was supplier quality management practices and the dependent variable was procurement performance. The study adopted a correlational research design. The population was 60 comprising of 10 managers, 30 procurement staff and 20 selected suppliers. Census sampling was used. Both primary and secondary data was used. To establish the validity of the research instrument, the researcher sought opinions of experts while the reliability was estimated using Cronbach's alpha coefficient where a value above 0.6 indicates that the instrument was reliable. Correlation analysis revealed that supplier appraisal and procurement performance had a strong positive relationship which was not significant ($r= 0.735, p>0.05$); supplier selection and procurement performance had a strong positive relationship ($r= 0.724, p>0.05$) and supplier development and procurement performance had a moderate positive relationship ($r= 0.522, p<0.05$). The study recommended that though organizations need to invest in supplier appraisal and supplier selection since they positively relates to procurement performance, though their relationship is not significant. The organizations also need to invest in supplier development.

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ABBREVIATIONS

SQM:	Supplier quality Management
PP :	Procurement Performance
CIPS:	Chartered Institute of Purchasing and Supplies
FDI :	Foreign Direct Investment
FMCG:	Fast moving Consumer Goods
PPMS:	Procurement Performance Management System
PP:	Procurement Performance

OPERATIONAL DEFINITION OF TERMS

Supplier quality management (SQM): It is terms of the managerial efforts necessary for creating an operating environment in which a manufacturer can integrate its supplier capabilities into its operational processes. (Harland *et al.*1999)

Procurement Performance: Is the quantitative assessment of the degree to which the procurement function and those employed therein achieve the general or the specific objectives assigned to them.(Lyson,2000)

Supplier Development: Supplier development refers of activities taken to improve supply quality with assistance to operations improvement in supplier side.Monczka*et al.* 1993, Krause and Ellram 1997)

Supplier Integration: Refers to decisions and activities that extend the buyers production plant to the supplier's yard and vice versa.(Prahalad and Ramaswamy, 2003)

CHAPTER ONE: INTRODUCTION

This chapter highlights the background of the study, statement of the problem, study objectives and the conceptual framework anchoring the study.

1.1 Background of the Study

1.1.1 Procurement Performance

Procurement performance (PP) is the quantitative assessment of the degree to which the procurement function and those employed therein achieve the general or the specific objectives assigned to them (Lyson, 2000). It is the extent to which the procurement process is achieving its objectives. Process performance measurement focuses on the concept of process capability and maturity. Procurement performance is also indicated by how well a system supports procurement needs of the organization. Quality of the procurement process can be one of the key performance indicators which can be measured by the proportion of business orders ejected or returned by the user (Subramaniam & Shaw, 2002). Similarly, the quality of systems is measured by looking at system availability or responsiveness and resolution of the technical issues.

The principle aim of procurement should be to obtain goods and services of the right quality in the right quantity from the right source, delivered to the right place and at the least cost and price (Lyson, 2000). Successful and efficient procurement practices are those that meet the need of customers, achieve optimum condition and value in regard to allocation of the scarce resources (Ntayi, 2009). The sound procurement practices demand that those responsible for implementing procurement should ensure that the objectives are clear and that quality is sustained (Walker and Sidwell 1996). The practice needs a labor force with effective management skills that develop clear and professional specifications with full knowledge of a competitive process negotiation and monitoring skill. Hunja (2003), posited that procurement system adhere to purchasing ethics ensure successful quality and service delivery to stakeholders.

For any organization to change its focus and become more competitive Amaratunga and Baldry (2002) suggest that performance is a key driver to improving quality of services while its absence or use of inappropriate means can act as a barrier to change and may lead to deterioration of the purchasing function. Organizations which do not have performance means in their processes, procedures, and plans experience lower performance and higher customer dissatisfaction and employee turnover (Artley & Stroh, 2001; Amaratunga & Baldry, 2002 and

CIPS Australia, 2005). Measuring the performance of the purchasing function yields benefits to organizations such as cost reduction, enhanced profitability, assured supplies, quality improvements and competitive advantage as was noted by (Batenburg&Versendaal, 2006).

According to CIPS Australia (2005) report, efficiency and effectiveness represent different competencies and capabilities for procurement organization. Efficiency reflects that the organization is doing things or activities right, whereas effectiveness relates to the organization doing the right thing. There is a trade-off between efficiency and effectiveness as a highly efficient organization may spend less than peers (particularly when compared to highly effective organizations), however, quality and value may suffer. Organizations focused on efficiency tend to make decisions based on cost and investment pay back likelihood; whereas effectiveness focused organizations make decisions based on quality and value rather than costs and productivity. The challenge for procurement organizations is targeting and achieving the right balance between the two.

A study by Saini (2010) examined unethical purchasing practices from the perspective of buyer–supplier relationships. Based on a review of the inter-organizational literature and qualitative data from in-depth interviews with purchase managers from diverse industries, a conceptual framework was proposed, and theoretical arguments leading to propositions were presented. Taking into consideration the presence or absence of an explicit or implicit company policy sanctioning ethically questionable activities, unethical purchasing practices were conceptualized as a three-tiered set. Three broad themes emerged from the analysis toward explaining purchasing ethics from a buyer–seller perspective: Inter-organizational power issues, Inter-organizational relational issues, and Inter- personal relational issues.

A case study by Bellet *al.* (2002) examined the deteriorating relationship between two international high-tech firms was carried out. Respondents were surveyed from the supplier firm to identify major elements that reduced the suppliers trust in its customer as an indicator of practice of ethics using the dimensions of trust identified by Mayer *et al.* (1995). While violations of ability, integrity, and benevolence all contributed to trust reduction, early violations of trustee benevolence contributed importantly to trust deterioration. The supplier and customer would likely differ in their opinion of whether the customer was acting ethically. The researchers recommended that scholars need to examine how many principles

can be violated before trust is eliminated, and whether any of the principles are particularly salient in business relationships.

The studies highlighted above did not look at procurement performance in context of supermarkets in Kisumu City. Lancioni,(2000) for instance only focused on the importance of information technology in procurement ignoring the very vital aspect of procurement performance.Saini (2010) on the other hand examined unethical purchasing practices from the perspective of buyer–supplier relationships but failed to investigate how these unethical practices relate with procurement performance. Another case study by Bell *et al* (2000) merely investigated the elements that reduced suppliers trust in their customers. All the above works therefore did not focus on procurement performance neither did any of them find out the extent of procurement performance in their investigations.

1.1.2 Supplier Quality Management (SQM)

The concepts of supplier quality management (SQM) can be viewed as an integration of strategic practices which need to stretch across inter-organizational boundaries to satisfy both existing and new customers (Harland *et al.* 1999). Accordingly, Yeung and Lo (2002), SQM can be viewed in terms of the managerial efforts necessary for creating an operating environment in which a manufacturer can integrate its supplier capabilities into its operational processes. These managerial efforts can be clustered into several components namely management responsibility, supplier selection, supplier development, supplier integration, quality measurement and conducting supplier audits. Fernandez,(1995) posits that supplier selection; supplier development and supplier integration can be regarded as forming an SQM system, with management responsibility seen as the driver of the system.

In order to compete effectively in the world market, a company must have a network of competent suppliers. Supplier assessment and selection is designed to create and maintain such a network and to improve various supplier capabilities that are necessary for the buying organization to meet its increasing competitive challenges. A firm's ability to produce a quality product at a reasonable cost and in a timely manner is heavily influenced by its suppliers' capabilities.Supplier performance is considered one of the determining factors for the company's success (Krause et al, 2000)Lyman and Wisner (2002), argued that without a competent supplier network, a firm's ability to compete effectively in the market can be hampered significantly.

Paul *et al.* (2008) explains that for purchasing managers, the evaluation and monitoring of supplier performance is also a critical responsibility. Price has been traditionally considered as the single most important factor in evaluating and monitoring suppliers. Changes in competitive priorities have also seen other dimensions of performance including quality, delivery and flexibility become increasingly important. Consequently, in order to maintain effective partnerships, the buyer must continuously monitor supplier performance across multiple dimensions and provide feedback for improvement. These dimensions may be both tangible (operational performance) and intangible (relationship status). It should provide timely information to suppliers which both communicate buyer expectations and where necessary enables corrective action to be undertaken. Chris and Adam (2007) on the other had argued that convenient performance measurement structure for suppliers is encompassed in the concept of the “perfect order”. They further argue that perfect order has three elements: delivery of the complete order; on time; and an error-free invoice. Supermarkets extend this concept to include: delivery to correct address; the product being undamaged; and conformance to quality standards. To achieve these six customer focused targets the supplier will need to measure a wide range of other related internal aspects.

Many studies have been conducted in the area of supplier monitoring and evaluation Ho *et al.*, (2007) for instance investigated the contribution of Supplier Evaluation and Selection Criteria in the Construction Industry in Taiwan and Vietnam. They found out that non-quantifiable criteria play a very important role in the selection process and that the construction companies with the common appraisal criteria being product quality, product availability, delivery reliability, product performance, product cost and service after sale.

Thairuet *et al.*, (2012) and Okello *et al.*, (2014) looked into what the traders in Dagoreti market, in Kiambu Kenya thought about the concept of supplier appraisal and whether they practiced it and the influence of supply chain management practices. The studies revealed that the supplier evaluation criteria include: location of supplier, adequate facilities, use of information technology, financial strength, quality in operations and products, adequate production capacity, and skilled personnel, corporate social responsibility and good ethics.

Wagner (2006) examined in the UK the relationship between supplier development, improvements and the support of the customer firm's competitive strategy with the resource-based view and the relational view as theoretical explanatory perspectives. The results

showed that appropriate supplier development activities substantially back up the customer firm's differentiation as well as cost leadership strategy.

A survey conducted carried out by Humphrey *et al.* (2003) on 142 electronic manufacturing companies in Hong Kong indicated a correlation analysis that transaction-specific supplier development and its infrastructure factors significantly correlated with the perceived buyer-supplier performance outcomes. Hierarchical multiple regression analyses suggested that transaction-specific supplier development, trust, supplier strategic objectives and effective communications significantly contributed to the prediction of buyer-supplier performance improvement.

In summary, whereas Thairu *et al.*, (2012) and Okello *et al.*, (2014) looked into what the traders in Dagoreti market, in Kiambu Kenya thought about the concept of supplier appraisal and whether they practiced it and the influence of supply chain management practices on the Nairobi Securities Exchange, Wagner (2006) only examined the relationship between supplier development and the support of the customer firm's competitive strategy. Humphrey *et al.* (2003) looked at how transaction-specific supplier development and its infrastructure factors significantly correlate with the perceived buyer-supplier performance outcomes.

From the works however, it is noted that the areas addressed though varied did not comprehensively cover the subject of supplier quality management practices. They were deficient in highlighting supplier quality management practices and how they relate with procurement performance. They also failed to shed light on the extent of supplier integration. For this reason, these areas are still unclear. Moreover none of the studies did address procurement performance.

1.2 Statement of the Problem

Procurement performance has been identified as a key indicator to the overall organization's performance. By ensuring better procurement performance, most organizations would have a competitive edge over others. This is due to reduced lead time, cost savings and quick inventory flow. South Nyanza Sugar Company Limited is one such organization that has in place procurement department to ensure proper procurement function. To ensure efficient procurement performance, the company has put in place Supplier Quality Management (SQM) that ensures proper supplier appraisal, supplier selection and development. Despite investing in SQM, the Company still faces a number of problems like wastage of raw materials from downstream suppliers, low sugar processing capacity within the organization which are in most cases attributable to procurement procedures. Studies have been conducted on SQM on one hand and procurement performance on the other but none has concentrated in the relationship. This study therefore was designed to analyze the relationship between supplier quality management practices and procurement performance of South Nyanza Sugar Company Limited

1.3 Objectives of the Study

The main objective of the study was to analyze the relationship between supplier quality management practices and procurement performance of South Nyanza Sugar Company Limited

The specific objectives were:

- i. To establish the relationship between Supplier appraisal and procurement performance of South Nyanza Sugar Company Limited
- ii. To establish the relationship between Supplier selection and procurement performance of South Nyanza Sugar Company Limited
- iii. To establish the relationship between Supplier development and procurement performance of South Nyanza Sugar Company Limited

1.4 Research Hypotheses

The study was guided by the following research hypotheses:

- HO₁: Supplier appraisal has no significant relationship with procurement performance of South Nyanza Sugar Company Limited
- HO₂: Supplier selection has no significant relationship with procurement performance of South Nyanza Sugar Company Limited
- HO₃: Supplier development has no significant relationship with procurement performance of South Nyanza Sugar Company Limited

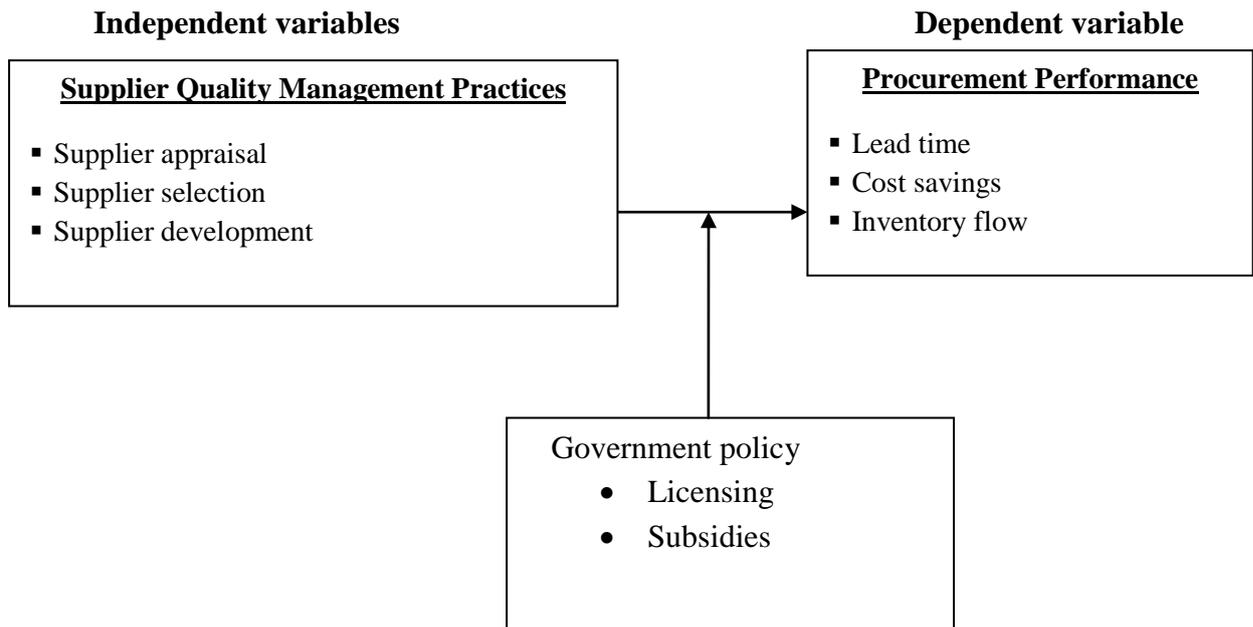
1.5 Scope of the Study

The study focused mainly on supplier quality management practices used by the procurement department of South Nyanza Sugar Company Limited and the procurement performance of the Company. The data was collected from employees and selected suppliers of South Nyanza Sugar Company Limited

1.6 Justification of the study

The findings of this study would be of great importance to the management of South Nyanza Sugar Company Limited and other governmental and nongovernmental organizations that engages suppliers in the provision of goods and services. The study findings could provide valuable insight into how to choose optimum suppliers in order to achieve better purchasing performance.

1.7 Conceptual Framework



Intervening Variable

Fig. 2.1: Influence of supplier quality management practices on procurement performance.

Adapted from: Fernandez (1995)

The relationship above shows the dependent variable, procurement performance as affected by the independent variable supplier quality management practices which have the elements namely measuring and monitoring supplier performance, supplier integration, supplier audits/appraisal, supplier development and competitive supplier selection. The above independent variable constructs are believed to have some form of relationship with procurement performance of South Nyanza Sugar Company Limited through lead time reduction, defect free products, and cost savings. The Governments policy and organizational processes are intervening variables in this relationship.

2.0 CHAPTER TWO: LITERATURE REVIEW

This chapter reviews theoretical literature and empirical studies. It focuses on the theoretical foundations on which the study will be built. It also explores comparative empirical literature which helps to explain the gap which the study seeks to address. The literature discussed is mainly on supplier quality management practices and performance.

2.1 Theoretical Literature Review

2.1.1 Agency Theory and Supplier Quality Management

This study was guided by the agency theory. Agency theory is concerned with agency relationships. Two parties have an agency relationship when they cooperate and engage in an association wherein one party (the principal) delegates decisions and/or work to another (an agent) to act on its behalf (Eisenhardt, 1989; Rungtusanatham *et al.*, 2007). The important assumptions underlying agency theory are that: potential goal conflicts exist between principals and agents; each party acts in its own self-interest; information asymmetry frequently exists between principals and agents; agents are more risk averse than the principal; and efficiency is the effectiveness criterion (Eisenhardt, 1989; Ekanayake, 2004; Rungtusanatham *et al.*, 2007).

In a supply chain relationship the buying firm acts like a principal that delegates the authority of production and/or services to the supplier, the supplier being the agent, so both parties are engaged in an agency relationship (Starbird, 2001; Zsidisin and Ellram, 2003). Along with the delegation of production and services, the responsibility of maintaining satisfactory quality of the supplied products and services is also delegated to suppliers, so buying firms need to ensure that suppliers provide products and/or services that conform to the quality requirements stipulated in the supply contracts. Moreover, competition these days is becoming supply chain versus supply chain rather than firm versus firm (Ketchen and Hult, 2007), so firms are working to increase customer satisfaction and gain competitive advantage by finding ways to improve the whole supply chain, from suppliers to end consumers. Strategic quality management of supply chains not only ensures the quality of supplies, but also enhances the capabilities of suppliers' quality management.

Managing supplier quality, then, involves frequent, continuous interactions between buying firms and their suppliers in tackling such various issues as negotiating contractual provisions related to quality requirements and rewards, penalties and inspection policies, specifying

requirements on the supplier's quality qualification and certification, and collaborating on product design and process improvement (Flynn and Flynn, 2005; Kaynak and Hartley, 2008; Kuei *et al.*, 2008; Robinson and Malhotra, (2005); Starbird, (2001). A well-developed agency theory is thus particularly useful in understanding the use of management mechanisms for Supply chain quality management (SCQM) and the attributes of supply chain relationships.

The assumptions and prescriptions of agency theory fit naturally with the issues inherent in SCQM. In the process of managing supplier quality, buyers in agency relations are faced with potential problems. By their nature, buyers expect suppliers to provide good quality and to improve the quality of supplied products and/or services, but suppliers may be reluctant to invest substantially in quality, especially if they perceive that buyers are reaping all the benefits. The difference in interest between buyers and suppliers will result in the two parties concerning themselves only with their self-interests. At this point moral hazard and adverse selection problems are likely to arise. Zsidin (2006).

When buying firms cannot constantly monitor the process at suppliers' sites, which is usually difficult or expensive to do so, suppliers may conceal their difficulties in delivering the quality demanded by buyers (i.e. adverse selection) and slight efforts to control and improve the product and process quality as expected (i.e. moral hazard) (Starbird, 2003; Swink and Zsidin, 2006). Furthermore, buyers and suppliers may have different attitudes toward risks associated with quality failures, especially those that occur after sales to end consumers, a situation that will result in risk-sharing issues between buyers and suppliers. Thus, when making decisions about how to manage supplier quality performance, buyers need to assess the nature of their buyer-supplier relationships in order to select the appropriate management mechanism.

2.1.2 The Concept of Supplier Quality Management.

Supplier quality management is a set of activities in most cases initiated by the management to improve organizational performance. Such activities include measuring and tracking the cost of supplier quality, using performance based score cards to measure supplier performance, conducting supplier audits and establishing effective communication channels with suppliers among many more, with an aim of achieving customer satisfaction (Carr and Pearson, 1999). Forker (1999) argues that the impact of supplier quality on an organization's performance is large and direct, and the general understanding is that a firm's quality

performance can only be as good as the quality performance of its suppliers. An increasing tendency towards supplier development by organizations as supplier quality integration is found to be a critical dimension of quality excellence.

The concepts of supplier quality management (SQM) can be viewed as an integration of strategic practices, and such practices need to stretch across inter-organizational boundaries to satisfy both existing and new customers (Harland et al. 1999). Accordingly, Yeung and Lo (2002), SQM can be viewed in terms of the managerial efforts necessary for creating an operating environment in which a manufacturer can integrate its supplier capabilities into its operational processes. These managerial efforts can be clustered into several components, namely management responsibility, supplier selection, supplier development, supplier integration, quality measurement and conducting supplier audits. Fernandez,(1995) posits that supplier selection, supplier development and supplier integration can be regarded as forming an SQM system, with management responsibility seen as the driver of the system.

In order to compete effectively in the world market, a company must have a network of competent suppliers. Supplier assessment and selection is designed to create and maintain such a network and to improve various supplier capabilities that are necessary for the buying organization to meet its increasing competitive challenges. A firm's ability to produce a quality product at a reasonable cost and in a timely manner is heavily influenced by its suppliers' capabilities, and supplier performance is considered one of the determining factors for the company's success (Krause et al, 2000), Lyman, and Wisner, (2002) Consequently, without a competent supplier network, a firm's ability to compete effectively in the market can be hampered significantly.

2.1.3 Measuring and Monitoring the Performance of the Supplier

Measuring supplier performance is an important means of modifying managerial behavior, and aligning the relationship with the strategic and operational goals of the buyer firm (Paul *et al.* 2008). Performance measures provide the information necessary for decision makers to plan, control and direct the activities of the organization. They also allow managers to measure performance, to signal and educate suppliers on the important dimensions of performance, and to direct improvement activities by identifying deviations from standards. Many well-known frameworks have been developed to aid in these goals, including the balanced scorecard (Kaplan and Norton, 1992).

Paul *et al.* (2008) explains that for purchasing managers, the evaluation and monitoring of supplier performance is also a critical responsibility. Price has been traditionally considered as the single most important factor in evaluating and monitoring suppliers. Changes in competitive priorities have also seen other dimensions of performance, including quality, delivery and flexibility become increasingly important. Consequently, in order to maintain effective partnerships, the buyer must continuously monitor supplier performance across multiple dimensions and provide feedback for improvement. These dimensions may be both tangible (e.g. operational performance) and intangible (e.g. relationship status), and should provide timely information to suppliers which both communicate buyer expectations and, where necessary, enables corrective action to be undertaken. Chris and Adam (2007) on the other hand argued that convenient performance measurement structure for suppliers is encompassed in the concept of the “perfect order”. The perfect order has three elements: delivery of the complete order; on time; and, an error-free invoice. Many supermarkets extend this concept to include: delivery to correct address; the product being undamaged; and, conformance to quality standards. To achieve these six customer focused targets the supplier will need to measure a wide range of other related internal aspects.

Many studies have been conducted in the area of supplier monitoring and evaluation Ho *et al.*, (2007) for instance investigated the contribution of Supplier Evaluation and Selection Criteria in the Construction Industry in Taiwan and Vietnam and found out that non-quantifiable criteria play a very important role in the selection process and that the construction companies with the common appraisal criteria being product quality, product availability, delivery reliability, product performance, product cost and service after sale.

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There is also the review of performance with a review of performance measures such as quality, delivery, profitability, price among many others (Narasimhan *et al.*, 2004). As several studies have been done in this area, it is important to investigate the conclusion made by these studies to establish whether similar conclusion can be reached when using different methodology and researcher to conduct the study. Equally since most studies did not investigate causal relationships between supplier management practices and procurement performance. It is therefore not known if this relationship exists.

2.1.4 Supplier Appraisal and Audits

Another supplier quality activity is conducting supplier audits. This is a very time consuming exercise but it is important since it adds value to a business. In modern organizations, the role of a quality auditor is that of an adviser who identifies areas of improvement for mutual benefit. Many firms are also adopting the non conformance audit where the auditor lists all the cases he/she has observed where things are not being done in accordance with procedures and whether they make sense or not. It should however be noted that supplier audits should not be regarded as an exercise to give the suppliers homework to do, but should be aimed at improving the relationship between the customer and supplier. This is because after the audits, the payback should come in the improved understanding of each company's requirements which develops from the audit process (Andrew, 1994).

Several studies (Kariuki&Nzioki, 2010; Luchali&Ombati, 2013) have shown that supplier appraisal and management has been of less importance considering its strategic value to the organization. Kariuki *et al* (2010) noted that the supplier evaluation and management in real estate industry in Kenya have not been given the priority despite the industry contributing to more than 5.1% GDP in the economy. The industry added KES 12.6 billion to the country's GDP in 2011 and employs more than 1 million people either directly and indirectly (KNBS, 2012). According to KNBS (2011) the real estate industry had a 5.1% GDP in 2009. Supplier inefficiencies have led the National Housing Corporation lose millions of money through rogue and unreliable suppliers (Luchali *et al*, 2013; Michira, 2013

Despite the above documented studies on supplier appraisal there is limited evidence on studies on supplier quality management practices and how it influence procurement performance in the health insurance scheme. Many of the existing studies have focused more

on the methodologies of supplier evaluation (Hung et al. 2009; Wang et al. 2011; Elanchezhian *et al.* 2010; Aspemaret *et al.* 2009; Ozdemir&Temur, 2009). In view of these, a dedicated study is required to establish the relationship between supplier appraisal and procurement performance.

2.1.5 Supplier Development

Supplier development refers to activities taken to improve supply quality with assistance to operations improvement in supplier side. Buying firms may use a variety of activities to develop suppliers' performance and/or capabilities. Previous researchers described activities that take place within the context of supplier development. These activities include introducing competition into the supply base, supplier evaluation as a prerequisite to further supplier development activities, raising performance expectations, recognition and awards, the promise of future benefits, training and education of the supplier's personnel, exchange of personnel between the buying firm and the supplier, and direct investment in the supplier by the buying firm (Monczka *et al.* 1993).

According to Krause & Ellram (1997), 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. If suppliers are to be innovative in supplying an exclusive product then the option of supplier development needs to be given consideration. 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 (Kruse *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 (Kruse *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 (Kruse *et al.*, 2007). Manufacturing and service companies are trying to work effectively with suppliers through sharing information, technical knowledge and schedules of production (Vermani, 2003).

Literature shows that firms may engage in supplier development as a reaction to competitive markets. Seeking competitive advantage from supply initiatives such as supplier development because of competitive pressures such as short product life cycles, innovations in technologies and demand for increased quality levels from customers. It is therefore apparently clear that those firms operating in highly competitive markets put more efforts in

their supplier development programs(Hahn *et al.* 1990). Supplier development can be a tremendous undertaking requiring resources of money, capital, and people by both the customer and the supplier. Therefore commitment from both parties is necessary. It also requires trust because it involves risk. It is risky for two reasons. First, success is not guaranteed. Second, the companies will have to share confidential and strategic data. Supplier development also requires cooperation and compromise. The companies have to come to agreements about very important matters, such as performance metrics. Sako, (2004) points out that the companies must also have “distinctive organizational and governance structure that facilitates long-term cumulative learning”. So commitment and trust are not enough, the companies must be able to support learning on the organizational level. Supplier development should be about partnership, where both customer and supplier are committed to working together for the long-term benefits (Quayle 2000).

Firms within a supply chain should communicate with each other because of competitivebusiness atmosphere. Therefore, information sharing between the buyer and supplier is measuredto be an important indicator of the use of Supply Chain Management because there are manycurrent studies that have reported considerable benefit of sharing information (Moinzadeh, 2002).

Among these variables communication methods, information sharing within and between firms,top management commitment, trust between trading partners and support aim of supplier havebeen frequently identified by authors as major factors of supplier development activities. Supplier development is a crucial element of supply chain management with potential reduction in lead time and inventory reduction. Critical factors such as strategic focus, suppliercommitment, effective communication, and supplier recognition and management involvementare important for success of supplier development (Anderson, et al 1992).

Supplier development requires both the supplier and buyer to commit to maximum efforts toachieve the greatest results out of the program.Management must align supplier development activities within the purchasing strategic plan andfor that it is highly desirable to clearly quantify the past performance, measure the current statusof supplier development process, identify objectives and previous strategies to recognize thestrengths, weaknesses, opportunities and threats. If the past performances are not sufficient thenupper management must consider changes in the supplier development strategies and approaches(Berlow, M.

1995). Moreover, upper management must be endowed with resources and the involvement at a level which supports in achieving improvements through the implementation of aggressive strategy approaches. Aggressive strategy can include frequent visits to suppliers to evaluate their processes, founding of a system to reward and recognize supplier improvements, providing training to suppliers, alliance with suppliers in improving existing and new materials, and involving the supplier in the company's new product development process.

A strong purchasing mission statement reflects and dives strategic emphasis and alignment (Blonska *et al*, 2008). Development of world class suppliers' base can also help in attaining the strong purchasing mission and strategic alignment. To check the progress and whether the factors are implemented properly can be done by following up the meetings and confirming that the supplier development program is equipped with all the resources and management strategies required.

Abubakar & Rajput (2012) noted that supplier development practices are important components of supply chain management. They noted that these practices play key role for bringing improvement in buyer-supplier performance. Krause *et al* (2007) noted that the increasing dependence on suppliers and the importance they play in both the maintenance of an existing supply chain and the development of future strategic capabilities suggests a growing requirement an organization to effectively manage and develop their suppliers.

Mahajan & Sarang (2012) observed that supplier development has two objectives, first to reduce problem of supplier by making immediate changes in the supplier's operations and second to increase suppliers' capability such that suppliers make their own improvement. Clarke (2007) noted that supplier development can be closely linked to the process of regular assessment. Areas requiring improvement can be identified, action plans drawn up and progress monitored. Clarke further noted that the linking of assessment systems to development programs underlines the dynamic nature of partnerships and emphasized that the overriding concern is for progressive improvement of performance. Monahan (2005) noted that supplier development is one of the strategies used to add value to the supply chain. CIPS (2006) noted that supplier development involves embracing supplier expertise and aligning it to the buying organization's business need, and, where appropriate, vice versa.

In summary the above works did not specifically focus on the relationship that supplier development has with procurement performance. Mahajan & Sarang (2012) merely looked at

the objectives of supplier development while the works of Abubakar& Rajput (2012) investigated the importance of supplier development in supply chain management. On the same note Humphrey *et al.* (2003) carried out a study on 142 electronic manufacturing companies in Hong Kong and they merely wanted to find out the role of supplier development in the context of buyer–supplier performance from a buying firm's perspective. This means that the relationship between supplier development and procurement performance still needed to be investigated.

2.2 EMPIRICAL LITERATURE REVIEW

2.2.1 Supplier Appraisal and Procurement Performance

Lelei, J. (2015) investigated the supplier evaluation criteria and the influence to the procurement performance in the Kenyan context. Therefore this study was undertaken with the main objective to assess the supplier selection and evaluation practices in Parastatals in Kenya. It employed a descriptive research design. The target population for the study included all the 187 parastatals under the state corporations' act of Kenya as at September 2015. Out of these, a sample of 53 was selected to give response to the study. However, 3 of these did not respond to the study giving a response rate of 94%. Questionnaires were used to collect data which was analyzed through SPSS software. Findings revealed that Parastatals in Kenya base their selection on following criteria; quality of the supplier services during, financial position of the supplier, flexibility of the supplier, supplier efficiency in service delivery, supplier charges, constitution and the PPOA guidelines, information sharing between the organization and supplier, supplier technical capability, supplier profile, ability of the supplier to share confidential information, experience of the supplier in offering certain services/products as well as compliance with procurement procedures. The study recommended that the management and the supply chain management for the Parastatals in Kenya need to effectively evaluate the most effective evaluation criteria that would facilitate its procurement performance. There is need also to ensure that competent personnel are in place to manage supply chain processes in the organizations.

Murigi (2014) sought to establish the influence that the supplier appraisal has on the procurement performance in the real estate industry. It deeply studied how supplier appraisal criteria, models, practices and supplier development influence procurement performance. He employed a descriptive research design. The data was collected using a questionnaire from

the employees of International House Ltd. The study used stratified sampling method in coming up with a sample size of 36. The collected data was edited, coded and entered for analysis using statistical package for analysis (SPSS) version 17. Descriptive statistics such as frequencies and percentages and augmented with measures of central tendency (mean) and dispersion (standard deviation) were used. Additionally, multiple linear regression analysis was conducted to determine the relationship between dependent and independent variables. The findings were presented in pie charts, bar graphs, and tables for clarity. The study established that the research model predicts 57.1% of the procurement performance in the real estate industry.

Chemjor, R (2015) assessed the supplier selection and evaluation practices in Parastatals in Kenya. It employed a descriptive research design. He established that the supplier evaluation in these organizations is faced by several challenges including corruption, incompetent procurement officers, inefficiencies in procurement processes, lack of incentives, pressure of implementing PPOA and PPDA guidelines, cost of implementing procurement systems as well as maintaining procurement system greatly affects supplier selection process. The study therefore recommended that the management and the supply chain management for the Parastatals in Kenya need to effectively evaluate the most effective evaluation criteria that would facilitate its procurement performance. There is need also to ensure that competent personnel are in place to manage supply chain processes in the organizations.

Tracey and Tan (2001) employed confirmatory factor analysis and path analysis to examine empirically the relationship among supplier selection criteria, supplier involvement, each of the four dimensions of customer satisfaction (competitive pricing, product quality, product variety, and delivery service), and overall firm performance. This research confirms that higher levels of customer satisfaction and firm performance result from selecting and evaluating suppliers based on their ability to provide quality components and subassemblies, reliable delivery, and product performance. It finds no evidence that selecting suppliers based on unit price has a positive impact on customer satisfaction or firm performance.

Watts and Hahn (1993) showed the importance of formal supplier evaluation to the supplier development process. The survey results of 81 usable responses show quality related supplier capabilities received the highest ratings from respondents, followed in order by cost, delivery, and technical related capabilities. Other studies found that firms often use supplier assessment and supplier selection to measure supplier performance and to identify specific

supplier deficiencies and drive the development of a plan to effectively address these problems, and the increased use of supplier development strategies across industries (Watts & Hahn, 1993; Choi & Hartley, 1996; Krause, Scannell&Calantone, 2000). To build more effective relationships with suppliers, firms are using supplier selection criteria to strengthen the selection process, to improve decision making, and upgrade supplier and manufacturing performance (Vonderembse& Tracey, 1999).

2.2.2 Supplier Selection and Procurement Performance

Shiatiet *al* (2014) assessed the determinants of supplier selection and the impact they have in the performance of public institutions in Kenya. The study was guided by case study and descriptive research survey designs. The researcher then analyzed the data using Statistical Program for Social Scientists (SPSS), where descriptive statistics were generated in terms of frequencies, percentages, and means among others and the results were presented in cross tabulation and frequency tables. The second level of the data analysis involved inferential statistics where regression analysis was used to establish the association between study variables at 95% confidence level, p-value \pm 0.05. The inferential statistical tools were used to test null hypotheses at confidence interval level of 95% ($p < 5\%$ or $p > 5\%$). The study findings were: quality of supplies had a positive and significant association on the performance of public institutions; supplier cost had a positive and significant ($p < 0.05$) association on performance of public institutions in Kakamega County. The following were the conclusions of this study: when conformance quality is enhanced in public institutions in Kakamega County, then product or services achieves customer satisfaction leading to improved performance. It was therefore recommended that the procurement department of public institutions in Kakamega County should reinforce and apply quality dimensions. The research findings will be helpful to academicians, procurement officers and the County Government as a whole on the determinants of supplier selection and the impact they have on the performance of public institutions.

Lee, J. (2008) examined the impact of supplier selection criteria and supplier involvement on the private hospitals' business performance in Malaysia. Furthermore, this study intends to find out whether supplier performance mediates the supplier selection and involvement on the business performance. The model is developed via extensive supplier selection literature. Theoretical basis such as the transaction cost economics and resource-based view of the firm are used to develop the framework for the present study. The basic assumption underlying the theory suggests that relationships between buyers and suppliers lower transaction costs and facilitate investment in relation-specific asset. Based on previous literature, the survey instrument was modified and the revised instrument is mailed to the private hospitals in Malaysia. Results indicate that most commonly used criteria such as competitive pricing, product quality, delivery service and supplier capability are found to be insignificant related to hospitals business performance. Only buyer-supplier fit is positively impact on supplier performance. Nevertheless, greater emphasis should be placed on supplier involvement because the intangible criteria have significantly impact on the hospitals business performance. Consequently, supplier performance does not have the mediating effect on the relationship between supplier selection criteria, supplier involvement and hospital business performance. Private hospitals should carefully select their suppliers to enhance their competitive advantage and long-term needs. In summary, the present study provides guidelines for the hospital boards to analyze the selection decisions and also shows the dimensions of supplier selection and supplier involvement applicable to the hospital industry. Thus, it is hoped that this study will contribute to better purchasing strategies and greater buyer-supplier performance.

Narasimhan and Das (1999) investigated the influence of strategic sourcing and advanced manufacturing technologies on specific manufacturing flexibilities. The findings suggest that strategic sourcing can assist in the achievement of modification flexibilities. Strategic sourcing can be used to target specific manufacturing flexibilities. Das and Narasimhan (2000) developed purchasing competence as a valid construct and explore its relationship with different manufacturing priorities. An empirical study is conducted among purchasing professionals in manufacturing firms. The results of the research indicate that purchasing competence is found to have a positive impact on manufacturing cost, quality, and delivery, as well as new product introduction and customization performance. Purchasing integration, a

component of purchasing competence, is found to relate to all dimensions of manufacturing performance.

2.2.3 Supplier Development and Procurement Performance

Wachiuri *et al* (2015) investigated the role of supplier development on organizational performance of manufacturing industry in Kenya. The specific objectives were to: establish the role of training suppliers, the role of rewards, the role of financial support and role of firm involvement on organizational performance of EABL: A descriptive case study design was used. Statistical analysis was carried out using SPSS. The study revealed that rewards, financial support and firm involvement have a great role in the performance of EABL thus this study recommends that EABL should work closely with the financial institutes to curb the challenge of finances, fund well the training programs that they administer to their suppliers, enhanced communication should be put into practice. Firms ought to evaluate and give feedback to their suppliers more often and on rewards firms should be more vigorous in rewarding and recognizing their supplier.

Agnes, B. *et al* (2015) investigated the outcomes of supplier development as perceived by the supplier. More specifically, we investigate whether supplier adaptation occurs as a result of the interplay among supplier development, preferential buyer status and supplier relational embeddedness. Supplier relational embeddedness provides information to the buyer about the supplier's intentions to reciprocate and stay close with the buyer. We examine the linkages between supply chain management research on supplier development, organization theory research on adaptation, social capital and networks in order to investigate how buyers can influence their competitive position in a supplier's portfolio of competitive buyers. Furthermore, we introduce into our conceptual model a number of relational mediators (i.e. trust, commitment and satisfaction) advancing existent research on supplier development and adaptation. The results show that the relationship between supplier relational embeddedness and a buyer's investments in supplier development are partially mediated by supplier trust, satisfaction (economic) and commitment (affective). Supplier relational embeddedness is an important mediator between investments in supplier development and gaining preferential buyer status that eventually effects in supplier adaptation.

An empirical study on the multidimensional relationships between supplier management practices and firm operational performance was carried out by Prajogo (2012). It focused on

three supplier management practices, namely strategic long-term relationship, supplier assessment, and logistics integration, and tested their effects on four operations performance measures, namely quality, delivery, flexibility, and cost. Data was collected from a sample of 232 manufacturing firms in Australia to conduct the study. The results showed that different supplier management practices have different unique effects on different operations performance measures. Supplier assessment has a positive relationship with quality performance. Both strategic long-term relationship and logistics integration have positive relationships with delivery, flexibility, and cost performance.

Another study by Holma (2012) also delved into buyer-supplier partnership. The sample survey in Australia applied a triadic perspective to business triads of an industrial buyer, its service supplier and intermediary partners. The focus was on the structural, relational and cognitive features of interpersonal interaction. The study also took into account strategic level interactions and interactions related to daily operations, thus providing insight into long and short-term interactive processes. The results showed that dedicated contacts and the social bonds between them provide important channels for both tacit and explicit information within and between the organizations, specifically at the operational level.

2.2.3 Summary of Literature Gaps

In summary, the studies above addressed various issues on supplier management practices albeit inconclusively. While Prajogo (2012) focused mainly on three supplier management practices namely strategic long-term relationship, supplier assessment, and logistics integration, and tested their effects on four operations performance measures, namely quality, delivery, flexibility, and cost it failed to show the practical the relationship that these practices have with procurement performance Holma (2012) delved into buyer-supplier partnership. Narasimhan and Das (1999) investigated the influence of strategic sourcing and advanced manufacturing technologies on specific manufacturing flexibilities. It is therefore clear that none of these studies focused on a particular supplier quality management practices and investigated their relationship with procurement performance.

From the works however, it is noted that the areas addressed though varied did not comprehensively cover the subject procurement performance. They are deficient in informing supplier quality management practices and procurement performance relationship. They also failed to shed light on the role supplier selection on general procurement performance. For

this reason, these areas are still unclear. Specifically, the relationship between competitive supplier selection and procurement performance of supermarkets in Kisumu are not clearly addressed. These remain unknown.

3.0 CHAPTER THREE: RESEARCH METHODOLOGY

This chapter provides an overview of the methods that was used to collect and process data. It gives the research design the sampling procedure.

3.1 Research Design

Correlation research design was employed in this study. This was deemed appropriate since the research is to establish the relationship between various Supplier Quality Management Practices and Procurement performance.

3.2 Study Area

The study was conducted in South Nyanza Sugar Company Limited. The Company is located in Migori County, south of Kisii County, West of Homabay County and East of Narok County.

3.3 The Target Population

The target population for the study included the top management, procurement staff and selected suppliers totaling to 60 respondents as summarized below:

Table 3.1 Target population

Respondents	Number
Management	10
Procurement staff	30
Selected Suppliers	20
Total	60

Source: Sony Sugar Company 2017

3.4 Sample size

A census survey was deemed appropriate because the population involved was small.

3.5 Data collection

3.5.1 Data Type and Sources

Both primary and secondary data was collected for this study. Primary data was obtained using structured questionnaire while secondary data was obtained from the procurement records and documents.

3.5.2 Reliability Test for Data collection instrument

A pilot study was carried out to pre-test and validate the questionnaire. To establish the validity of the research instrument, the researcher sought opinions of experts in the area of procurement. The reliability was estimated using Cronbach's alpha coefficient (Fraekel&Wallen, 2000). According to Mugenda and Mugenda (2003), the high coefficient above 0.6 implied consistency.

3.6 Data Analysis and presentation.

The data collected was processed and organized by first sorting it to ensure consistency, and completeness in information required for statistical analysis which involved coding and tabulating the data. Correlation analysis was used to analyze the relationship between supplier quality management practices and procurement performance of South Nyanza Sugar Company Limited.

4.0 CHAPTER FOUR: RESULTS AND DISCUSSION

This chapter provides the results of the findings and a discussion of each of the findings.

4.1 Response Rate

The respondents consisted of management, procurement staff and selected suppliers at South Nyanza Sugar Company Limited. The respondents who filled in the questionnaires comprised of 19 female and 41 male.

4.2: Firm Specific Characteristics

The firm specific characteristics were assessed in terms of supplier quality management practices and procurement performance at South Nyanza Sugar Company Limited

Table 4.1: Rating of Extent Supplier performance evaluation (n=60)

Supplier performance evaluation Activities	Low		Average		High		V. High		μ	SD
	f	%	f	%	f	%	f	%		
Extent of supplier responsiveness to customer concerns	0	.0	2	1.5	52	48.5	49	29.2	4.29	.36
Extent of on time delivery for products required by customer	0	.0	34	23.9	43	36.8	28	12.3	2.91	.43
Level of technical knowledge of the products supplied	0	.0	42	56.8	31	20.4	37	22.8	3.26	.53
Cost competitiveness of the products supplied by our suppliers	2	1.2	38	57.4	47	27.2	23	11.2	3.44	.73
Suppliers value and maintain good relationships with their customers	2	1.2	53	35.7	40	43.4	6	3.7	3.36	.51

1-V.Low, 2-Low, 3-Average, 4-High, 5-V.High **Source:** Survey Data (2017)

As shown in column 9, the individual mean response scores (μ) for each of the items was above 2.90. On a scale of 1 to 5 scored from “very low” to “very high,” this means that the ratings in both cases were “high” implying the respondents agreed the practice of supplier

performance evaluation was high at South Nyanza Sugar Company Limited. The values of the standard deviations (SD) as shown in column 10 are small. This means that there were minimal variations in the responses on the items that were rated implying that the respondents had a closer feeling on the activities of supplier performance evaluation.

These results are in agreement with those of Paul *et al.* (2008) who explains that for purchasing managers, the evaluation and monitoring of supplier performance is also a critical responsibility. These results further supports those of Tracey and Tan (2001) who employed confirmatory factor analysis and path analysis to examine empirically the relationship among supplier selection criteria, and overall firm performance.

Table 4.2: Correlation of Supplier quality management practices and procurement performance

	Procurement performance	Supplier appraisal	Supplier selection	Supplier Development
Procurement Performance	1			
Supplier appraisal	0.735	1		
Supplier selection	0.724	0.523	1	
Supplier Development	.522*	.502*	.785*	1

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

Source: Survey Data (2017)

4.3.1 Relationship between Supplier Appraisal and Procurement Performance

Objective one sought to establish the relationship between supplier appraisal and procurement performance. From the above correlation table, it is clear that supplier appraisal and procurement performance had a strong positive relationship which was not significant ($r= 0.735, p>0.05$). This implied that whenever South Nyanza Sugar Company Limited invested on appraising their suppliers, their procurement performance increased to a greater level.

This finding supports those of Lelei, J. (2015) who recommended that the management and the supply chain management for the Parastatals in Kenya need to effectively evaluate the most effective evaluation criteria that would facilitate its procurement performance.

The study further supports Murigi (2014) who sought to establish the influence that the supplier appraisal has on the procurement performance in the real estate industry and established that the research model predicts 57.1% of the procurement performance in the real estate industry.

The results concurs with Chemjor, R (2015) who assessed the supplier selection and evaluation practices in Parastatals in Kenya and recommended that the management and the supply chain management for the Parastatals in Kenya need to be effectively evaluated to facilitate its procurement performance.

Finally the study contradicts Tracey and Tan (2001) who employed confirmatory factor analysis and path analysis to examine empirically the relationship among supplier selection criteria, supplier involvement, each of the four dimensions of customer satisfaction (competitive pricing, product quality, product variety, and delivery service), and overall firm performance and found no evidence that selecting suppliers based on unit price has a positive impact on customer satisfaction or firm performance.

4.3.2 Relationship between Supplier Selection and Procurement Performance

Objective two sought to establish the relationship between supplier selection and procurement performance. From the above correlation table, it is clear that supplier selection and procurement performance had a strong positive relationship ($r= 0.724$, $p>0.05$). This implied that whenever South Nyanza Sugar Company Limited invested on selecting their suppliers, their procurement performance increased to a greater level.

The findings supports Shiatiet *al* (2014) who assessed the determinants of supplier selection and the impact they have in the performance of public institutions in Kenya. The inferential statistical tools were used to test null hypotheses at confidence interval level of 95% ($p<5\%$ or $p>5\%$). The study findings were: quality of supplies had a positive and significant association on the performance of public institutions; supplier cost had a positive and significant ($p<0.05$) association on performance of public institutions in Kakamega County.

The findings further concur with Lee, J. (2008) who examined the impact of supplier selection criteria and supplier involvement on the private hospitals' business performance in Malaysia. Results indicate that most commonly used criteria such as competitive pricing, product quality, delivery service and supplier capability are found to be insignificant related to hospitals business performance.

4.3.3 Relationship between Supplier Development and Procurement Performance

Objective three sought to establish the relationship between supplier development and procurement performance. From the above correlation table, it is clear that supplier development and procurement performance had a moderate positive relationship ($r= 0.522$, $p<0.05$). This implied that whenever South Nyanza Sugar Company Limited invested on developing their suppliers, their procurement performance increased to a moderate level.

The study concurs with Wachiuri *et al* (2015) who investigated the role of supplier development on organizational performance of manufacturing industry in Kenya and concluded that firms ought to evaluate and give feedback to their suppliers more often and onrewards firms should be more vigorous in rewarding and recognizing their supplier.

The study further supports Agnes, B. *et al*(2015) who investigated the outcomes of supplier development as perceived by the supplier. The results showed that the relationship between supplier relational embeddedness and a buyer's investments in supplier development are partially mediated by supplier trust, satisfaction (economic) and commitment (affective). Supplier relational embeddedness is an important mediator between investments in supplier development and gaining preferential buyer status that eventually effects in supplier adaptation.

The finding agrees with Holma (2012) who also delved into buyer-supplier partnership. Results showed that dedicated contacts and the social bonds between them provide important channels for both tacit and explicit information within and between the organizations, specifically at the operational level.

5.0 CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents a summary of study findings, conclusions and recommendations based on the major findings.

5.1 Summary of the Findings

Objective one sought to establish the relationship between supplier appraisal and procurement performance. It was established that supplier appraisal and procurement performance had a strong positive relationship which was not significant.

Objective two sought to establish the relationship between supplier selection and procurement performance. It was established that supplier selection and procurement performance had a strong positive relationship which was not significant.

Objective three sought to establish the relationship between supplier development and procurement performance. It was established that supplier development and procurement performance had a significant moderate positive relationship.

5.2 Conclusion

Based on the finding of objective one that supplier appraisal and procurement performance had a strong positive relationship which was not significant, it was concluded that Supplier appraisal has no significant relationship with procurement performance of South Nyanza Sugar Company Limited. Hence the null hypothesis was accepted.

Based on the finding of objective two that supplier selection and procurement performance had a strong positive relationship which was not significant, it was concluded that Supplier selection has no significant relationship with procurement performance of South Nyanza Sugar Company Limited. Hence the null hypothesis was accepted.

Based on the finding of objective three that supplier development and procurement performance had a significant moderate positive relationship, it was concluded that Supplier development has a significant relationship with procurement performance of South Nyanza Sugar Company Limited. Hence the null hypothesis was not accepted.

5.3 Recommendations

Based on the conclusion on objective one that Supplier appraisal has no significant relationship with procurement performance of South Nyanza Sugar Company Limited, it was recommended that though organizations need to invest in supplier appraisal since it positively relates to procurement performance, and the relationship is not significant.

Based on the conclusion on objective two that Supplier selection has no significant relationship with procurement performance of South Nyanza Sugar Company Limited, it was recommended that though organizations need to invest in supplier selection since it positively relates to procurement performance, and the relationship is not significant.

Based on the conclusion on objective three that Supplier development has a significant relationship with procurement performance of South Nyanza Sugar Company Limited, it was recommended that organizations need to invest in supplier development since it positively relates to procurement performance, and the relationship is significant.

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APPENDICES

APPENDIX I: QUESTIONNAIRE

Introduction

This questionnaire is meant to help in collecting data for the analysis of supplier Quality management practices and procurement performance of South Nyanza Sugar Company Ltd. Consequently, you have been identified as a potential respondent for which you are kindly requested to complete the questionnaire and give any additional information you feel is crucial to the study. The information given is absolutely for academic purposes only, and shall be treated with the utmost confidentiality it deserves. Kindly respond to the best of your knowledge. Remember, there is no wrong or right answer.

(a) General information: (Please (✓) tick as appropriate)

1. Age of the respondent:

(a) Up to 18 years

(b) 19 – 24 years

(c) 25 – 35 years

(d) 36 – 45 years

(e) 46 – 55 years

(f) More than 55 years

2. Gender (a) Male

(b) Female

3. How long have you worked in this organization?

- (a) Less than one year
- (b) 1 – 2 years
- (c) 2 – 5 years
- (d) More than 5 years

4. What is your academic qualification?

- (a) O level certificate
- (b) Diploma
- (c) Degree
- (d) Masters

(b) SUPPLIER QUALITY MANAGEMENT PRACTICES

Supplier quality management is a set of activities initiated by management to put checks and balances on suppliers concerning quality of goods and services they offer to the organization.

i. Does your organization engage in supplier quality management?

Yes No

ii. Which supplier quality management practices listed below do your organization use to choose the best suppliers?(You can tick more than one box)

Measuring and monitoring supplier performance	
Supplier integration	
Supplier appraisal	
Supplier development	
Competitive supplier selection	

iii. What is the extent of application of the practice(s) chosen in ii above in your organization?

	Very great extent 5	Great extent 4	Average extent 3	Low extent 2	No extent at all 1
Measuring and monitoring supplier performance					
Supplier Integration					
Supplier appraisal					
Supplier development					
Competitive supplier selection					

c) Extent of Supplier performance evaluation

Tick one box for each, to indicate how you would rate the following **supplier performance evaluation** activities in your firm

		Very high 5	high 4	average 3	low 2	Very low 1
1	extent of supplier responsiveness to customer concerns					
2	Extent of on time delivery for products required by customer					
3	Level of technical knowledge of the products supplied					
4	Cost competitiveness of the products supplied by our suppliers					
5	Suppliers value and maintain good relationships with their customers					

d) Extent to which supplier appraisal practice is adopted

Tick one box for each, to indicate how you would rate the following **supplier appraisal** activities in your firm

		Very high 5	high 4	average 3	low 2	Very low 1
1	Extent to which we carry out an assessment of the level of competence of key personnel within the suppliers organization					
2	Extent to which we measure total acquisition cost of suppliers rather than just their prices					
3	Extent of analysis of suppliers' cash resources and financial ability over a reasonable period of time					
4	We keep a record of the consistency of delivery and quality with evidence of improvement over time					
5	Extent to which we ask for evidence of supplier commitment to the buyer organization in terms of quality					

e) Extent of competitive supplier selection

Tick one box for each, to indicate how you would rate the following **supplier selection practices** in your firm

		Very high 5	high 4	average 3	low 2	Very low 1
1	Extent to which we perform supplier qualification screening					
2	We request suppliers for information regarding their products on offer					
3	Level of technical knowledge of the products supplied					
4	Extent to which we carry out supplier evaluation					
5	Extent to which we monitor our suppliers performance					

f) PROCUREMENT PERFORMANCE MEASURES

Procurement Performance is the quantitative assessment of the degree to which the procurement function and those employed therein achieve the general or the specific objectives assigned to them.

i. Does your organization measure procurement performance?

Yes

No

ii. Which performance measures listed below do you adopt to measure procurement performance for your organization.(You can tick more than one)

iii.

Lead time	
Defect free products	
Return on investment	
Cost savings	
Supplier relationship	

iv. To what extent do you apply the above procurement measures in your organization?

	Very great extent 5	Great extent 4	Average extent 3	Low extent 2	No extent at all 1
Lead time					
Defect free products					
Return on investment					
Cost savings					
Supplier relationship					

THANK YOU FOR YOUR CO-OPERATION

Appendix 2: Budget

The approximate total cost of this research is Kenya Shillings 132,240.00

The breakdown of expenditures on materials required, services, allowances including contingencies are indicated below.

<u>Item Description</u>	<u>Cost</u>
<u>1. Materials</u>	
Ruled papers 1 ream @300/=	300/=
Photocopying papers 4 reams @400/=	400/=
Folders 6 pieces @50/=	300/=
Pens 1 dozen	240/=
Sub-total	<u>1,240/=</u>
<u>2. Services</u>	
Typesetting	8,000/=
Binding	5,000/=
Photocopy	8,000/=
Sub-total	<u>21,000/=</u>
<u>3. Other Costs</u>	
Commuting cost	30,000/=
Accommodation	20,000/=
Subsistence	10,000/=
Research Assistants	40,000/=
Miscellaneous	10,000/=
Sub –total	<u>110,000/=</u>
<u>Grand Total</u>	<u>132,240/=</u>