THE ROLE OF PROCUREMENT ACT 2015 IN THE BUYER - SUPPLIER RELATIONSHIPS AND THE PERFORMANCE OF MILK PROCESSING FIRMS: A CASE OF NAIROBI COUNTY, KENYA

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ABSTRACT

It is widely acknowledged that the procurement Act 2015 ensures that it takes a much shorter time to undertake procurement from start to finish provides for greater professional responsibility and accountability thus ensuring procurement outcomes are sound and follow due process. Kenya has made steady advances in the administration of public procurement and supply chain processes over the last 15 years. This therefore integrates procurement and supply chain professionals and firms' key suppliers in the decision-making process. The purpose of the study was to determine the role of procurement Act 2015 in the buyer-supplier relationships and the performance of milk processing firms in Nairobi County. The specific objectives which the study focused on were; to determine the effect of quality dependability, to assess the effect of information sharing, to ascertain the effects of cost control, to determine the effect of reliability of services on the performance of milk processing firms and finally to determine the moderating role of procurement Act 2015 on the buyer-supplier relationships and performance of milk processing firms. The study was guided by Transaction cost, commitment-trust and social exchange theories. The explanatory research design was used which involved 8 large-scale milk processing firms operating in Nairobi County. A target population of 2312 respondents forming a universe drawn from the 8 milk processing firms within Nairobi County were distributed with questionnaires. The sample size generated was 375 after adjustment for possible non-responses. The study adopted stratified random sampling and proportionate sampling designs. Pilot study was carried out on 38 employees of New KCC milk processing firm in Kitale, Trans Nzoia County. Data was collected using closed ended questionnaires that were in the form of Likert scale. To test the reliability of the instruments of data collection, the Cronbach alpha test was employed. Data collected was sorted, coded, edited and then analysed using descriptive statistics which involved constructing tables of means, measures of dispersion such as standard deviation, regression analysis was done using SPSS version 25. The findings indicated that there was a significant role of procurement Act 2015 in the buyer-supplier relationships and the performance of milk processing firms. The study concluded that quality dependability perfectly contributed to firms' performance. On information sharing, the study concluded that information sharing was critical to firms' performance. In addition, there was a significant contribution of cost control and reliability of services on firm performance. On the procurement Act 2015 it was concluded that that it played a moderating role between buyer-supplier relationships and firm performance of milk processing firms. Thus, it is recommended that Milk processing firms should share their production skills in determining quality with their key suppliers and also embrace timeliness in order to improve performance through buyer supplier relationships.

INTRODUCTION

Background of the study

Supplier relationship is the concept of quality management and is part of strategic management plan for risk mitigations and quality improvement in organizations globally. The buyer supplier relationship involves two parties that relate with each other through transactions that involve exchange of goods and services for money (Butt, 2019). These two parties are separately identified as suppliers and buyers. Effective buyer supplier relationship is associated with benefits including quality dependability, information sharing, cost control and reliability of services (Blessley, Mir, Zacharia & Aloysius, 2018). Buyer-supplier relationship has been acknowledged as the set of approaches that are utilized to ensure that the supplier is integrated in the chain with manufacturing; warehouses and stores which in the long run, will guarantee that merchandise is created and disseminated at different amounts with a point of limiting expenses while in the meantime fulfilling administration level necessities (Yoo, Rhim & Park, 2019).

Emerging from increased competition, firms have changed procurement practices through adoption of effective buyer supplier relationships. The extent to which firms compete is based on supplier quality, but sources of supplier competition link their buyer operations in the supply chain partners, distributors and retailers who supplied from wholesalers Najib, Kartini, Suryana & Sari, 2017). In Public organizations, meet buyer supplier relationships are crucial to their performance. The effective buyer supplier relationship is associated with short demand, customer expectation refocused. Additionally, buyer supplier relationship have enhanced strategic role of the relationship in decision making regarding (Awan, 2019). Yang, Jiang, and Xie, (2019) indicated that one of the vital preconditions for long-term firm survival is the achievement of its productivity and that productivity is achieved through aggressive supply relationship that is able to involve both internal and external stakeholders. Buyer-supplier relationship is a purchasing practice used in firms procurement aspects.

Globally, in Europe, Boddy (2016) on buyer supplier relationship and success of implementing partnering performance among firms noted that quality dependability aspect of buyer supplier relationship includes the timeliness and exchange credibility of the product or services procured. In Australia, Petrovic (2017) on the buyer supplier relationship noted that perceived quality as an aspect of buyer supplier relationship was critical in supply chain performance of enterprises. In Dublin, Vikas et al (2017) on the effect of dependability of key quality elements noted that quality element of buyer supplier relationship could lead to customer satisfaction levels, loyalty and performance. In USA, Arrowsmith and Hartley (2016) on the impact of information sharing as an aspect of buyer supplier relationship noted that that firms need to procure with the correct information that is adequate, to take the correct materials. In China, Todd (2017) on buyer suppler relationship and firm performance noted cost cutting associated with integration between buyer and supplier systems improved performance.

Regionally in Africa, researchers have presented different perspectives on buyer supplier relationship and performance. In Ghana, Kumar (2018) on the relationship between quality dependability aspect of buyer-supplier relationship and customer satisfaction noted that quality dependability is very critical to achieve performance. In Burundi, Hallikas (2017) on the supplier's reliability and performance noted that buyer- supplier relationships promote reliability in supply chain goals. In Uganda Basheka and Mugabira (2018) on the implications of quality, dependability on procurement performance noted that quality dimensions are relatively related to performance. In Egypt, Bob (2019) on buyer supplier relationship and operating costs of postal corporations noted that cost controls benefit of effective buyer supplier relationship had significant effect on performance through operating costs.

Locally in Kenya, buyer supplier relationship and performance have been examined in various sectors. In the education sector, Otieno and Getuno (2017) on supplier sharing information and procurement regulations on performance of public secondary schools in Nairobi County noted that that transparency, inspections, professionalism, acceptance level had impacted on performance. In agricultural sector, Adhaya (2018) on buyer supplier relationship and supply chain performance found out that organization performance and efficiency are influenced by specific costing controls resulting from beneficial buyer supplier relationship. On the role of procurement and disposal act (2015) on buyer- supplier relationship in Kenya, Kosgei (2016) noted that procurement Act is expected to enhance competitive growth through price negotiations, quality, and dependability, timeliness to the market, production and innovations.

Public Procurement and Disposal Act, 2015 (PPDA, 2015) came into force and replaced PPDA 2005. The PPDA, 2015 guidelines are adopted by state owned corporations and generally provide provisions that guide the process of inventory management, asset management, contract performance and disposal of assets (Matasio, 2017). The initiatives of the PPAD 2015 involve two-stage tendering, design competition, electronic reverse auction; force account, competitive negotiations and framework agreements (Transparency International, 2015). PPOA (2016) clearly articulates that PPAD Act is purely enacted by provisions of Parliament which are described under Article 227. It spells out guidelines of sourcing goods and services for public entities (Odero & Ayub, 2017)

Procurement Act 2015 gives effect to article 227 of the constitution to provide procedures for efficient procurement and disposal by business entities (Mutangili, Awuor & Cheluget, 2020). The Act establishes Public procurement regulatory Authority (PPRA) to among other functions monitor, assess and review the public procurement and asset disposal system to ensure they respect the national values while PPARB was established by the Act to review, hear and determine tendering and asset disposal disputes(ppra.go.ke). The act aims to maximize the value for money to all public organizations and state organs in relations to buyer supplier relationships (Omolo & Akinyi, 2019). The process of procurement applies through planning, processing, inventory and asset management, disposal act and contract management. This procurement act plays an important role to avoid doubt that may or not

arise on the process of procurement or disposal of assets as it applies. It clearly indicates that procurement act has vital role in providing public organizations strategic plans to achieve their goals and prepare for uncertainties ahead of costs (Maradze, 2019). Procurement Act 2015 takes part procurement requirement to meet driving costs. The opportunities exist with procurement Act 2015 functions to improve performance in strategic ways. Organizational procurement is based on this act from supplier registrations process and obtaining prospective providers or procuring goods (Munyede & Mapuva, 2020).

Various authors have defined firm performance differently. Fowowe (2017) describes firm performance as money related and non-monetary outcomes of a firm. Monetary related performance is regularly estimated utilizing ROA, ROS, EBIT, EVA or Sales development. The non-money related performance can be estimated utilizing operational Key Performance Indicators, for example, Market share, advancement rate or client fulfillments are unmistakable cases, gives a review of regularly utilized performance measures (Danoshana & Ravivathani, 2019). Numerous analysts additionally utilize self-announced measures to operationalize performance. Others consolidate both, the accounted monetary KPIs and self-announced measures in their reports (Kale, Aknar & Başar, 2019).

Vikas (2017) showed that different ways non-monetary performance could be estimated; anyway, the performance can be scarcely surveyed without the connection to corporate procedure in Kenya. Performance contrasts in firms are regularly the subject. Generally, the accentuation in examining varieties in firm performance has been at the business level, inferring that qualities of an industry as significant to the industry and thus decide to a vast degree firm performance.

Dairy industry in Kenya has been changing due to more concerns over sustainability, consumer demands and greater efficiency requirements. Dairy sector continuously strive for efficiency due to the price and volume competition in various countries (Berut, 2020). Collaboration between supply chain partners is very critical in addressing the challenges inhibiting performance of dairy processing firms (Muhammad, Akhter and Ullah, 2014). Supply Chain Collaboration consists of members that have specific objectives and each partner has unique characteristics. Moreover, supply chain partners influence on the decision making or supply chain activities of others. Generally, stronger members can get more benefits from the supply chain in respect of profit gains from lower cost and enhanced innovative capacity leading to clients satisfaction. Further to this to this membership there is increased value leading to competitive advantage (Kimiti, Muathe & Murigi, 2020).

The Kenyan dairy industry is dominated by three major dairy processors: New KCC, Brookside and SpinKnit. These three dairy processors have countrywide coverage interms of milk collection, sales and distribution. These processors also have the capacity to produce a wide range of dairy products (Chemirmir & Ndeto, 2021). However the New KCC is the only process or with milk powdering capabilities and is a public entity supported by the government of Kenya. The rest of the dairy industry is made up of medium or small-scale processors, with limited product range and milk collection and distribution networks (KDB,

2018). Milk processing firms operating in Nairobi County includes; Brookside, New KCC, Sameer Agriculture & Livestock, Bio food product , Orchard Limited , Lattana, Eldoville Dairy and Kinangop Dairy Ltd (Mwangi & Gakobo, 2018).

Statement of Problem

Effective buyer-supplier relationships coupled with quality dependability, information sharing, cost control and reliability of services ensures that there is efficiency, competitiveness, transparency, predictable procedures, open competition and enhanced performance in the firms leading to increased profits, customer satisfaction, appropriate lead time and compliance to the best practices in buyer supplier relationships (Maradze, 2019). There is also need to have cooperation between buyers and suppliers that is essential to achieve performance in terms of increasing sales with fewer inventories in the total system and matching supply and demand. 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 (Mutangili, Awuor & Cheluget, 2020).

Despite the importance of buyer supplier relationship to firm performance, the dairy industry in Kenya is not realising its full potential by not embracing the benefits of effective buyer supplier relationships. Milk processing firms do not trust their suppliers with vital information, do not share skills on product quality, have high operational costs, and lack reliability in timeliness, trust, commitment and loyalty leading to poor customer satisfaction, low profitability, inadequate lead time and poor compliance with rules and regulations (Kiarie, 2017). Notwithstanding numerous opportunities ahead, milk processing firms in Kenya still face numerous difficulties. In recent past, milk and packaging industry has experienced performance challenges in the existing markets. From the financial reports of 2018, Kenya Cooperative Creameries (KCC) for instance has been characterized by drop-in profitability for the year 2015 to 2017. Many companies have existed from buyer supplier relationship thus; need to compete in the supply chain industry. This is worrying and needs attention of various stakeholders to reverse it and somehow protect the economy from the envisaged monopolies and revive employment opportunities already lost by many Kenyans. The common cause of challenges in supply chain is poor buyer- supplier relationships. Supply chain failures reduce production systems based on operations in holding inventory costs.

The empirical review has established knowledge gaps. First, the studies have tended to focus on various aspects of buyer supplier relationship such as quality dependability, information sharing, cost control and reliability of services in isolation. There is therefore a need for a study that examines various aspects buyer and supplier relationship and firm performance in one study. Secondly, few studies examining buyer supplier relationship and firm performance have evaluated the moderating role of Procurement Act 2015 on the buyer supplier relationship and firm performance. Finally, few studies have examined buyer supplier relationship in firm performance among milk processing firms Nairobi County. In response to

the above, the study sought to evaluate the role of procurement Act 2015 in the buyer-supplier relationships and the performance of Milk processing firms in Nairobi county Kenya.

Objectives of the study

Overall Objective of the Study

The general objective of the study was to determine the role of Procurement Act 2015 in the buyer-supplier relationships and performance of Milk processing firms in Nairobi County, Kenya.

Specific Objectives

i) To examine the effect of quality dependability on performance of milk processing firms in Nairobi County.

ii) To evaluate the effect of information sharing on performance of milk processing firms in Nairobi County.

iii) To determine the effects of cost control on performance of milk processing firms in Nairobi County.

iv) To assess the effect of reliability of services on the performance of milk processing firms in Nairobi County.

v) To determine the moderating role of Procurement Act 2015 on buyer- supplier relationships and performance of milk processing firms in Nairobi County.

Research Hypotheses

The study tested following hypotheses

H_{01}: Quality dependability has no statistically significant effect on performance of milk processing firms in Nairobi County.

H_{02}: Information sharing has no statistically significant effect on performance of milk processing firms in Nairobi County.

H_{03}: Cost control has no statistically significant effect on performance of milk processing firms in Nairobi County.

H_{04}: Reliability of services has no statistically significant effect on performance of milk processing firms in Nairobi County.

H_{05}: Procurement Act 2015 has no statistically significant moderating effect on the buyer-supplier relationships and performance of milk processing firms.

LITERATURE REVIEW

Transaction Cost Theory

This theory traces its roots to Coase (1937) through his work "The Nature of the Firm". This theory posits that optimal level of buyer-supplier relationship is based on the lowest possible total cost such that ordering cost is balanced with warehousing cost (Grover & Malhotra, 2003). Warehousing cost are the internal operations costs that are incurred by a firm by holding inventory such as storage cost, cost of obsolescence and other cost of operating the warehouse as long as the goods are still held in the store. Warehousing cost includes all cost incurred by a firm from the time inventory is received at the warehouse to the time inventory are issued from the warehouse to customers (Williamson, 2008). Ordering costs on the other hand are cost incurred by a business from the time requisition is made by user department to the time inventory arrives at the firm. The ordering cost includes the purchase price of the products, cost of transportation, insurance on goods on transit to the firm, loading and unloading costs and clerical costs incurred on staff involved in ordering inventory. The ordering costs include cost of purchasing, planning, adapting and monitoring externally transacted operations (Williamson, 2008).

The theory is based on number of assumptions. The theory assumes that transactional cost can be differentiated clearly warehousing costs and ordering costs. Such that costs are either involved in process of order making including purchase price of the products, cost of transportation, insurance on goods on transit to the firm, loading and unloading costs and clerical costs incurred on staff involved in ordering inventory. The warehousing costs are those costs incurred while the goods and material are held in the store. The theory also assumes that organizations are rational and that rational organizations are always exploring the options of reducing and avoiding transactions costs (Papulova & Papulova, 2016). Hobbs (1996) further outlined three elements of transaction relations, namely: transaction-specific investments, uncertainty and frequency. Smeltzer and Siferd (1998) argued that transactional cost approach to buyer supplier relationship was particularly useful in connection to achievement of efficiency, flexibility and overall performance issues.

The dominant criticism leveled against transactional cost theory is the need to go beyond narrow cost approach to a wider transaction benefits based analysis that is based on long-term benefits for both parties in exchange process (Youn, Hwang & Yang, 2012). The theory has also been criticized for its assumption that parties to exchange transaction are rational such that they would look for opportunity to minimize cost of transactions. In real business

environment, decision makers in firms are not always rational and buyer supplier relationship is not always based on transactional costs minimization. There are other wider benefits of supplier buyer relationships that go beyond the rational buyer supplier relationship including irrational behaviours such as friendship and attachment between buyer and supplier.

The theory is applicable in the current study on the association between buyer supplier relationship and firm performance. The theory is particularly critical in explaining the association between transaction relationships and firm performance of milk processing firms. Theory identifies optimal level of transactional relationship when their optimal transactional costs such that the internal costs of operations are balanced with external cost of ordering inventory and moving the inventory from supplier to the purchasing firm. The purchasing firm is the milk processing firm and the suppliers are the milk farmers who supply the key raw material in milk processing. For maximum performance, the milk processing firms are required to regulate or control their costs. This could be done by reducing the costs associated with ordering the raw material from a new supplier or recruiting new suppliers by maintaining the current suppliers.

Social Exchange Theory

Social exchange theory (SET) is one of the most influential theoretical paradigm for evaluating social interactions among humans in contexts such as workplace, trade among other contexts. The theory traces its roots to the works of Malinowski, (1922), Homans, (1958), Blau, (1964). Even through there exist various differing views on theory, proponents have generally agreed that social exchange involves a series of interactions that generate obligations on the part of parties interacting (Emerson, 1976). Within SET, these interactions are often viewed as being interdependent and contingent on the actions of the parties interacting (Blau, 1964). The theory posits that that these interdependent interactions or transactions have the capability to evolve into high-quality relationships among the parties, however the possibility of such evolution depends certain circumstances (Simmel, 2011).

SET holds that for relationships to evolve over time into trusting, loyal, and mutual commitments; there are three basic assumptions that must hold including rules and norms of exchange, resources exchanged, and relationships that emerge (Kingshott, 2006). The first assumption is that transactional relationship is based on rules and norms of exchange. Rules of exchange form a basis for the establishment of the relationship among participants in an exchange relation, hence acting as the guidelines for the exchange process. The most dominant exchange rule is the expectations of reciprocity. Reciprocity generally referred to as repayment in kind (Homans, 1958). Exchange relationship is usually based on each party to the exchange giving something of value to the other party. In the case of buyer supplier relationship, the buyer akes a payment while the supplier deliver products. The second rule of exchange is the Negotiated Rules where parties in an exchange relationship are expected to negotiate over the transactional relationship with the aim of reaching an arrangement that is beneficial to both parties (Blau, 1964).

The second assumption is that interdependent interactions that have the potential of evolving into high value relationship must be based on resources that can be exchanged. The resources of exchange may include status, love, goods, services, information and money. The resources that can be exchanged is further classified in to particulate vs Universal and concrete vs intangible (Homans, 1958). Resources such as money are universal hence; their value is constant and does not depend on the giver while a resource such as information is more particular and value depends on the giver of information. Further, universal and concretes resources are usually exchanged in the short-term period while resources that are particular and less concrete as usually exchanged in the long-term period (Blau, 1964).

The final assumption of SET theory is based on social exchange relationships. SET assumes that only certain transactions can lead to interpersonal connections. Such interpersonal connections are referred to as referred to as social exchange relationships (Cropanzano, Byrne, Bobocel, & Rupp, 2001). Social exchange relationships in the context of buyer supplier relationships only evolve when both the buyer and supplier takes care of each other thereby leading to beneficial consequences. In other words, the social exchange relationship is a mediator or intervening variable: Advantageous and fair transactions between strong relationships and these relationships produce effective work behavior and positive employee attitudes. This line of reasoning has received much attention—most of which uses Blau's (1964) framework to describe social exchange relationships.

SET has been equally been criticised based on certain challenges in the conceptualization. Despite the benefits of SET framework, it has various systematic difficulties. One of the criticisms has been based on the key ideas that comprise SET that have are still not yet adequately ventilated. Therefore, tests and application of the theory tends to be based on incomplete specified set of ideas. Most tests of SET have tended to omit crucial theoretical variables. Second, some variants and formulations of SET are ambiguous leading to multiple interpretations making the model difficult to test (Miller, 2005).

Despite the challenges, SET is critical and relevant in the current study in examining buyer supplier relationship and firm performance. The theory examines that the transactional relationship of economic nature between buyers and suppliers that may evolve into long-term beneficial relationship to both parties. The theory further explains that for the buyer supplier relationship to evolve into high value relationship, there ought to be resources of value that can be exchanged and there should be reciprocity and negotiated benefits between the buyer and the supplier. The resources that can be exchanged between the buyer and supplier include money, services, information, love, trust, commitment among other resources.

Empirical Literature Review

The empirical literature review past studies on the association between buyer-supplier relationships as firm performance. The empirical literature has been organized in terms of research objectives as follows:

Quality Dependability

At the global stage, studies exist on Quality Dependability and firm performance, In Europe Boddy (2016) conducted a study on quality dependability and success of implementing partnering performance among European firms. The study aimed to examine the relationship between quality dependability and success of implementing partnering firm's performance. The study used descriptive design, where 15 managers and 26 supervisors were given questionnaires. Using correlation analysis and regression model analysis, the findings indicated that quality dependability includes timeliness and exchange credibility of the product or services procured. It is also significance to the level of accuracy and adequacy and thus quality dependability had significant impact on performance of firms.

In Australia, Petrovic (2017) investigated the impact of perceived quality on the performance of enterprises. The main objective of the study was to investigate the impact of perceived quality on the performance of enterprises. The questionnaire was used to collect primary data from 56 respondents. Both descriptive and inferential statistics were used to analyze data. The findings showed that perceived quality is critical in supply chain performance of enterprises. The study established that perceived quality differs from different suppliers in procurement activities according to the firms. Hence, this study aimed to fill the gap on sharing skills on quality designs, efficiency, and customer referrals.

In Dublin city, Vikas et al (2017) examined the effect of dependability of key quality elements on achieving competitive advantage in information service firms in Dublin city. The study aimed to examine the effect of quality dependability on competitive advantage. The study adopted cross sectional design to collect data from 93 firms in operating in Dublin city. Factor analysis was used to analyze primary data which was collected by questionnaires. The findings showed that firms distinguish its performance by quality dependability. Quality element can lead to customer satisfaction levels, loyalty and performance, especially dependability on quality drives to customer satisfaction. Dependability of quality is the major driver of competitive advantage.

In Ghana, Kumar (2018) carried a study on the relationship between quality dependability and customer satisfaction in information technology firms. From inferential statistics through use of chi-square test, it was shown that quality dependability element is important on enhancing customer satisfaction. However, it was also established that quality dependability is very critical to achieve performance. Quality dependability was not easy to state as an important aspect. The customer demand is driven by customers' quality methods applied in the supply chain that requires buyer supplier cycles to prevent wastage level, stock shortage in lead-time and minimize inventory cost.

In Kenya, Kamau (2015) analysed buyer- supplier relationship on dependability of supply chains of super foam manufacturing firm in Kisumu. Descriptive research design was used to describe the nature of buyer supplier relationship dependability among supply chains. The cross tabulation of chi-square was used to analyse data collected from 74 questionnaires. The study showed that customer centric sustainability depends on supplier quality. In procurement

practices, quality dependability is a critical factor that can differentiate suppliers from supply chains. The element of dependability involves technical service quality, sources of competitive advantage, customer satisfaction and sustainable loyalties; there is a connection between dependability of quality and performance of firms. However, firm's performance depends on quality dependability dimensions resulting to sources of competitive growth. However, customer satisfactions and loyalty can result to stiff competition due to the notion that most of the firms provide similar goods and services, thus adopting dependability ensures improved market share with customer quality.

Information sharing

In the USA, Arrowsmith and Hartley (2016) investigated the impact of information sharing on performance of firms in New York. The objective of the study was to investigate the impact of buyer- supplier and supplier engagement on performance. The study adopted correlation design. The study data collected was analyzed by descriptive statistics using mean and percentage. The study indicated that firms need to procure with the correct information that is adequate, to take the correct materials. This implies that procurement operations must be informed about the product consequently affecting the performance of firms. This has affected supplier cost of operations as there is high spending in procurement processes and trust building. Buyer and supplier feel free and secure when they have information.

In Kenya, Otieno and Getuno (2017) studied the effect of supplier sharing information and procurement regulations on performance of public secondary schools in Nairobi County in Kenya. The study sought to establish the effects of supplier sharing information and its impact on procurement regulation in public secondary schools. Census of the entire population was conducted in 6 secondary schools. The researcher adopted descriptive research design with a target population of 76 procurement staff. Questionnaire was used to collect primary data. Pearson correlations coefficient was done to analyze transparency, procurement reforms, inspections, tendering activities and professionalism on organizational performance. The results showed that transparency, inspections, professionalism, acceptance level had significant effect on performance. The study further showed that public secondary schools have implemented information sharing in the procurement of goods and services.

Cost control

In India, Schoch (2011) investigated the effect of cost control on performance of firms in India. The study investigated cost control and performance of firms. Time series data was employed and fixed effect regression to analyze data collected. The study showed that there exists statistically significant effect on performance. In his study, he argued that cost control is a strategy that takes place in various forms. The findings showed that cost control differs by business type. Various cost control measures include; reducing expenditure, cost of purchasing, service cost, and payment delays; minimize avoidable purchases, improved cost

saving. However, the study failed to outline various cost controls involved such as administrative cost expenses and operational costs. The cost controls used to cut cost can be used in many organizations to reduce costs involved yet determining strategic costs in manufacturing sector are still challenging. The knowledge gap is that the study only concentrated on the types of cost involved in various forms but fails to indicate how type of cost affect performance of firms.

In China, Todd (2017) examined the effect of cost control on the firm performance in China. The aim of the study was to assess the effect of cost cutting on firm performance. The correlation design was used to analyze control and firm performance. Correlation and regression analysis were also employed. The findings indicated that cost cutting does not translate to improved performance. It was also noted that most firms retrying to use cost cutting in their period of operation with cost ratios, but they have not been efficiently utilized. This created a knowledge gap on cost control in terms of phone calls cost, mail cost, courier cost and handling of complaints costs on buyer supplier relationships on firm performance.

In Zambia, Landgraf (2013) did a study on effectiveness of procurement cost controls on performance of public organizations in Zambia. The study aimed to determine the effectiveness of procurement cost controls on the performance of public organizations. The study adopted descriptive statistics such as mean and standard deviations to analyze 458 employees in public organizations. The study found that cost control is done through expenditure cost reductions. The costing processes require standardized procedures. The vendor management need cost evaluations from raw materials to provide cost controls efficiency. However, this cannot arrive to conclusive evidence since cost reduction strategies affected manufacturing firms' performance.

In Kenya, Adhaya (2018) studied the determinant of cost control strategies in supply chain performance of firms, a case of agricultural organizations in Kenya. The objective was to analyze the determinants of cost control strategies and organization performance in Kenya agricultural organizations. The objective of the study was to investigate the effect of strategic cost management on organization performance. The study used descriptive design. The study found out that organization performance and efficiency are influenced by specific costing controls. The desired amount of inventory cost is controlled through minimum order quantities, reorder point, warehouse, and ride of obsolete stock levels. Just in time, inventory systems help to improve performance through supply chain management in buyer supplier relationships.

Reliability of Services

In India, Abdulateef, Mokhtar and Yusoff (2013) examined supplier chain reliability and performance in technical institutions in India. The study sought to establish the linkage between reliability of services through knowledge applications, technology, and first call resolutions in bound to the performance of technical institutions. Descriptive design was used to analyze reliability of supply chain management in technical institutions. Correlation and

factor analysis were done which found out that technical institutions implement purchasing strategies in relation to supplier reliability. Cost effective purchase decisions are influenced by reliability of services on delivery of quality goods in lead time and agreeable contract terms. Reliability of services should be expressed in terms of trust, loyalty, timeliness and commitment.

In the US, Ponomarov (2017) examined the understanding of reliability of services on performance of supply chain resilience in American Homewood, Illinois. The study sought to establish the understanding of the reliability of services on performance of supply chain resilience. The study adopted descriptive design with a sample of 23 respondents. Using descriptive statistics from mean and percentage it was shown that suppliers, customers, stakeholders and strategic partners that anchor on level of trust, commitment on crucial competition reliabilities perform better. Product lifecycles are based on customer expectations, since business must invest and focus on customer, suppliers' relationships. Thus, supply chains have become more reliable when driving at supply chain management.

In Mexico, Alfredo (2016) analysed reliability of services in supply chain on the methods of self-assessment as first step building resilient systems. The study found out that reliability of supply chain is measured in different steps to promote construction of resilient supply chains. This is necessary to guarantee efficiency in securing global purchase and supply of goods. The reliability between supply chains and complexity of systems affect buyer supplier relationships.

In South Africa, Sodhi and Son (2012) examined the reliability of services on supply chain management efficiency of firms. The study aimed to examine the extent to which suppliers' reliability affect supply chain management. The case study design was collected, and descriptive statistics was done. It was held that supplier reliability could be developed by different buyers-supplier's operations in the markets. The finding showed that reliability of services in supply chain is hindered by buyer supplier relationship disruptions. The improvement of reliability of services affects flexibility in supply chains. However, supply chain reliability is enhanced through stock levels. The result showed that organization frequently relate with suppliers to lay down responsiveness of reliability standards. Hence, there is the need to put re-order or place with order number, customer identifier, product identifier, confirmed date of supplier, shipment information, delivery date and not number.
In Burundi, Hallikas (2017) investigated the effect of supplier's reliability on performance of firms in Burundi. The study sought to determine the influence of reliability of services in supply chains, the study employed both inferential and descriptive statistics. The findings showed that the objective of buyer- supplier relationships promotes reliability in supply chain goals. It also proposes that supply chain management quality affect performance. The change in supplier relationship can be affected by the changes in buyer demand.

In Kenya, Cedillo and Bueno (2014) did a study on the impact of supplier's reliability on global supply chains performance in Sugar processing firms in Kenya. The study explored the impact of reliability systems on global supply chains performance. The study used ordinary

least square (OLS) to determine the impact of supplier's reliability on supply chain performance. The target population of 63 was used to determine the sample size through census. The results indicated that customer satisfaction affect buyer supplier relationships on performance of processing firms.

Procurement Act

In the US, Moore (2017) examined the role of procurement Act and its impact on performance of Washington defense forces. The study used a target population of 55 firms in United States registered. Stratified sampling technique was also used to arrive at the sample size. The data was collected through the self-administration and analyzed by descriptive statistics and regression. The results showed that procurement and disposal procedures comply with PPAD act, compliance with section 147, 68, 148 and 149 of public finance management act, there is signing of all supplier contracts, authority of procurement plans demonstrates application of tenders within approved budgets.

Mark and Ram (2019) investigated the relationship between lean reliability and procurement Acts in the United States of America. The study sought to determine the relationship between lean reliability and procurement Acts in United States. The study adopted 23 firms applied with lean practices with descriptive research design. From regression analysis, it was established that head of procurement unit shall render procurement advice with the accounting officers according to section 47(2), update and maintain registered list of suppliers or contractors/consultants under section 57, procurement officers should provide secretariat services during tender evaluation committees under section 46(4)(c).

In China, Chiou (2012) evaluated the effect of procurement Acts on overall performance of public organizations in China. Descriptive research design was used to analyze data from 321 respondents using correlation and inferential. The finding showed that PPAD is expected to improve performance in supply chain management. The results further indicated that proposed membership is required to attend tender opening, negotiations, evaluations and disposal committees during supplier appointment in line with the procurement Act. Contract documentation and correspondence should be done by issuing notification letters and letter of tender terminations.

In Uganda, Ntayi (2012) analyzed the role of procurement Act on performance of public organization in Uganda. The study sought to establish the role of procurement Act on performance of public organization in Uganda. Explanatory design was used to explain the available information about procurement act. Questionnaire was distributed to 54 respondents specifically employees working in public organizations. The analysis of data collected was done by correlations and chi-square test. This showed that procurement Act 2015 approves and ratifies policies governing procurement activities. It also oversees the control, management and organizational assets administrations under the authority.

In Kenya, Mwale (2014) affirmed that in Kenya, most firms are developed with different supply chains. Firms have put more efforts to achieve that their supply chains performance is better to improve buyer supplier relationships. Companies have supply chains which play a role in procurement regulatory regimes and other policies in price negotiations in environment they operate both locally and internationally.

Firm Performance

Gengeswari et al., (2013) found that there are some good motives for using subjective measures in buyer supplier relationships in China. To begin with, administrators might be unwilling to unveil genuine execution information on the off chance that they think of it as industrially delicate or private. Second, execution estimates, for example, gainfulness may not precisely point toward the basic money related strength of a firm. To wrap things up, there exists a solid relationship amongst goal. Comments on survey forms or customer comment cards emerged as the most popular choice for gleaning customer information as a measure of customer satisfaction.

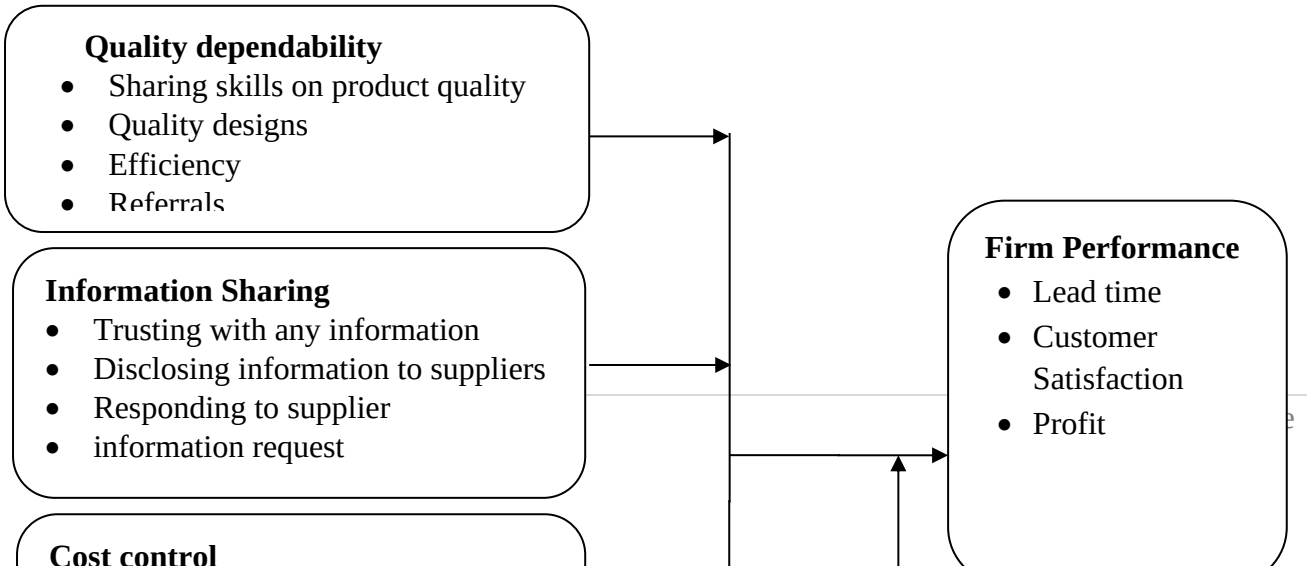
Vikas (2017) showed that different ways non-monetary performance can be estimated; anyway, the performance can be scarcely surveyed without the connection to corporate procedure in Kenya. Performance contrasts in firms are regularly the subject. Generally, the accentuation in examining varieties in firm performance has been at the business level, inferring that qualities of an industry as significant to the industry and thus decide to a vast degree firm performance.

Conceptual Framework

Conceptual framework is explained as diagrammatical illustrations of the relationship between independent variables and the dependent variable. The study independent variables were quality dependability; information sharing; cost control and reliability of services with a moderating role of procurement Act 2015 which was assumed to affect firm performance as the study dependent variable. This illustration is depicted in figure 2.1 below.

Independent Variable **Dependent Variable**

Buyer Supplier Relationships



Firm Performance

Figure 2. 1: Conceptual Framework

Figure 2.1 Conceptual Framework

Source: Researcher, (2021)

The above model illustrates the relationship between the independent and dependent variables of the study. The independent variables are quality dependability, information sharing, cost control and reliability of services of buyer-supplier relationships and its effects on firm performance while the dependant variable is organization performance measured in terms of; compliance with rules and regulations, profit, lead time and customer satisfaction. The moderating variable is the Procurement Act 2015.

RESEARCH METHODOLOGY

The explanatory research design was used since it explores the fact given from the respondents directly without any alteration (Cooper and Schindler 2011).
The target population was 8 milk processing firms within Nairobi County namely; Brookside, New KCC, Sameer Agriculture & Livestock, Bio food product, Orchard Limited, Lattana, Eldoville Dairy and Kinangop Dairy Ltd. From the 8 firms HR database, there is a total 2312 employees of the 8 milk-processing firms who belong to marketing, production and procurement.

In this research, Yamane formula was used to calculate the sample for the study. It enabled everyone in a population rather that a fraction to be selected, it's however, relies on sampling frame to count the population. It was used in this study, since it has a wider spectrum of

accuracy in data and population characteristics. After the sample size of 341 respondents, the final sample size in consideration of non-response rate of 10% was 375.

The data was analyzed by descriptive statistics such as frequency, percentage, mean and standard deviations. The data was analyzed by SPSS and Microsoft excel. Regression analysis was used to investigate the predictability of the independent variables on the outcome variable.

RESULTS AND DISCUSSION OF FINDINGS

Response rate

The researcher distributed 375 questionnaires to Milk Processing Firms in the Nairobi County. Table 4.2 below shows the response rate.

Table 4.1: Response Rate

Response	Number	Percentage
Distributed Questionnaires	375	100.00
Returned questionnaires	354	94.9
Unreturned Questionnaires	21	5.1

Source; field data, 2020

The responded questionnaires were 354 which represented 94.4% while 21(5.6%) did not respond. The response rate of 94.4% was adequate for data analysis. The respondents who did not respond to the questionnaire were busy which hindered them from filling the questionnaire.

Demographic Analysis

Gender distribution of the respondents

The respondents were also required to state their gender. The responses from the 354 respondents were recorded in table 4.3 below.

Table 4. 2: Respondents Gender

Gender	Frequency	Percent
Male	221	62.42
Female	133	37.57
Total	**354**	**100.0**

Source; field data, 2020

On gender distributions, the study showed that 221(62.42%) of the respondents were male while female respondents were 133(37.57%). The results indicated that the majority of the respondents working in milk processing firms were male. This means that there is gender imbalance in terms of employment in relations to the role of recruitment policy. However, a third gender rule is already achieved in milk processing industries.

Descriptive Statistics

The findings are derived from a Likert scale in the questionnaires where the respondents were supposed to indicate their level of agreement or otherwise with a given statement. The descriptive statistics was done based on each independent variable/objective.

Quality dependability

The first objective of the study was to determine the effect of quality dependability on performance of milk processing firms in Nairobi County. The results from a 5 point Linkert scale questionnaire are shown in table 4.3.

Table 4. 3: Quality Dependability

	N	Minimum	Maximum	Mean	Std. Deviation
We share production skills in determining quality with our key suppliers	354	1	5	4.52	.711
Our firm is committed to quality standards through sharing skills on product	354	1	5	4.48	.594
Our firm involves all suppliers in quality design	354	1	5	3.97	.567
Our firm help our suppliers to enhance product quality in supply chain	354	1	5	3.93	.533
We normally get referrals from our supply chain to the buyers	354	1	5	3.83	.699
Our firm is committed to efficiency to maintain clients	354	1	5	3.88	.699
We solve quality complaints with our suppliers so as to maintain efficiency	354	1	5	4.00	.795
We involve our suppliers with new production processes	354	1	5	4.01	.825

We normally get referred by our supply chain customers' needs through quality production	354	1	5	3.98	.868
Referral programs help us to establish long-term relations with customers	354	1	5	4.20	.723
Grand Mean				**4.08**	**0.605**

Source: Field data 2020

Table 4.3 showed that milk processing firms were committed to ensuring quality standards through sharing skills on product quality with the highest (Mean=4.52; SD= 0.711). High mean indicates that the milk processing firms were committed to ensuring quality standards while the low standard deviations shows that the respondents agreed among themselves. Ccommitment to quality standards through sharing skills on product with their customers had a (Mean =4.48; SD=0.594). Also, milk processing firms normally involves all suppliers in quality design as indicated by (Mean =3.97; SD= 0.567). The respondents further indicated that milk processing firms had helped their suppliers to enhance product quality in supply chain with mean (Mean=3.93; SD=0.533) and that normally they get referrals from their supply chain to the buyers normally get referrals from their supply chain to the buyers (Mean=3.83; SD=0.699).The study findings further showed that most respondents indicated that their firms are committed to efficiency in order to maintain clients (Mean=3.88; SD=.699). Milk processing firms solve their quality complaints with their suppliers so as to maintain efficiency with mean (Mean=4.00; SD=.795). On whether milk processing firms involved their suppliers with new production processes, most respondents agreed with that as shown by a mean of (Mean 4.01; SD=.825). They also agreed that milk processing firms normally got referrals from supply chain to the buyers (Mean=3.98; SD=0.868). Lastly, majority of respondents agreed that referral programs help them establish long-term relations with customers as shown by (Mean=4.20; SD=0.723).

Thus, the general perception of the respondents is that management of milk processing firms in Nairobi County prefers quality dependability to a great extent (M=4.08 SD=0.605).

Information sharing

The second objective of the study was to determine the effect of Information sharing on performance of milk processing firms in Nairobi County. The study sought to assess the effect of information sharing on performance of milk processing firms. The results were presented in table 4.4.

Table 4. 4: Information sharing

	N	Minimum	Maximum	Mean	Std. Deviation
Trusting our suppliers with any information improves performance	354	1	5	3.95	.635
We disclose truthful information to our customers	354	1	5	3.89	.622

We trust our suppliers in disclosing information to the public	354	1	5	3.94	.585
Responding to suppliers needs improve credibility in supply chain	354	1	5	3.96	.689
We determine our customer expectation by responding to suppliers	354	1	5	3.97	.785
We request our supplier to supply to us in time	354	1	5	4.02	.811
Information request by supplier improves accuracy	354	1	5	4.11	.814
The information is exchanged within suppliers in a timely manner	352	1	5	3.94	.743
We interact with our clients to ensure shared ideas	354	1	5	3.93	.728
We determine our customer expectations frequently	354	1	5	4.00	.704
Grand Mean				**3.97**	**0.712**

Source: Field data 2020

The study results showed that milk processing firms trusted their suppliers in disclosing information to the public as shown by (Mean=3.95; SD=0.635).Further, the respondents indicated that they don't just disclose information, but went ahead and stated that the information disclosed by the milk processing firms to the customers is truthful as shown (Mean=3.89; SD=0.622).The also did agree that they trust their suppliers in disclosing information to the public (Mean=3.94; SD=0.585). Concerning whether milk processing firms responded to their suppliers needs in order to improve credibility of supply chain, the respondents were in agreement about that as indicated (Mean=3.96; SD=0.689). Also, the findings show that the respondents determine their customer expectation by responding to suppliers (Mean=3.97; SD=0.785). Similarly, the findings show that the respondents agreed that milk processing firms requested their suppliers to supply to them in time (Mean=4.02; SD=0.811).Further, information request by supplier improved accuracy of milk processing firms (Mean=4.11; SD=.814). Respondents also agreed that milk processing firms exchanged information within suppliers in a timely manner as shown (Mean=3.94; SD=.743). On the same breathe, majority respondents agreed that milk processing firms interacted with their clients to share ideas (Mean=3.93; *SD*=0.728) and also processing firms determined their customer expectations frequently (Mean=4.00; SD=.704).

Cost Control

The third objective of the study was to determine the effect of Cost Control on performance of milk processing firms in Nairobi County. The study sought to ascertain the effects of cost control on performance of milk processing firms. The results were presented in table 4.5.

Table 4. 5: Cost control

	N	Minimum	Maximum	Mean	Std. Deviation
Our firms phone call cost is reduced from suppliers ordering cost	354	1	5	4.08	.629
We use phone calls to reach far customers	354	1	5	4.02	.580
We use Mail services to cut travelling expenditure	354	1	5	3.91	.656
Our mail services are cost effective than other supply chain	354	1	5	4.44	.619
We use courier services to control cost of enquiry	354	1	5	4.32	.600
Courier services is faster to our client's relationships	354	1	5	4.00	.628
Our way of handling client complaints control costs	354	1	5	3.77	.649
We reduce complaints of purchasing and services for better performance	354	1	5	3.83	.654
Our administrative expenses are less in handling complaints	354	1	5	3.92	.819
Grand Mean				**4.03**	**0.648**

Source: Field data 2020

Table 4.5 show that the respondents agreed that their firms phone call cost is reduced from suppliers ordering cost (Mean=4.08; SD=.629) and milk processing firms used phone calls to reach far customers (Mean=4.02; SD=.580).Most respondents also agreed that firms used mail services to cut travelling expenditure (Mean=3.91; SD=.656).In addition, majority of respondents affirmed that their mail services are cost effective than other supply chain (Mean=4.44; SD=.619).

Most respondents also greed that they use courier services to control cost of enquiry (Mean=4.32; SD=.600). Courier services are also considered faster to their client's relationships (Mean=4.00; SD=.628).Concerning whether milk processing firms reduced complaints of purchasing and services for better performance, the respondents agreed as indicated (Mean=3.83; SD=.654). Similarly, the respondents acknowledged that the administrative expenses were less when handling complaints (Mean=3.92; SD=0.819). Most of these means was accompanied by high standard deviation, an indication that the respondents differed on their view concerning these statements. Majority of respondents agreed that their way of handling client complaints control costs (Mean=3.77; SD=0.649).

Reliability of Services

The fourth objective of the study was to determine the effect of reliability of services on performance of milk processing firms in Nairobi County. The study sought to determine the effect of reliability services on performance of milk processing firms. Table 4.6 presents the results.

Table 4. 6: Reliability of services

	N	Minimum	Maximum	Mean	Std. Deviation
We trust our suppliers in delivery of quality products	354	1	5	4.20	.575
We trust our suppliers in the procurement process	354	1	5	4.10	.564
We maintain loyalty in order to enhance our value chain to make and provide our customer services	354	1	5	4.07	.682
Our acquisition of goods to make products are timely	354	1	5	3.87	.698
We support timeliness for fairness and transparency of procurement activities in our firm	354	1	5	3.93	.776
We maintain timeliness in delivery within time frame to ensure performance	354	1	5	4.03	.769
Our commitment to inspections is based on acceptance of purchasing decisions	354	1	5	3.99	.751
Our commitment to procurement associated activities and resources provides are significance to clients	354	1	5	4.14	.744
Grand Mean				**4.04**	**.599**

Source: Field data 2020

The results show that the firms trusted their suppliers in delivery of quality products (Mean=4.20; *SD*=.575) and also in the procurement process (Mean=4.10; *SD*=.564).Respondents agreed that they maintained loyalty in order to enhance value chain made to provide services to customers (Mean=4.07; *SD*=.682). Similarly, their acquisition of goods to make products are timely (Mean=3.87; *SD*=.698).

Respondents agreed to the question ‘we support timeliness for fairness and transparency of procurement activities in our firm’ (Mean=3.93; *SD*=.776). Majority of respondents also agreed that they maintain timeliness in delivery within time frame to ensure performance (Mean=4.03; *SD*=.769) and their commitment to inspections is based on acceptance of purchasing decisions (Mean=3.99; *SD*=.751).Lastly, they agreed that commitment of the firm

to procurement associated activities and resources provided significance role to clients (Mean= 4.14; SD=.744).

Procurement Act 2015

The fifth objective of the study was to determine the moderating role of Procurement Act 2015 on the relationship between buyer- supplier relationships and performance of milk processing firms. Table 4.7 presents the results.

Table 4. 7: Procurement Act 2015

	N	Minimum	Maximum	Mean	Std. Deviation
Public procurement and disposal act (PPDA) promote good buyer supplier relationship leading satisfaction	354	1	5	3.83	.517
Our firm's associated activities are regulated by public procurement and disposal act regulations (PPDA)	354	1	5	3.99	.656
We are recognized as a procuring entity and our procurement functions are regulated by PPARB regulations	354	1	5	4.08	.729
PPARB generally improves compliance of rules and regulations in procurement reports	354	1	5	4.00	.802
Laws and regulations monitor and review procurement system for entities	354	1	5	4.03	.866
Laws and regulations help procurement process of determining tendering disputes	354	1	5	4.17	.808
Grand Mean				**4.02**	**0.73**

Source: Field data 2020

The study findings on Table 4.10 showed that laws and regulations helped procurement process in determining tendering disputes (Mean=4.17; *SD*=.808).On whether the milk processing firms were recognized as procuring entities and their procurement functions were regulated by PPARB regulations, the respondents not only agreed with the stamen, but also agreed among themselves as indicated by (Mean=4.08; *SD*=.729).Respondents also agreed that laws and regulations monitored and reviewed procurement system for entities (Mean=4.03;SD=0.866).The findings further indicated that firm's associated activities were

regulated by public procurement and disposal Act regulations(PPDA) (Mean=3.99;SD=.656). Public procurement and disposal Act (PPDA) also promoted good buyer supplier relationship which led to customer satisfaction (Mean=3.83; SD=5.17) .Respondents agreed that PPARB generally improved compliance of rules and regulations in procurement reports (Mean=4.00; SD=0.802).

Thus the general perception of the respondents is that the management of milk production firms in Nairobi county embraces Procurement Act 2015 to a great extent (M=4.02 SD=0.73).

Firm performance

Lastly, the study sought to determine the level of firm performance in relation to buyer-supplier relationships as shown in table 4.8.Table 4. 8: Firm performance

	N	Minimum	Maximum	Mean	Std. Deviation
Our lead time is efficient to meet customer expectations	354	1	5	4.10	.776
Our lead time focuses on quality of goods procured	354	1	5	4.12	.718
Our performance is enhanced through customer satisfaction	354	1	5	3.87	.708
There is improvement of customer satisfaction in our firm	354	1	5	3.81	.753
Our efficiency in procurement process increases profits	354	1	5	3.75	.878
Our profits level depends on buyer supplier relationships	354	1	5	3.99	.764
Grand Mean				**3.94**	**0.766**

Source: Field data 2020

The results showed that the firm lead time focused on quality of goods procured (Mean=4.12; *SD*=0.718).Respondents also did agree that lead time is efficient to meet customer expectations (Mean=4.10; *SD*=0.776). Majority of respondents also agreed that their profits level depends on buyer supplier relationships (Mean=3.99; *SD*=0.764). A greater majority of respondents also agreed that their performance is enhanced through customer satisfaction (Mean=3.87; *SD*=0.708). There was improvement of customer satisfaction in milk processing firms which is indicated (Mean=3.99; *SD*=0.764). Finally, the results showed that the firm's efficient procurement process increased profits (Mean=3.75; *SD*=0.878). In all cases above, the grand (Mean =3.94; SD=0.766) showed that performance could be enhanced through customer satisfaction and good procurement procedures.

Correlation analysis

After performing descriptive analysis, correlation analysis was done to determine the association between independent and dependent variables. The correlation coefficients range from -1 for a perfect negative relationship to +1 for perfect positive relationship through zero for no relationship. Table 4.9 presented a pair wise results of the variable correlated which were independent variables and dependent variable.

Table 4.9: Correlation Matrix

		Quality Dependability	Information Sharing	Cost Control	Reliability of Services	Firm Performance
Quality Dependability	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	354				
Information Sharing	Pearson Correlation	.556**	1			
	Sig. (2-tailed)	.000				
	N	354	354			
Cost Control	Pearson Correlation	.990**	.549**	1		
	Sig. (2-tailed)	.000	.000			
	N	354	354	354		
Reliability of Services	Pearson Correlation	.409**	.509**	.409**	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	354	354	354	354	
Firm Performance	Pearson Correlation	.597**	.529**	.593**	.531**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	354	354	354	354	354

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

Source: Field data, 2020

There is a strong, positive and significant correlation between Quality dependability at r=0.597, P<0.01) with firm performance. There was also a strong, positive and relevant correlation between Information sharing and firm performance at (r=0.529, P<0.01) with firm performance. Cost control had a strong, positive and significant association (r=0.593 and p=<0.01) with firm performance. Also, Reliability of services showed a strong, positive and significant association (r=0.531, p<0.01) with firm performance respectively.

Regression analysis

Regression analysis deals with distribution value of a model summary with one random multivariate as any other variable held constant. The multivariate regression model is generally used to establish whether a relationship exist between variables. This regression is specified with x value and y value of variables under study. The equation is expressed in form of mathematical values linking variables. This mathematical equation is used to explain

the relationship while other variables were adjusted with random variable to predict the variations in dependent variables.

Model Summary

The model summary consists of R. value, R square value, Adjusted R Squared Value, and a standard error of the estimate. The values obtained were recorded in table 4.10 as shown below.

Table 4. 10: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.686[a]	.470	.464	.31450

Predictors: (Constant), Reliability of services, Information sharing, Quality dependability, Cost control

Source: Field data, 2020

Regression model summary was presented in table 4.10 which showed that the correlation coefficient of R was 0.686 and R square was 0.470. An R squared of .470 shows that the model of buyer-supplier relationships contributes to 47% of the performance of milk processing firms while the remaining 53% can be explained by other variables not in this study.

Analysis of Variance

The analysis of variance was done to generate the f- statistic which is used to test significance of R. That is, ANOVA was conducted to test goodness of fit in the model. The results are shown in table 4.11.

Table 4. 11: ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.622	4	7.655	77.396	.000[b]
	Residual	34.520	349	.099		
	Total	65.142	353			

a. Dependent Variable: Firm Performance

b. Predictors: (Constant), Reliability of Services, Cost Control, Quality Dependability, Information Sharing

Source: Field data, 2020

Table 4.11 showed the p value of F value (77.396) was 0.01 <5% which implied that the model of buyer-supplier relationship was statistically significant at 5%. The independent variables (buyer-supplier relationship was significant to improve the role of procurement Act

2015 on firm performance. The model summary was fit to predict the variations between variables.

Regression Coefficients

A regression analyses was done to test combined effect of the independent variables (Quality dependability, Information sharing, Cost control, Reliability of services) to the dependent variable (firm performance). The results were then presented in table 4.12 below.

Table 4. 12: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.164	.024		6.660	.000
Quality dependability	.436	.058	.370	7.492	.000
Information sharing	.198	.058	.173	3.425	.001
Cost control	.165	.038	.170	4.342	.000
Reliability of services	.335	.056	.271	5.936	.000

a. **Dependent Variable: firm performance**

b. **Source: Field data, 2020**

The results in table 4.12 show a constant term (β_0) of 0.164 and significant p value of 0.000 $p<0.05$. The indication of these results is that in absence of all the buyer-supplier relationship, the performance of the milk processing firms will be 16.4%. Quality dependability had a beta coefficient (β_1) of 0.370 which was statistically significant at 5% alpha level ($p<0.05$). Increasing the quality dependability by 1 unit while all other buyer-supplier relationship is kept constant will lead to increase in firms' performance by 37%.

Information sharing had a significant beta coefficient of (β_2) of 0.173 implying that a change in one unit of Information sharing results to an increase of firm performance by 17.3%. Cost control had a beta value of (**β_3**) of 0.170 which implied that a variation in a unit of cost control would lead to an increase of firm performance by 17%. The critical value was p=-<5% which was found to be statistically significant, hence, there is significant contribution of cost control on firm performance.

Lastly, reliability of services had a beta value (**β_4**) of 0.271. This indicated that change in one unit of reliability of services causes a positive improvement in firm performance by 27.1%. The p value was 0.000 was less than the critical value 5% hence statistically significant; therefore, there is significant contribution of reliability of services on firm performance.

From the results (Table 4.13) the model was then specified as: -

$Y= 0.164+0.436X_1 +0.198X_2 +0.165X_3+0.335X_4+ Ɛ$ .....(i)

Where the β is regression coefficients which used to measure changes in unit of variables, Y is firm performance, X_1, quality dependability, X_2 information sharing, X_3 cost control and X_4 reliability of services.

Moderating Role of Procurement Act 2015

Regression analysis was also conducted to determine whether procurement Act 2015 had significant role to predict firm performance of milk processing firms in Nairobi County. That is, to establish the moderating role of procurement Act 2015 in buyer-supplier relationship and firm performance as presented in table 4.13.

Model Summary

Table 4. 14: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.686[a]	.470	.464	.31450
2	.915[b]	.837	.835	.17467

a. Predictors: (Constant), Reliability of Services, Cost Control, Quality Dependability, Information Sharing
b. Predictors: (Constant), Reliability of Services, Cost Control, Quality Dependability, Information Sharing, X1.X2.X3.X4.M
Source: Field data, 2020

Table 4.14 showed that R coefficient of .915 which implied that the role of procurement Act 2015 had a strong and positive contribution on buyer-supplier relationships and firm performance. The value of R^2 =.837 indicated that the change in role of procurement Act 2015 resulted to 83.7% variation of buyer-supplier relationship and performance of milk processing firms. The remaining percentage of 6.3% was not explained by the role of procurement Act 2015 under this study.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The study determined the effect of quality dependability on performance of milk processing firms in Kenya. The study found that milk processing firms were committed to ensuring quality standard through sharing skills. Further, referral programs helped milk processing firms to establish long-term relations with customers. Therefore, there was a perfect contribution of quality dependability on firm performance.

The study assessed the effect of information sharing on performance of milk processing firms. The study found that there was a significant contribution of information sharing on

firm performance. The study concluded that milk processing firms trusted their suppliers when disclosing information to the public.

The study ascertained the effects of cost control on performance of milk processing firms. The firms reduced complaints of purchasing and services for better performance. Courier services were faster to client relationships. The study concluded that there was a significant contribution of cost control on firm performance.

The study determined the effect of reliability of services on performance of milk processing firms. The results found that the firms-maintained loyalty in order to enhance value chain made to provide services to customers. Commitment to procurement activities and resources provided significant role to clients. Therefore, the study also concluded that there was significant contribution of reliability of services on firm performance.

Recommendations of study

The study confirmed that quality dependability had a positive significant effect on performance of milk processing firms in Kenya. However, they indicated that they don't share production skills in determining quality with their key suppliers. The study recommends that milk processing firms should be advised to embrace quality dependability in improving performance. Further, they indicated that they don't involve their suppliers in the new production processes. The study recommends that the milk processing firms should to involve suppliers in any kind of decision making, to share information with the suppliers in an effect to improve their performance.

The study established a significant positive relationship was established between information sharing and performance of milk processing firms in Kenya. However, they indicated that they don't trust their suppliers with any information aimed at improving performance. Also, they don't respond to their customers' expectation by responding to suppliers. The study recommends that milk processing firms should respond to suppliers' complaints on time so as to improve on their performance. Also, they need to trust their suppliers with information related to milk processing.

The study established a significant positive relationship was established between Cost Control and performance of milk processing firms in Kenya. However, they indicated that though they use Courier services, the Courier services are not fast enough to maintain client's relationships. The study recommends that milk processing firms use other mode of information sharing to avert incurring expenses without corresponding output. They could stick to use of phone calls to reach far customers which has shown to be effective.

The study established a significant positive relationship was established between reliability services and performance of milk processing firms in Kenya. However, they findings indicated that their commitment to procurement associated activities and resources are not

significant to their clients. The study therefore recommends that milk processing firms find other ways of improving reliability services.

The study showed that there were laws and regulations which helped procurement process in determining tendering disputes and Public procurement and disposal act (PPDA) promoted good buyer supplier relationship leading to customer satisfaction. However, the study established that PPARB has generally failed to improve compliance of rules and regulations procurement reports. Thus, it is recommended that milk processing firm should embrace on the role of procurement Act 2015 in the relationship between buyer-supplier relationship and firm performance.

Suggestion for further study

The study determined the moderating role of Procurement Act 2015 on the relationship between buyer- supplier relationships and performance of milk processing firms. Thus, another study can be conducted to examine the role of procurement Act 2015 in procurement processes and its effect on performance of public organizations.

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