

THE ROLE OF MODERN TECHNOLOGY IN IMPROVING PROCUREMENT FUNCTIONS IN
COOPERATE ORGANIZATIONS.A CASE STUDY OF PEMBE FLOUR MILLS LTD

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**A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF MANAGEMENT AND
LEADERSHIP IN PARTIAL FULFILLMENT FOR THE AWARD OF DIPLOMA IN
SUPPLY CHAIN MANAGEMENT OF THE MANAGEMENT UNIVERSITY OF
AFRICA**

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DECLARATION

This research project is my genuine task and has not been hand over for a diploma within any other University.

Signature: _____

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DSM/7/00047/1/20

Date

This research project has been submitted for examination with my endorsement as the University Supervisor.

Signature: _____

Date

Management University of Africa

DEDICATION

I dedicate this research project to my family

ACKNOWLEDGEMENT

I am grateful for the gift of life and grace that God has given me to go through this entire course specifically this research project

ABSTRACT

Supply chain management has gotten to be a vital administration tool to help agencies improve their enterprise operations. In spite of the fact that cutting-edge technology ,information and communication innovations has been utilized extensively in supply chains, there may be a lack of structured evidence concerning the technique through which modern technology creates value. furthermore, supply chain targets are going beyond operational performance towards pursuing higher-order goals, including know-how marketplace dynamics and discovering new partnering arrangements to offer extra consumer cost, the competencies which are needed for supply chains to preserve their competitive preferences need to be properly understood by means of analyst's and practitioners. To permeate this gap, this research looks into the outcomes of the supply chain's collective understanding control capability at the supply chain overall performance. Drawing from the useful resource-based outlook of the firm and the relational outlook of organizations competitive gain, this dissertation proposes a framework of supply chain IT functionality as facilitating/inhibiting the supply chains' knowledge control capability. First, an empirical study at the use of survey-based facts series become conducted. Second, a simulation model was constructed to investigate the mechanisms via which modern technology improves procurement functions in cooperate organizations, a case study of Pembe Flour limited enabled recognition of management activities effect on firms " long-term knowledge outcome. The challenges faced during the collection of data became the measures positioned by the government of Kenya to combat the spread of the deadly Covid-19 disease. This led to slow but gradual collection of data from the organization's workers.

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ACRONYMS AND ABBREVIATIONS

SCMS- supply chain management systems

SCM-Supply chain management

IT-Information technologies

EDI- Electronic Data Interchange

RFID-ratio frequency identification

ERP-Enterprise resource Planning

OPERATIONAL DEFINITIONS OF TERMS

Electronic Tendering: Involves sending and receiving tenders by electronic means, in preference to the old paper based technique. As opposed to inserting documents into an envelope and posting them, we and you may presently trade them safely through the internet

Enterprise Resource Planning: is a method utilized by companies to organize the significant sectors of their businesses. Most ERP software applications are beneficial to companies because they are necessary in the implementation of resource planning by the integration of the processes required to operate their companies with a single system

Buyer supplier Relationship: Refers to commercial transactions between organizations for the purchase and supply of goods or services.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter will convey the overall scope of the examination including the basic origin, statement of problem, objectives of the study, the research inquiries, justifications and general overview including the chapter summary

1.1 Background of the Study

Procurement has been stated as an more and more essential administration tool to assist establishments elevate supply chain operations (Markus, 2000). SCM entails the flows of fabric, records, and finance in a community including providers, manufacturers, vendors, and customers. in the past ten years, we have observed a shift in inter-organizational relations far from conventional market-based totally arm's-length relationships to strategic partnership-like relationships (Bensaou & Scott, 2000). As a matter of fact, both the instructional literature and practioner literature have noted that commercial enterprise competitions in some of the industries are no longer among individual corporations, but alternatively among supply chains (Lambert & Cooper, 2000). One of the fundamental reasons that purpose the pattern shift in supply chain (SC) connections is the surfacing of knowledge-in depth economy. The value of maximum products and services in an understanding-in depth economy relies upon by and large at the development of know-how-primarily based intangibles, like technological knowhow, product design, advertising, preferences of customers, and expertise of value delivered networks. As new product development becomes extra complex and market environments emerge as extra dynamic and aggressive, it's far probably that the understanding and records needed to supply value to the end clients are no more limited in a single firm (Inkpen & Dinur, 1998). corporations that broaden the competency of managing know-how assets transcending organizational borders might be rewarded with higher financial benefits (Ven, 2005). as an example, Motorola effectively decreased the inventory-out fee of its stock of cellular cellphone handsets with the aid of taking part with its shops to proportion and make use of the knowledge on product plans, exceptions, and forecasts (al., 2007). Researchers who have a look at the strategic influences of expertise management have cited the criticality of know-how and information management in constructing a powerful supply chain relationship and in reaching positive supply chain performance. for instance, (Jarvenpaa & Tanriverdi, 2003) recommend that information creation is a key to a firm's survival and to its price chain's competitiveness. (al H. e., 2004) conclude that the know-how development manner in a strategic supply chain, which includes understanding acquisition activities, know-how distribution activities, and formation of shared which means, is an essential tool to procurement efficiency as measured by way of cycle time, despite the emphasis at the position of understanding in supply chains, there was a loss of systematic information of what constitutes a supply chains knowledge management functionality and how to build expertise control functionality in supply chains (Gunasekaran & Ngai, 2007) growing supply

chain understanding control capability, this is hard to imitate via other supply chain partnerships calls for procurement companies to take a courting-orientated view in the direction of their supply chain operations, which include aligning goals and activities concerned within the supply chain (Im & Rai, 2008). However, due to the combination of skills and interests of a couple of organizations in procurement, combining and changing expertise can be tough and politically traumatic for the supply chain businesses involved (Ven, 2005). Some of the struggles in managing, understanding in supply chains may be ascribed to the competing, and from time to time conflicting, goals of corporations. Companies forming expertise-based totally networks may be heterogeneous in terms of size, enterprise, and organizational structures. Those variations lead to discrepancies inside the effects that partnering firms assume from the supply chain. For instance, a small supplier whose primary focus is operational excellence can be more presumably to upgrade its order-interface associated expertise and won't be interested by collecting product information or purchaser understanding. Therefore, it's miles vital for the supply chain partners to create powerful underlying organizational and technological infrastructures to guide the exploitation of the know-how control capability of the supply chain. In procurement, the usage of statistics and communication technologies has been shown to exert brilliant effect on SC operational performance (Lee, 2000) and to sustain the community of relationships (al S. e., 2007). Information technology (IT) used for SCM, along with supply chain control structures (SCMS), internet/net, digital facts interchange (EDI), radio frequency identification (RFID), and cellular technologies, allow companies to alternate timely statistics, perform plans precisely and perform numerous SC features and sports effectively. As an example, EDI technology, that have been used in procurement for many decades, automate transactions between buying and selling companies. Despite the fact that, the theoretical and empirical research concerning the function of supply chain IT in facilitating/inhibiting procurement capacity to manage understanding is scarce (al M. e., 2005). Supply chain relationships are going past fee-targeted, arm's-duration relationships and becoming know-how-driven, collaborative relationships (Ven, 2005), it's miles vital to recognize how procurement can equip IT in building the abilities of dealing with expertise sources. To this end, this dissertation attempts to recognize the role of procurement IT infrastructure in bringing procuring corporations together and facilitating the introduction of the understanding control capability of the supply chain.

1.2 Statement of the Problem

Ngugi and Mugo, (2010) studied internal factors influencing acquisition functions and established that accountability, computerized information adaptation and ethics affect acquisition processes in public acquisition function in Kenya which is relevant.(Rwoti 2005) conducted analysis on acquisition presentation evaluation structures a survey of large manufacturing companies in Nairobi and discovered that monitoring acquisition performance is dogged by among others poor data management and operation of manual structures in acquisition. (Kiburi 2008) conducted analysis on the elements influencing the application of e-acquisition among firms listed on the Nairobi Stock Exchange and found that most corporations have not implemented it and that its features could improve efficiency the business operations.(Magutu, Njihia and Mose 2013) also did theirs and found out the critical success factors and challenges in it but their scrutiny was on large scale manufacturing firms. All these studies did not cover the relationship between modern technology and acquisition performance in cooperate organizations such as Pembe Flour Mills Limited in Nairobi, Kenya. From these studies it was evident that impact of modern technology adoption and acquisition functions needs to be researched. This investigation therefore sought to bridge the gap by seeking solutions to the subsequent research question. What is the relation between modern technology and acquisition functions in cooperate organizations specifically Pembe fLour Mills limited.

1.3 Importance of the Study

1.3.1 General Objective

The main goal of the study was to demonstrate the role of modern technology in improving procurement functions in cooperate organizations. A case study of Pembe Flour Mills Limited.

1.3.2 Specific Objectives

- i. To understand the impact of Electronic tendering in procurement in performance of Pembe Flour Mills Limited..

- ii. The role of resource planning in hindering the knowledge administration capability of supply chains in organizations.
- iii. To establish the level of contribution of buyer supplier relationship on performance of improving procurement functions of Pembe Flour Mills Limited

1.4 Research Questions

The research questions of the study were;

- 1) How does the impact of Electronic Tendering in procurement affect the performance of Pembe Flour Mills Limited ?
- 2) How does the supply chain modern enterprise resource planning capability affect its knowledge management capability in pembe flour mills limited?
- 3) What roles do different buyer supplier relationship play in affecting the knowledge performance of Pembe Flour Mills Limited in the supply chain?

1.5 Justification of the Study

To procurement students the study provides avenues to improve the operational efficiencies on various parameters that could lead to increased revenue generation. It further provide deeper insight on how to boost revenue figures of the procurement in the short run and long run. Further the study brings to the limelight the role of modern technology in improving procurement functions in cooperate organizations. A case study of Pembe flour mills ltd

which needs to be acted upon in their entirety. The information lays the foundation for making sound decisions and strategies that would enhance increased financial and social sustainability, hence economic growth as well. In the academic discipline other researchers would get reference materials on the role of modern technology in improving procurement functions in cooperate organizations. A case study of Pembe Flour Mills Ltd and further expose the tenets of the procurement problem, thereby expanding the scholarly knowledge in the wider procurement sector.

1.6 Scope of the Study

The study concentrated on role of modern technology in improving procurement functions in cooperate organizations. A case study of Pembe flour mills ltd utility is situated within Lunga Lunga Road Industrial Area. There were 234 but 57 employees were done the study in all the departments.

1.7 Chapter Summary

The chapter sheds light on the background to the study, which has brought an understanding on the role of modern technology in improving procurement functions in cooperate organizations. A case study of Pembe Flour Mills Ltd , identified the statement of the problem , objectives, scope of the study, justification of the study, research questions and chapter summary thereof

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The focus in this chapter is the theoretical literature review and empirical literature review supporting the research variables. It also presents a summary and research gaps, conceptual framework, operationalization of the fluctuating and chapter summary.

2.1Theoretical Literature Review

It was anchored on Theory of acquisition functions. They are going to be underpinned within the life-cycle-cost theory. The concept of Lifecycle-cost was originally proposed and employed by the United States. Department of Defense, mainly applied to the acquisition of important United

States. military equipment. It refers to total expenses involved within the full life cycle of a commodity, mostly covering analysis, experimentation, acquisition, maintenance, transportation and storage (Letian, Hongbin and Yifeng, 2007). As a frontier cost management theory, it believes that the worth of acquisition activity isn't simply limited to get cost, but has additional importance as regards of other related costs, like transaction rates, financing rates, preservation , prices and opportunity deprivation's. Although unseen, these expenses can't be ignored. the essential meaning is to realize rock bottom cost of kit within the total life cycle of ownership on the idea of meeting requirements of reliability (Miao, 2006). consistent with the global level for life-process-cost IEC 60300-3-3 (2011), prepared by International Electro technical Commission, includes costs occurring during a number of stages, like conception ,description, evolution and design, Production, installation, performance, preservation and distribution. the entire expenses are often calculated by summarizing related expenses at each stage and usually be divided into acquisition expenses, ownership expenses and disposal expenses.

2.2 Empirical Literature Review

Empirical literature review clarifies the investigations done by other scholars in the past is related to study variables of electronic tendering , enterprise resource planning , and buyer supplier relationship and how they relate to the procurement functions(Cost minimization ,Quality, Audit and compliance and Inventory optimization).

2.2.1 Electronic-Tendering (e-Tendering)

Nowadays, large organizations usually need to handle multiple acquisition needs by applying different sorts of data structures developed by various providers. Such procedures will become automatically prolonged and unmanageable in standard e-tendering systems ,when the classification of goods aren't well sorted out. So as to understand greater price savings and expand efficiency, replacing the manual hard copy tender processes by electronic-facilitated methodology .This sets off to be an important element in process re-engineering (Croom & Brandon-Jones, 2007). With a highly automated eTendering structures, tender specification and aggregation, also because the evaluation and placing of the contract are often prepared worry-free.

According to Teo et al (2009), e-Tendering System provision's the entire tendering process from advertising the need to lay down a contract. This Involves the trading of all applicable documents in electronic layout. Consumers are prepared to control tenders being brought in. Therefore storing all tenders in one place. Consumers can combine data from the electronic tender records for effortless comparison throughout spreadsheet. Evaluation apparatus can issue automation of this comparison procedure. The business benefits include tender cycle-time , precise pre-stipulation and estimation, which permits the dismissal of providers that fail to satisfy the tender specification, rapid solutions to inquiries and clarification of points during the tender duration , depletion within the labor intensive tasks of receipt, recording and distribution of tender submissions, reduction of the written record on tendering exercises, reducing expenses to both councils and providers, refined audit series increasing transparency of the tendering procedures, refined quality of tender identification and supplier feedback and provision of quality management information (Vaidyanathan and Devaraj, 2008).

2.2.2 Enterprise Resource Planning

The certainty key information together with cost middle and commodity codes is hard coded in opposition to the user dramatically decreases coding mistakes and provides surprisingly distinctive and easily attainable data. This is of great importance in maximizing the potential benefits of strategic sourcing (Mishra et al, 2007). A successful ICT systems execution will give high quality, detailed administration data and will refute the need for warehousing information . Despite the potential of ERP system to improve Organization performance, effectiveness and efficiency, many organizations are still unable to fully exploit these benefits. The benefits of ERP systems are often matched with high levels of risks associated with such projects. Implementing ERP systems involve organizations to acquire one of the ERP software packages i.e. oracle and seeking implementers who are usually consultancy firms to turn around the organization in readiness for the migration of processes , data and people to the selected system. The consultancy service costs huge sums of money and the organization have also to undergo an extra cost through purchase of a license. Further, once the ERP system has been implemented and validated, the organization must continue maintaining the system which is extremely expensive (Fang et al, 2007).

2.2.3 Buyer Supplier Relationship

In a sourcing method a purchaser researches for available sourcing options inside the provider market, that could either be from nearby or global carriers. An in depth evaluation of the specific supplier alternatives should be undertaken, weighing numerous criteria, along with price, lead time, on-web page guide and long term situations amongst others. Procurement employees must utilize their inventiveness in investigating elective supply alternatives. A dealer pre-qualification manner to make sure they comply with necessities aligned with procurement approach and rules is also essential (Beer, 2011). The need to be aggressive, bendy and efficient has compelled businesses to go into collaborative relationship with suppliers and clients (Hines, et al., 2000; Carr & Smeltzer 2010). This has been necessitated via these days competitive situations in which authentic competitive battles are fought alongside a community of cooperating businesses. These aggressive battles are fought alongside supply chains, implying that an enterprise is as steady as its weakest supply chain associate (Veludo, Macbeth & Purchase, 2011).

The shopping for corporation can imply that they have a deep know how approximately the supply market and dealer provided within the market. This shows that the employer can examine providers to be able to put into effect the suppliers to be extra reliable and powerful. It may also improve the provider levels (Liker and Choi, 2012). The great action to enhance the dealers performance is to offer clear commands on what's anticipated and needed from them presently and also in the future. Engaging in various evaluation on dealers overall performance could offer a device to the provider to develop its moves to a greater desired path.

2.3 Summary and Research Gaps

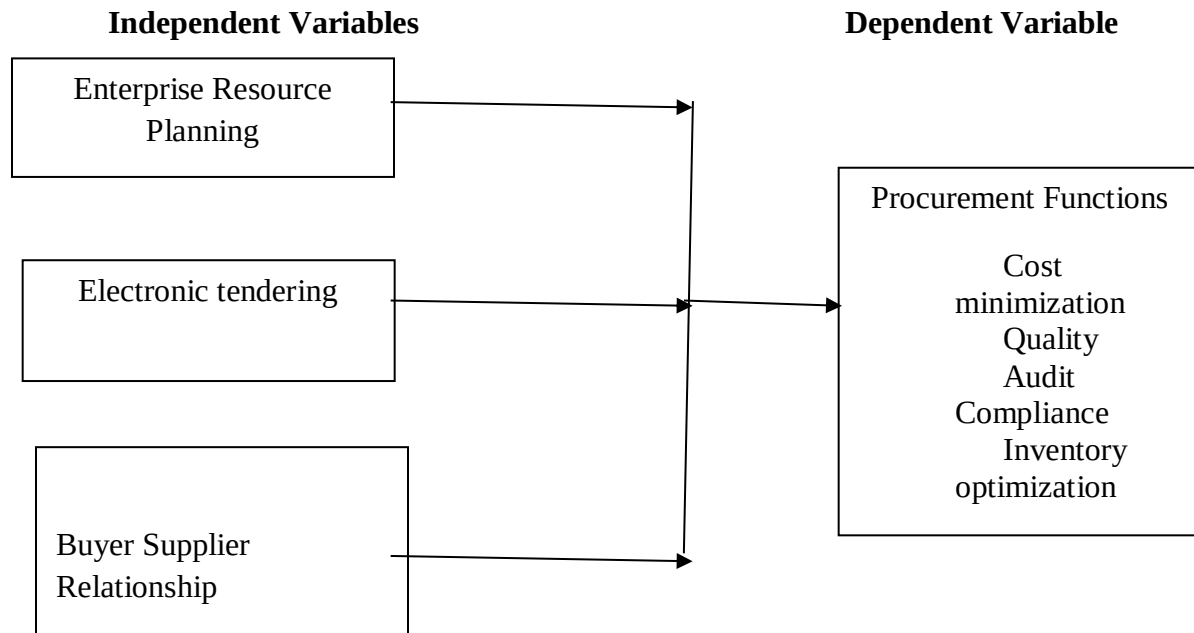
As organizations advance toward a more vital view of procurement, selection broaden in reach and develop in scope are increasing difficulties to integrating different structures and applications effectively all through the firm (Mendoza et al. 2006). These outcomes in the subsequent challenges. Despite the varied benefits offered by the utilization of recent technologies, organizations meet variety of challenges when implementing such structures. Problems with

integration to backend structures, which can have incompatible platforms, are a obstacle to several computerized reports efforts. Some companies use multiple ERPs, which can not be compatible. providers got to be ready to handle different e-acquisition structures customers are using (Bedell, 2002).

Most fabricating plants are still utilizing old decades equipment and parts whose documentation is manual and lacks the advanced format essential for reacquisition structures (Moore, 2003). the first suppliers of those equipment's often like better to sell manufacturers new equipment instead of to form the required upgrades to digital format. Firms which cannot afford to exchange their aging equipment must forego opportunities to implement modern technology. Although advances are made in search technology to deal issues, irregularities in terminology for parts, between companies and indeed inside distinctive departments or sites of an equivalent enterprise, often cause costly delays and errors (Moore, 2003). like any new technology introduced into the workplace, modern technology system's adequacy depends ultimately on being embraced and frequently employed by employees in procuring. Employees are said to suits the acquisition of contracted goods as it were 65% of the time, causing Firms to miss out on the 22% in taken a toll decreases conceivable through compliance with contract terms (Aberdeen, 2006). Upkeep requires a more extensive provider base than other trade . procurement system must provide access to a broad supplier base. Many providers, especially smaller ones, don't have the technological capability to integrate with e-acquisition platforms. they'll lack the fashionable technology infrastructure and capital necessary to deliver e-acquisition and fear that e-acquisition will enable buyers to leverage price concessions (Singer, 2003).

2.4 Conceptual Framework

The conceptual frame work illustrates the relationship that exists between the independent variables namely enterprise resource planning ,electronic tendering, and buyer supplier relationship and how they affect the dependent variable that is procurement functions(Cost minimization ,Quality ,Audit and compliance and Inventory optimization) in Pembe Flour Mills Limited.



2.5 Operationalization of Variables

An operational definition specifies precisely how study variables are measured and therefore the purpose of operationalizing or operationally defining each variable is to make them measurable.

2.6 Chapter Summary

Despite the various benefits offered by the use of modern technology , firms meet a number of provocation when enforcing such systems. Problems with amalgamation to backend systems, which may additionally have irreconcilable platforms, are a stumbling block to many present day technology efforts. Some organizations use multiple ERPs, which may not be well suited. Providers need to be able to manage different e-Procurement systems which consumers are using (Bedell, 2002).

Further in the chapter the summary and research gaps , the conceptual frame work depicts relationship between the study independent variables namely electronic tendering, enterprise resource planning and buyer supplier relationship and the dependent variable Procurement function (cost minimization, quality, audit compliance and inventory optimization) .The operationalization of the study variables have been explained in chapter summary thereof.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.0 Introduction

This section is focused on design also because the methodology of analysis. it's into detail on the sampling design, target population, data collection, research design , sample size, procedures and instruments ,pilot examination, validity, reliability test, data analysis and presentation techniques, ethical considerations and therefore the chapter summary

3.1 Research Design

Research design was a comprehensive outline of how an investigation happened that's a plot, a roadmap and advanced strategy of analysis visualized so on get answers to research questions; it's the backbone of any inspection, (Kothari, 2004). A scrutinized descriptive research design was adopted to gather both qualitative and quantitative data (Mugenda & Mugenda, 2003).

3.2 Target Population

The target population includes all Individuals of a group that an analyst has interest in a study (Yin, 2003). The effects of the investigation are summarized to this population, due to the fact that they all have remarkable traits in common place of the study

Table 3.1 Target Population

Departments	Number of Employees
Accounts	31
Human resource	23
Internal Audit	59
Finance	41
Sales and merchandise	80
Total	234

3.3 Sample and Sampling Technique

The target population embraces a number of distinct categories of the water company which possess departments that deal exhaustively on the subject matter, thus stratified sampling was suitable. The analyst took samples from the staff in each sector. According to Mugenda (2003), a sample size between 10% and 30% was appropriate for a descriptive study. Thus 30% of the population was selected as the sample in each section and the sample size was regarded sufficient to constitute the remaining population as shown below

Table 3.2 Sample Size

Departments	Number of Employees	Sample Size
Accounts	31	9
Human resource	23	7
Internal Audit	59	18
Finance	41	12
Sales and merchandise	80	24
Total	234	70

3.4 Data Collection Instruments

The research investigation utilized both essential data and auxiliary data. The researcher utilized questionnaires in data collection. Primary data was acquired through the utilization of closed and open-ended questionnaire. Questionnaires was preferred because consistent with Kothari (2014) are often administered by the researcher or by any number of individuals with minimal effect to its reliability and validity. data obtained from the questionnaires was bias free and therefore the researcher is on top of things and thus perfect of valid data was collected (Bhattacharjee, 2012). The researcher prepared open and shut ended questionnaires for respondents. The point of the closed-ended survey was to encourage precise information analysis and classification whereas open-ended survey was to supply a more prominent profundity reaction.

3.5 Pilot Study

The basic reason of completing a pilot study was to try the likelihood of an approach that was projected to eventually be utilized in a way bigger scale study. The investigation permitted prior inspection of the research equipment's and wasn't included inside the actual analysis. Pilot examination may be a minor probe of the procedures and actions to be utilized on a much

bigger scale (Yin, 2003). It was wiped out the commercial department where consistent with Mille, Huberman, and Saldana (2014) a sample of 10% anticipated the last word much bigger scale scrutiny are going to be ideal. Six employees from the commercial department were selected randomly.

3.5.1 Validity

According to Orodho (2006) validity is described as the level to which an experiment compute what it had been intended to live . The validity trial helps the researcher to be sure that the info collecting apparatus that was used to measure what was intended to live and this was wiped out regular manner. inside the content validity was wont to determine whether the instrument measures appropriately what it had been meant to live . Content validity regards as the appropriateness use of specific measuring apparatus during a given evaluation condition through the method of checking of that instrument by the experts. inside the framework a gaggle of educational experts (supervisors and statisticians) was used to give their views concerning the instrument to be utilized and whether it might measure what it had been meant to measure

3.5.2 Reliability Test

According to Saunders and Lewis (2009) a trial is reliable if it's consistent inside itself and across time. It's steadiness of dimension or constancy of magnitude over a variety of surroundings during which essentially an equivalent result should be acquired. The reliability test helps the researcher make sure that consistent same outcomes are obtained. The -split half was employed by comparing the outcomes of 1 half a trial with the outcomes from the opposite half. The split-half method was preferred because it had been an easy and straightforward to perform method. The tactic was also time and price effective because it made it possible to make two trials employing a single test eliminating the necessity for multiple administrations.

3.6 Data Collection Procedure

The research study used both primary and secondary data. Before the method of data collecting began, the researcher ensured that all the questionnaires were ready. These included the drafted questionnaires, both closed and open ended, and the procedure of administering the questionnaires was drop and pick after two days.

3.7 Data Analysis and Presentation Techniques

The processing of the responses generated from the administered questionnaires require editing and checking for completeness and consistency, then coding and entering of data take place in the spreadsheet software. The data was analyzed quantitatively and qualitatively using Microsoft Excel software. Quantitative data accumulated was inspected by descriptive statistics, and conferred through tables, charts and in prose.

3.8 Ethical Considerations

3.8.1 Informed Consent

The researcher explained to the respondents prior to providing them with any requirements for the study.

The researcher ensured utmost caution before the administration of the info collection instruments, an introduction on the aim and therefore the objective purpose was made to the respondents

3.8.2 Voluntary Participation

Ethical principals were placed into great contemplation during the completion and therefore the analyst guaranteed that no informant was pressured in any course of action into giving the specified material. the material collected from the respondents was given voluntarily

3.8.3 Confidentiality

The researcher bore in mind the company processes hence was disciplined, customer sensitive, and showed respect to the company leaders. Information provided by the respondents, was treated confidentially. The researcher observed integrity to crucial information that was obtained so as to safeguard the confidential matters of the company.

3.8.4 Privacy

Respondents' rights and privacy were upheld and the researcher ensured that no participant was identified from the information they provided in the questionnaires.

3.8.5 Anonymity

The respondents were informed not to write their names on the questionnaire or any information that identifies their identity otherwise they had to leave it anonymous.

3.8.6 Permit

Authorization to conduct the research was acquired from relevant authorities; that are the Management University of Africa, company administration and the individual respondents targeted. All data collected in the study was used for scholarly purposes only.

3.9 Chapter Summary

In summary the chapter sheds light on the research methodology employed in conducting the study that is the design used the population considered, the techniques used to sample, instruments of data collection, procedures for collecting data, the pretesting of the questionnaires (pilot study through ascertaining validity and reliability), data analysis and presentation techniques, ethical considerations and the chapter summary.

CHAPTER FOUR RESEARCH FINDINGS AND DISCUSSION

4.0 Introduction

This section shows the analysis, presentation and interpretation of findings from primary quantitative and qualitative data that was collected from the selected company employees (respondents). This investigation was to demonstrate the role of modern technology in improving procurement functions in cooperate organizations. A case study of Pembe Flour Mills Limited. The analysis of data was done through descriptive statistics and the findings of the study were presented in form frequency distribution tables, percentage charts and graphs. The interpretation of the outcomes is based on the outputs from the Microsoft Excel software as per the objectives and indicators of the variables of the analysis

4.1 Presentation of Research Findings

4.1.1 Respondent Rate Analysis

Table 4.1: Table showing the Response Rate

Departments	Sample Size	Frequency	Percent (%)
Accounts	9	7	10.00
Human resource	7	18	25.71

Internal Audit	18	16	22.86
Finance	12	10	14.29
Sales, Merchandise	24	6	8.57
Total	70	57	81.43

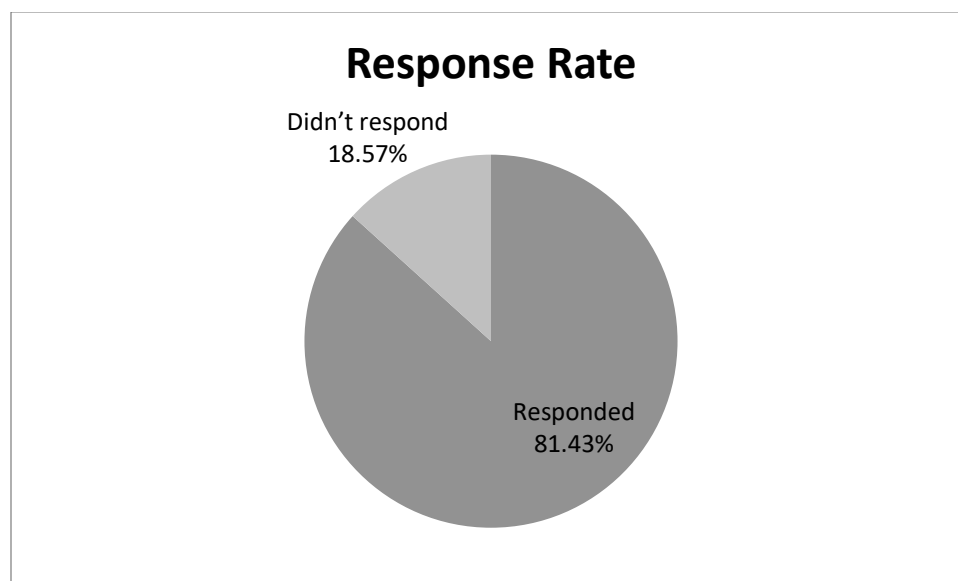


Figure 4.1: Chart showing the Response Rate

Table 4.1 and Figure 4.1 shows a total of 70 questionnaires were disseminated and 57 questionnaires were returned dully filled. Thus a response rate of 81.43% was obtained. According to Peil (2015), questionnaire profit above 50% is regarded good for a research.

4.1.2 Information on Gender of the Respondents

Table 4.2: Table showing Gender of Respondents

Gender	Frequency (n)	Percent (%)
Male	37	64.91
Female	20	35.09
Total	57	100

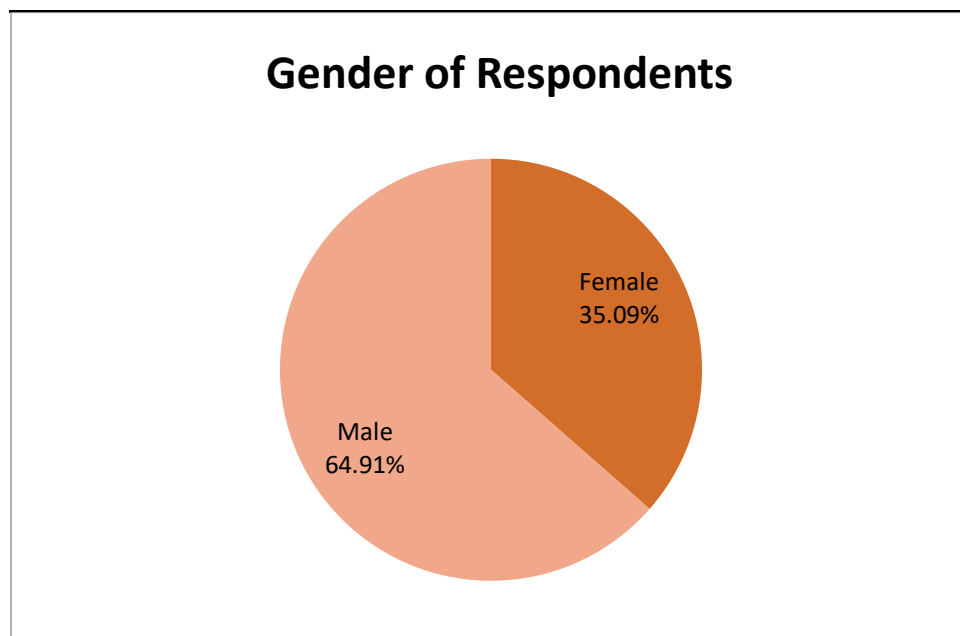


Figure 4.2: Chart showing Gender of Respondents

Table 4.2 and Figure 4.2 show that 35.08% of the respondents are females while 64.91% are males, an indication that males are more dominated as compared to females, thereby a disparity in gender representation in the study employees in the Pembe Flour Mills Company Limited.

4.1.3 Information on Respondents Age

Table 4.3: Table showing Respondents Age

Age Bracket (Years)	Frequency (n)	Percent (%)
15– 20	3	5.26
21 – 25	16	28.07
26 – 30	19	33.33
31 – 35	9	15.79
36 & Over	10	17.55

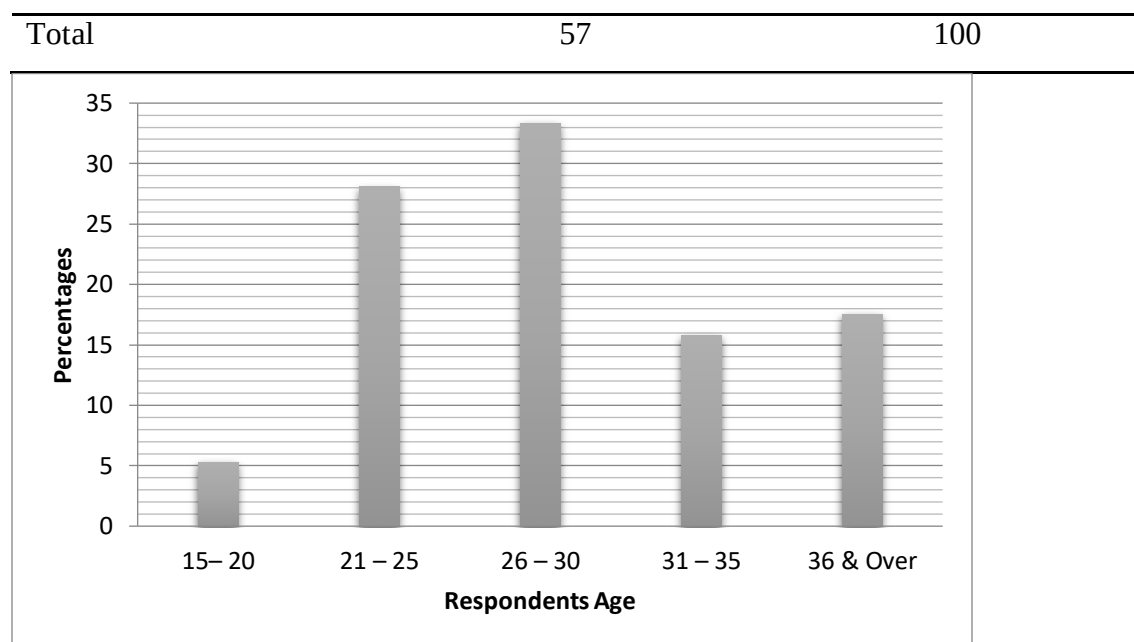


Figure 4.3: Chart showing Respondents Age

Table 4.3 and Figure 4.3 show that 5.26% of the respondents were between the ages of 15 to 20 years, 28.07% were between the ages of 21 to 25 years, 33.33% were aged 26 to 30 years, 15.79% were aged 31 to 35 years while 17.55% were 36 years and above. An interpretation from the respondents shows that the majority of the employees are aged between 26 to 30 years, indicating that most of the company employees are young and full of energy.

4.1.4 Level of Education of the Respondents

Table 4.4: Table showing Level of Education of the Respondents

Level of Education	Frequency (n)	Percent (%)
Certificate	11	19.3
Diploma	36	63.16
Degree	9	15.79
Masters	1	1.75
Total	57	100

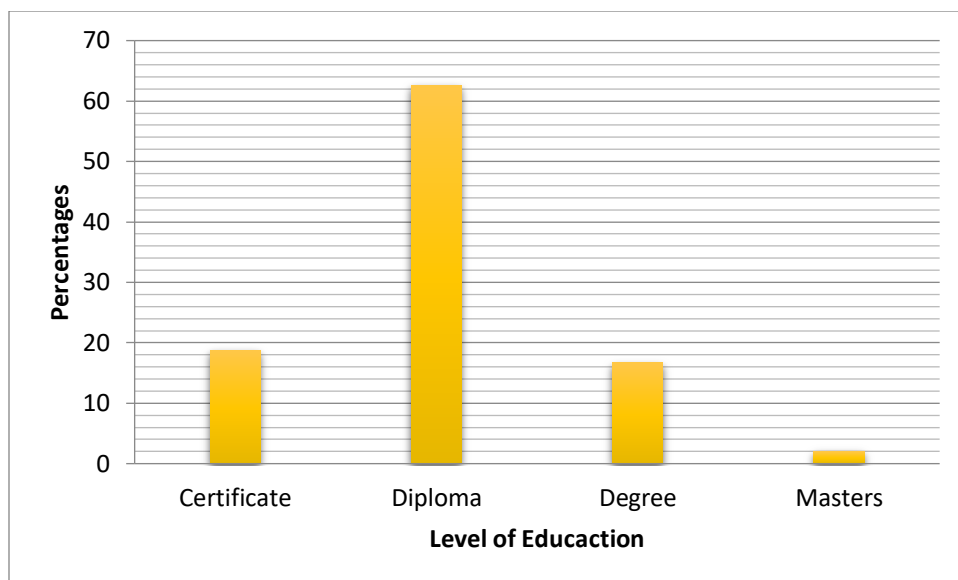


Figure 4.4: Chart showing the Level of Education of the Respondents

Table 4.4 and Figure 4.4 show that 19.3 % of the respondents hold certificates, 63.16 % hold diplomas, 15.79 % possess first degree and 1.75% were post graduates with Masters. Thus most of the study respondents were diploma holders in Pembe Flour Mills Company limited.

4.1.5 Length of Service of the Respondents

Table 4.5: Table showing Length of Service of the Respondents

Length of Service (Years)	Frequency (n)	Percent (%)
1 – 2 years	18	31.58
3 - 4 years	23	40.35
5 - 6 years	9	15.79
7 years and above	7	12.28
Total	57	100

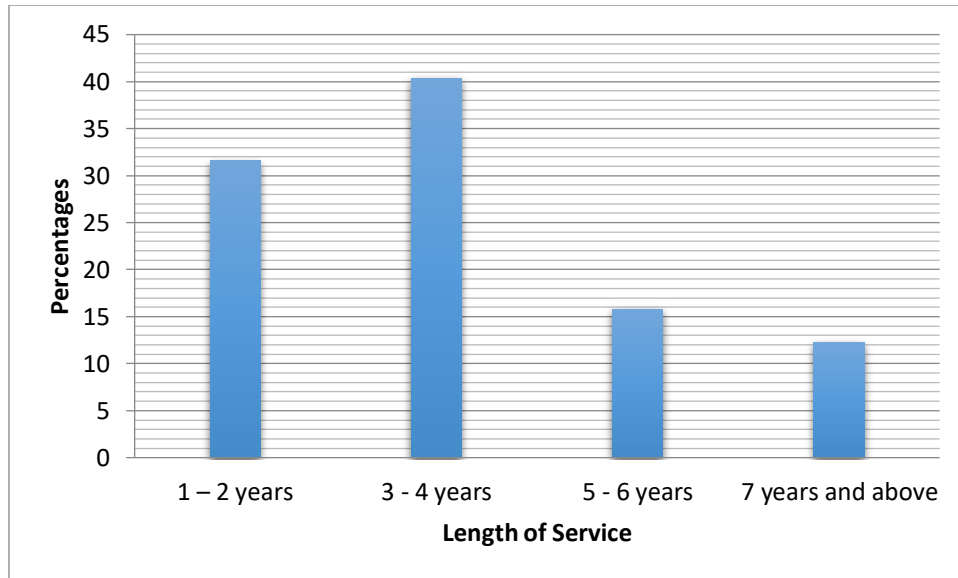


Figure 4.5: Chart showing Length of Service of the Respondents

Table 4.5 and Figure 4.5 expresses that 31.58% of the respondents have served between 1 to 2 years, 40.35% have served for 3 to 4 years, 15.79% have served for 5 to 6 years, and 12.28% have served for 7 years and above. This suggests that greater number of respondents within the company have served for 3 to 4 years.

4.1.6: Electronic Tendering

Data was collected on Electronic Tendering

Table 4.6: Table showing Electronic Tendering

Response	Frequency (n)	Percent (%)
Strongly Agree	21	36.84
Agree	12	21.05
Neutral	6	10.53
Disagree	11	19.3
Strongly Disagree	7	12.28
Total	57	100

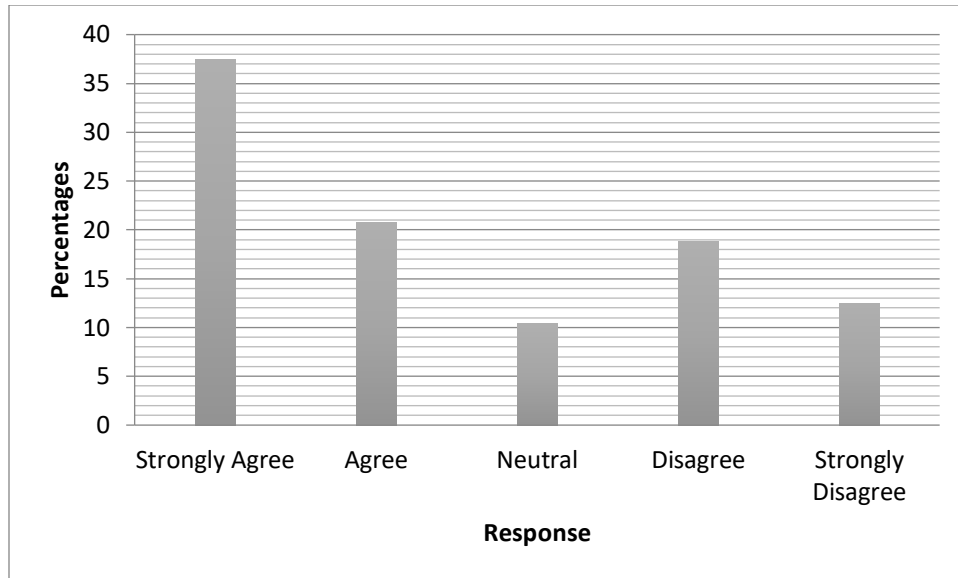


Figure 4.6: Figure showing Electronic Tendering

The findings in Table 4.6 and Figure 4.6 shows that 36.84% of the respondents agreed strongly, 21.05 % agreed, 10.53% were neutral, 19.3% disagreed while 12.28% strongly disagreed .

4.1.7 Resource Planning

Table 4.7: Table Showing Resource Planning

Response	Frequency (n)	Percent (%)
Strongly Agree	12	21.05
Agree	10	17.54
Neutral	7	12.28
Disagree	13	22.81
Strongly Disagree	15	26.32
Total	57	100

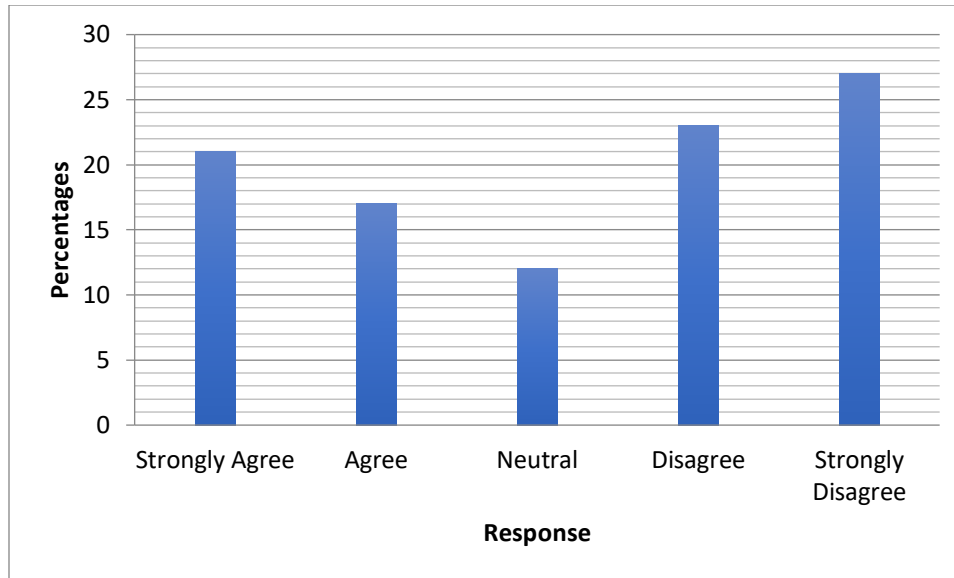


Figure 4.7: Figure showing Resource Planning

The findings in Table 4.7 and Figure 4.7 shows that 21.05% of the respondents agree strongly, 17.54% agree, 12.28% were neutral, 22.81% disagree while 26.32% strongly disagreed. An interpretation of the findings is that most of the study respondents disagreed.

4.1.8 Buyer Supplier Relationship

Table 4.8: Table showing Existence of Buyer supplier Relationship

Response	Frequency(n)	Percent (%)
Strongly Agree	10	17.54
Agree	7	12.28
Neutral	5	8.77
Disagree	16	28.1
Strongly Disagree	19	33.31
Total	57	100

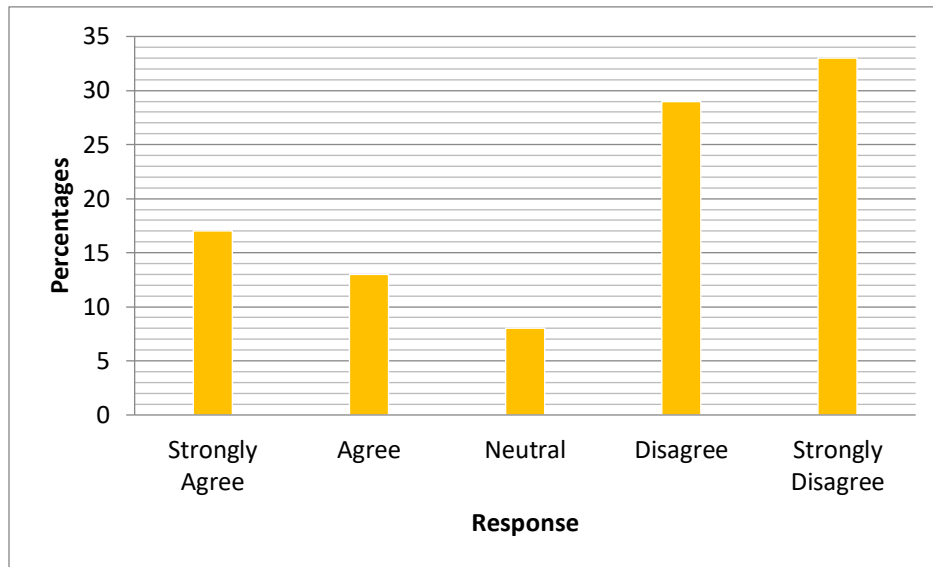


Figure 4.8: Figure on Existence of Buyer supplier relationship

From the results in Table 4.8 and Figure 4.8 shows that 17.54% of the respondents strongly agree, while 12.28% only agree, 8.77 % are neutral, 28.1% disagree, and 33.31% felt that there is no policy.

4.1.9 Overall on procurement functions

The research evaluated the indicators of overall of procurement functions.

Table 4.9: Table showing overall procurement functions

Response	Frequency (n)	Percent (%)
Strongly Agree	31	54.39
Agree	19	33.33
Neutral	4	7.02
Disagree	2	3.51
Strongly Disagree	1	1.75
Total	57	100

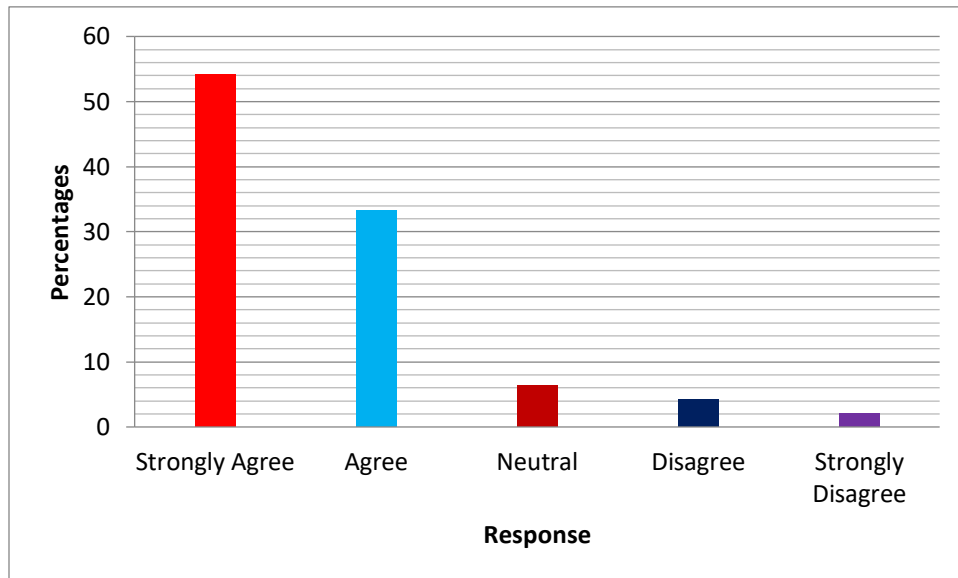


Figure 4.9: Figure showing overall procurement functions

The findings in Table 4.18 and Figure 4.15 revealed that 54.38% of the respondents concur ,while 33.33% agreed, 7.02% are neutral, 3.51% disagree and 1.75% strongly disagree.

4.2 Limitations of the Study

Within the course of ending the study the investigator was tasked to locating the workers as they were bolted down because of the Corona Virus pandemic (COVID -19) and were busy with their routine activities and therefore became tough to access them. A number of the respondents failed to perceive what the study was regarding, as they viewed it to competitive tool meant to show their company thence didn't respond with the avidity expected, whereas others still command crucial info to the study that they felt was sensitive to their revenue policy in their company. Because of these constraints the investigator assured the respondents of the confidentiality of the knowledge they issued and described to the respondents the significance of the research and advantages that may accrue to them if they gave the answers honestly.

4.3 Chapter Summary

The chapter has typically secured the survey, explanation and demonstration of findings originating from collected statistics coming from the respondents. The analyst suggested to gather data from 70 employees, but complete feedback was from 57 respondents. The info has been

presented in sort of tables, charts, bar graphs, and percentages supported the research objectives and therefore the variable indicators. The restrictions are explained and the way the researcher overcame the constraints experienced therein.

CHAPTER FIVE

SUMMARY, RECOMMENDATIONS AND CONCLUSIONS

5.0 Introduction

This section sums up the vital findings of the research, applicable recommendations drawn from the findings and conclusions based on the main purpose of the analysis. The research was on the role of modern technology in improving procurement functions in cooperative organizations. A case study of Pembe Flour Mills limited anchored on three variables namely electronic tendering, Resource Planning, and Buyer supplier relationship.

5.1 Summary of Findings

The top objective of the research was to compile on the role of modern technology in improving acquisition functions in cooperative organizations. In the case of Pembe Flour Mills limited. From the outcomes, the star rated guest houses have adopted computerized data in various phases of the acquisition cycle including computerized data in announcement of the notice publication, contract administration, preparation of tender dossier and acquisition planning to great magnitudes and that the guest houses adopted computerized data in calculating the value and classification of the contract, opening and evaluation of tenders, determination of the acquisition procedure and giving and signing of contract to moderate levels. Organizations got to consider another organizational factor which will potentially affect the adoption of an IT a firm's statistics sharing culture. Consistent with Weele (2010) acquisition via the web requires firms to share statistics with its business partners. Since acquisition has evolved to facilitate streamlining and automating the entire acquisition process also as making order and requisition statistics available along the entire, data sharing between and inside organizations is indispensable.

Further, the findings concur with Kearney (2004) that ICT in procurement considerably influence the success of an organization and therefore the priority of ICT is to relinquish support within the creation of method potency worth and value / expenditure transparency also as achieving reductions within the buying price. Data sharing helps to scale back data spatial property, thereby conjointly forestall opportunistic behaviors. The study also found that various aspects of use of ICT affect the procurement performance of star rated hotels in Nairobi. For instance, placing of the contract and advertising affects the procurement performance of star rated hotels in Nairobi to great extents, while tender evaluation, tender aggregation and tender specification affect the procurement performance of star rated hotels in Nairobi to moderate extents. The study further established that that Web-based Enterprise Resource Planning improves customer service, ERP system advances business performance by integrating a variety of business processes, electronic tendering provides greater data accuracy, electronic tendering leads to a reduced tender cycle-time and E-procurement implementation provide detailed management of information that will negate the need for heavy data mining. It is moderately established that that electronic tendering allows for huge time savings, in electronic tendering there is refined audit series increasing integrity of the tendering processes, electronic processing leads to a more efficient procurement process and ERP software assists companies with standardized data formats. The findings also concur with Javier et al. (2010) that the reengineering of acquisition has been attempted through various data technologies; the important opportunity for achieving this reengineering goal may dwell the utilization of computerized data. The power to speak electronically between members is rapidly becoming a requirement for getting into business alliance. Further, the target of electronic business strategy in acquisition area is to provide purchasing managers with better control over their companies' purchasing habits and relationships with providers. With increasing competitive pressures, acquisition professionals should continually find ways to scale back prices, increase efficiency, and reduce time interval within the pembe flour mills limited. It also found that supplier appraisal, supplier network and integrating brand and acquisition management processes affect acquisition presentation inside the star rated guest houses in Nairobi to great extents as compared to supplier selection and development plan, involvement inside the early stages of brand name building, data flow (documentation, reporting and communication), supplier performance tracking and assessment and developing the providers who affect acquisition functions in cooperate

organizations i.e Pembe flour mills limited to moderate levels. Computerized data tools support its pursuits, proper organization and governing tactical conclusions by a comprehensive clarity on; inventory (stipulations designs, carrying expenses), transportation (consumer location, shipment sizes), facility (location, capacity, smart grid), and dues patterns for reprocess and reuse, restricted waste and deficiency. ICT tools (e-tendering, ERP and buyer supplier relationship) also enhances the performance of the entire procurement to make it less troublesome other hand they experience challenges of inadequate capital necessary to provide e-procurement, use of multiple ERPs which may not be compatible and lack of the advanced configuration necessary for procuring systems to a moderate extents. In accordance, Thai (2009) emphasized one of the most significant challenges in developing countries procurement is how to best use ICT in an age of communications revolution.

5.2 Recommendations

In view of the findings summary the study makes the subsequent suggestions in connection to the role of modern technology in improving procurement functions in cooperate organization in Pembe flour mills limited.

From the findings and conclusion, ICT play a very vital role in the performance of the procurement departments of the star rated hotels. The study thus recommends that Corporations must be sensitive of the ever converting business surroundings that dictates the competitive environment they perform in. As such, staying ahead of the competition through adoption of ICT would ensure that the organizations survive in the competitive environment. Grasping of ICT guarantees that the supply chain equalizes its need to fulfill consumers wants and also to oversee prices in order achieve dividends. The study found that the various aspects of use of ICT that affect the procurement performance of star rated hotels in Nairobi include placing of the contract and advertising as well as tender evaluation, tender aggregation and tender specification. The study therefore recommends for the star rated hotels to realize the optimum performance in the procurement, there is need to embrace the use of modern technology in procurement processes. This will help to reduce lead times and increase efficiency and lead to benefits such as elimination of de-linkage between procurement and financial management, elimination of corruption,

elimination of fraud, efficiency or time of service delivery, elimination of delays and inefficiencies, reliability of the service and customer satisfaction. As a way of coping with the demanding situations, the study recommends the star rated hotels need to employ procurement staffs who have attained professional qualification. Workshops, seminars or short courses need to be offered to the procurement personnel so as improve their knowledge and skills which will in turn enhance procurement efficiency frequently. The organizations need to take on constant coaching for procurement staff to empower them overhaul their aptitudes and knowledge. Adequate basic facilities and resources to perform their expected tasks need to be provided.

5.3 Conclusions

There were, however, several setbacks which may have altered completion of the course. The respondents confronted were likely to be reluctant in divulging data for fear that the data perused would be wont to undermine them or slander them or their firms. Some respondents would even reject the request to fill questionnaires. The matter was resolved by conveying an introductory letter from the University and Reassuring them that the data they provide would be handled confidentially and it might be utilized exclusively for tutorial purposes. The researchers focus was to personally submit the questionnaires so on clarify the speed of submissions in terms of feedbacks from the respondents. The researcher foreshadowed a challenge in securing the respondents valued time regarding their busy schedules. The researcher had to consent with the respondents to avail themselves during overtime hours also as motivating them on its importance. He also had to exercise self control and compassion in sight of this. He has got making every effort possible so on obtain adequate data from the respondents. a further setback was the very fact that there are limited inquiries made on the world of recent technology in acquisition functions of co operate organizations. Due to diverse objectives, methodologies and examination designs of previous studies, the info wasn't accurate enough to assist during this venture. To counter this setback, it didn't limit itself to the scope of recent technology and acquisition performance in Kenya only but rather internationally to widen the research process. Indeed, this minor setback served as a crucial opportunity for this research.

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APPENDIX I
INTRODUCTION LETTER

The
Management University of Africa

Date: 27TH AUGUST 2021

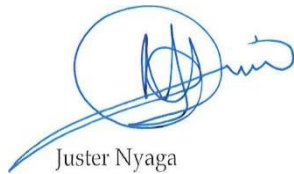
To WHOM IT MAY CONCERN

LYNE LAVE AWUOR- DSM/7/00047/1/20

This letter serves to introduce the above named who is a Diploma in Supply Chain Management (DSM) student and is interested in carrying out research on The Role of Modern Technology in Improving Procurement Functions in Cooperate Organizations, A case study of Pembe flour Mills Ltd.

Any assistance accorded to her in pursuit of this will be greatly appreciated

Yours Sincerely,



Juster Nyaga

Dean, School of Management and Leadership

The Management University of Africa Ipopo Road, Off Mombasa Road Bellevue, South C P.O. Box 29677,00100 Nairobi,
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APPENDIX II

QUESTIONNAIRE

The researcher is executing out a study to demonstrate the role of modern technology in improving procurement functions in cooperate organizations. Please answer all of the questions as objectively and absolute . Do not write your name in the questionnaire. the usage of a tick, suggest your responses in the boxes below.

Section A: Respondents Profile

1. Gender

Male []

Female []

2. Age (Years)

18-21 []

22-26 []

27-31 []

31-36 []

37& Over []

3. Level of Education

Diploma []

Certificate []

Masters []

Degree[]

4. Length of service in the department

3-6months []

1-2 years []

3-5 years []

6 years& over []

Section B: Electronic Tendering

1.What is your standard agreement on electronic tendering and how it affects procurement functions in cooperate organizations ? Use rating scale of 1-5. Where 1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree.

Statements		1	2	3	4	5
i.	The electronic tendering is efficient					
ii.	The company is fitted with sufficient to facilitate this mode of procurement function					
iii.	There is a policy on to regulate this mode of procurement function					

2. Comment on how electronic tendering affect the improvement of procurement functions in cooperate organizations.

.....

.....

Section C: Enterprise Resource Planning

1.What is your level of agreement on resource planning and how it affects the in improving procurement functions in cooperate organizations? Use rating scale of 1-5. Where 1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree.

Statements		1	2	3	4	5
i.	Application of ERP makes the procurement process smoother					
ii.	officers are trained on accurate ERP					
iii.	The data source in system is checked and verified					

2. Comment on how Enterprise resource planning affect the improvement of procurement functions in cooperate organizations.

.....

.....

Section D: Buyer supplier relationship

1.What is your standard agreement on buyer supplier relationship and how it affects in improving procurement functions in cooperate organizations? Use rating scale of 1-5. Where 1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree.

Statements		1	2	3	4	5
i.	The company has collaborative transactions between the two parties electronically					
ii.	The company has strategic alliance between suppliers					
iii.	The company allows free flow of ideas through use of social media channels and internet in general					

2. Comment on how Buyer supplier relationship affects improvement of procurement functions in cooperate organizations.?

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