An Analysis of Elements Influencing Electronic Procurement Performance in Kilifi County Government, Kenya

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Abstract

This research endeavoured to Analysis the Elements Influencing Electronic Procurement Performance in Kilifi County Government, Kenya. The specific objectives of the study were; to examine the effect of public procurement regulations on electronic procurement performance in Kilifi County Government; to establish the effects of staff competence in ICT on electronic procurement performance in Kilifi County Government; to identify the effect of managerial commitment on electronic procurement performance in Kilifi County Government and finally to assess the impact of Information communication technology infrastructure on electronic procurement performance in the Kilifi County Government. The researcher employed a descriptive research methodology. The target population included 200 personnel from diverse departments in Kilifi County Government, Kenya. The study aimed at extract valuable insights from key participants from the department of the Human Resources, Finance, Inspectorate, ICT, Procurement departments, and members of the Budget Committee. For a precise analysis, the researcher employed purposive sampling methods to curate a subset of 60 respondents for our study. Our primary data collection tool was semi-structured questionnaires. Subsequently, the data underwent analysis using the SPSS software, version 24. To ensure the reliability of our findings, the researcher applied the internal consistency technique, leveraging Cronbach's alpha. The results indicated that there is a significant positive relationship between public procurement policies and Electronic Procurement Performance in Kilifi County Government, Kenya with the coefficient of correlation ($r = 0.839$, $p = 0.000$). The results also showed there is a significant positive relationship between ICT proficiency and Electronic Procurement Performance in Kilifi County Government, Kenya with ($r = 0.572$, $p = 0.000$). The results also indicated a significant positive relationship between management support and Electronic Procurement Performance in Kilifi County Government, Kenya with ($r = 0.627$, $p = 0.000$) and finally there existed a significant positive relationship between ICT infrastructure and Electronic Procurement Performance in Kilifi County Government, Kenya with ($r = 0.971$, $p = 0.000$). In terms of the weight of the variables; public procurement regulations which (53.5%), followed by managerial commitment at (43.7%), Staff competence in ICT at (12.8%) then ICT infrastructure at (12.6%). Policies and guidelines are essential in any process for they stipulate the process on how work should be done. The researcher recommends that the County Government of Kilifi should ensure not only the implementation of these procurement policies but also enforcement should be done through strict monitoring and evaluation of the progress. On the issue of ICT proficiency, the recruitment criteria of County government should be designed and followed strictly to ensure that the County hires staff with the necessary job experience and expertise. This will help to eliminate mistakes in the procurement process which may be costly to the county government and which may go a long way in denying it the value for money. Management support and goodwill also acts as a motivation to the staff

who feel facilitated to undertake their roles within the organization. The County Government of Kilifi should not only ensure that the electronic procurement system is put in place but also ensure that it's up to date with the technological changes that are dynamic in nature. They should also ensure that experienced and skilled staffs are hired to run the system. Lastly, The County Government of Kilifi should ensure that it invests heavily in the ICT infrastructure like computers and an effective system as well including reliable internet which will facilitate the efficiency of electronic procurement processes.

Key Words: *Electronic Procurement Performance, Public procurement regulations, Information communication Technology Infrastructure, Staff competence in ICT, Kilifi County Government, Kenya*

Introduction

Public procurement is viewed as an overall process of acquiring goods, civil works and services involving all functions right from needs identification, supplier identification, selection and solicitation, preparation and award of contract and all steps of contract administration all through the end of the service or useful life of an asset (Thai 2019). Public procurement has gained great importance worldwide owing to the significant share of the Gross Domestic Product (GDP) that it accounts for. According to Darin (2010), public procurement across the Sub-Saharan Africa accounts for 8-15% of the GDP, therefore improvement in procurement legislation and its implementation results into approximately 30% savings. Van Weele (2016) posits that public procurement performance is regarded as a result of two elements; effectiveness and efficiency, which represent different competencies and capabilities for the procurement function. The element of performance acts as the yardstick against which an organization to assesses how well it is progressing towards its predetermined objectives. This forms the basis upon which strengths and weaknesses are identified and decisions on future initiatives made with a view to initiate performance improvements. Public procurement importance has seen governments improve their procurement processes with implementation of new systems such as E-procurement that relates with technologies like E-Commerce which links the procurement function to the world thus making it easy to exploit the available business opportunities (Wanyama 2012).

Globally, procurement has evolved by shifting its focus from short-term purchasing activities to long term, value adding purchasing and supply chain initiatives (Johnson 2011). This move has been triggered by the dynamics of the global business environment which is characterized by challenges and opportunities whereby only the most competitive ventures survive the tides. This evolution has necessitated the employment of internet-enabled operations in order to cope with modern business environment which is swiftly drifting away from traditional and manual paperwork in the procurement process. According to Eyaa (2011), procurement is now appreciated as an integral strategic function as opposed to the traditional view of the last few decades which regarded procurement as a support function that provides for sourcing needs of other departments.

The Kenyan public procurement system has greatly evolved over the last decades from a system with no governing regulations in the 1960s to a system regulated by treasury circulars in the period between 1970s to 1990s (Odunga 2015). Public Procurement and Disposal Act (PPDA) of 2005 and the subsequent regulations of 2006 was then introduced in order to set new standards that governed public procurement in Kenya since then. The main aim of this act and the regulations was to streamline supply chain management and introduce ethics in the public sector in Kenya. These reforms brought with them the standardization of public procurement practices across all the procuring entities in Kenya. The reforms aimed at streamlining the procurement process in Kenya saw the installation of a tender's portal to act as a publication platform for information of tender notices and contract awards (Wanyama 2012).

The government of kenya introduced vision 2030 which is anchored on three pillars; political, economic and social development, with actionable strategies in this plan being transparency and accountability in strategic investment plans (Njoroge 2014). Of much importance on public investment was the economic pillar which focuses on public investment based on accountable, efficient and effective management of resources as the key elements of good governance. This was also in a bid to ensure the government performs the most important responsibility of ensuring value for money in the management of public funds. Khemani (2015) posits that, to gain public confidence, the government committed itself to introduce a process aimed at enhancing coordination, planning, mobilization, allocation, management and reporting of public resource usage in compliance with rules and regulations.

This birthed the use of electronic procurement system, popularly known as the Integrated Financial Management Information System (IFMIS) which was believed to be a major contributor in achieving these strategic objectives. In Kenya, the journey towards the automation of procurement processes began in 1997 with efforts to implement a project aimed at strengthening government finance and accounting functions with the sole aim of improving financial management, accountability and transparency of public funds. A number of diagnostic reviews were conducted within a period of three years where Financial Management Information Systems were developed in two phases. IFMIS was introduced in 2008 and rolled out in all government ministries within a period of five years. This system has been a benchmark for the country's budget reform agenda which is regarded as a precondition for achieving effective management of budgetary resources.

ICT has been adopted by governments worldwide, in both developed and developing nations, to improve public service quality, advance public information access, and promote civic involvement. To increase communication and simplify the flow of information, the Kenyan government recognizes the significance of information and communication technology (Chebii, 2016). In this context, electronic procurement, which comprises internet technology to acquire goods, services, and labor plays a crucial role. By improving the structure and tracking of transaction records and enabling more effective supply chain integration, these technologies make it easier to collect data (Ambali, 2010).

Global trends have influenced the development of the ICT sector in Kenya, and a variety of indicators, including the number of fixed and mobile phone lines, computers and services, Internet service providers, Internet users, and broadcasting stations, can be used to track its progress (Chebii, 2016). Governments are aware of the possibility of achieving similar revolutions by adopting the ideas and innovations guiding the electronic business revolution. Due to this, electronic procurement has become a receivable management solution for financial service organizations in both the public and commercial sectors. Its goal is to improve public financial management systems by encouraging accountability, transparency, and responsiveness to goals in public spending policy. Electronic Procurement has gained great popularity globally with many nations embracing technology. Rapid development of E-procurement was reported in the beginning of the year 2000 in USA just before the famous recession. By the end of that year, all state functions were maintaining web presence in their procurement processes with some going as far as online bidding (Kinoti 2017). Electronic procurement has become an ever-growing means of doing business globally with recent projections by World Bank showing that transactions worth $3 trillion will be done by the end of 2024 up from $75 billion in 2020 (Amuhaya 2023). The use of E-procurement comes with several benefits like; high levels of integrity, minimized corruption, cost reduction and increased efficiency as compared to the traditional manual procurement.

There are various forms of E-procurement that are applied in the different stages of procurement process such as e-tendering, e-auction, e-catalogue, vendor management, purchase order integration, e-invoicing, e-payment and contract management. According to Chebii (2016), E-procurement, which is enabled by ICT development has greatly made procurement more competitive and efficient in the dynamic global business environment through value addition which has resulted to cost reduction. In relation to this, Ambali (2010) posits that automation of procurement processes has brought efficiency and effectiveness which translates into value addition, reduction in order cycle, standardization of procedures, reduction in errors and quick supplier payments which is an important ingredient in enhancing good supplier relationship.

Despite being in existence for the last two decades and the maturity of technology landscape, Kahiu (2015) opines that only 25% of the available functionality of E-procurement is utilized by government functions. This is because of insufficient training and little or none alignment to procurement's evolving requirements. Despite all these shortcomings, the concept of E-procurement is still gaining popularity within both public and private sectors. To deal with the problem of lack of accountability and transparency in public procurement processes, most countries have instituted major legal reforms as well as the adoption of procurement. Kenya, for instance, has instituted E- procurement infrastructure to facilitate e-sharing, e-advertising, e-submission, e-evaluation, e- contracting, e-payment, e-communication and e-monitoring especially in the county government level to ensure accountability in the procurement processes (Marei 2022).

Kilifi County is one of the five counties that make up the Kenyan coast. Like all other counties in Kenya, Kilifi County Government has recognized the potential benefits of electronic procurement and has implemented it in its procurement practices. According to Chebii (2017), the Public Procurement and Disposal Act (2015) provides the legal framework to guide procurement in Kenya and thus emphasizes more on electronic systems. Despite adoption of the electronic procurement systems by County Government of Kilifi, effectiveness and efficiency in the procurement processes have not been greatly achieved as initially projected (Kahiu 2015). These challenges result from underutilization of the systems and partial use of manual processes which lead to variations between the actual and expected outcomes.

According to Kahiu (2015), managerial commitment is also crucial for the success of electronic procurement. The support and commitment of top-level management play a vital role in ensuring the effective implementation and utilization of e-procurement systems. If the management of the Kilifi County Government demonstrates a solid commitment to electronic procurement, it is likely to have a positive impact on its performance. Furthermore, a robust information communication technology infrastructure is essential for the smooth functioning of electronic procurement. The availability of reliable hardware, software, internet connectivity, and other technological resources dramatically affects the performance of e-procurement systems.

One key element of electronic procurement performance is adherence to public procurement regulations. Public procurement regulations ensure transparency, accountability, and fair competition in the procurement process (Kahiu 2015). However, the extent to which these regulations are effectively implemented and followed by Kilifi County Government may impact the performance of electronic procurement. Another element is the competence of staff in information and communication technology (ICT). The successful implementation of electronic procurement systems relies on staff members' ability to effectively operate and utilize these technologies

(Kahiu 2015). Therefore, the level of ICT competence among the Kilifi County Government staff may significantly influence electronic procurement performance.

Electronic procurement is using electronic platforms and technologies in the procurement process. The process offers numerous advantages, such as increased efficiency, transparency, and cost savings. The Kenyan government has been trying to modernize its procurement practices by adopting e-procurement systems. According to Chebii (2016), it is crucial to understand the elements that influence electronic procurement performance to identify the factors influencing its success or failure in the context of the Kilifi County Government.

Specific Objectives of the Study

i. To examine the effect of public procurement regulations on electronic procurement performance in Kilifi County Government.
ii. To establish the effects of staff competence in ICT on electronic procurement performance in Kilifi County Government.
iii. To identify the effect of managerial commitment on electronic procurement performance in Kilifi County Government.
iv. To assess the impact of Information communication technology infrastructure on electronic procurement performance in the Kilifi County Government.

2.0 Literature Review

The study was guided by the following theories: Lean Procurement Theory; Supply Chain Integration Theory and Technological Acceptance Theory

3.0 Conceptual Frame work

The conceptual framework visually represents the relationship between the dependent variable (electronic procurement performance) and the independent variables (public procurement regulations, staff competence in ICT, managerial commitment, and information communication technology infrastructure). The conceptual framework illustrates how these variables interact and influence electronic procurement performance (Kahiu, 2015). By analyzing the relationships in the conceptual framework, the study examines how public procurement regulations, staff competence in ICT, managerial commitment, and information communication technology infrastructure influence electronic procurement performance in Kilifi County Government. Through data collection and analysis, the study will provide insights into the strength and significance of these relationships and their overall contribution to electronic procurement performance. The conceptual framework is provided in Figure 1

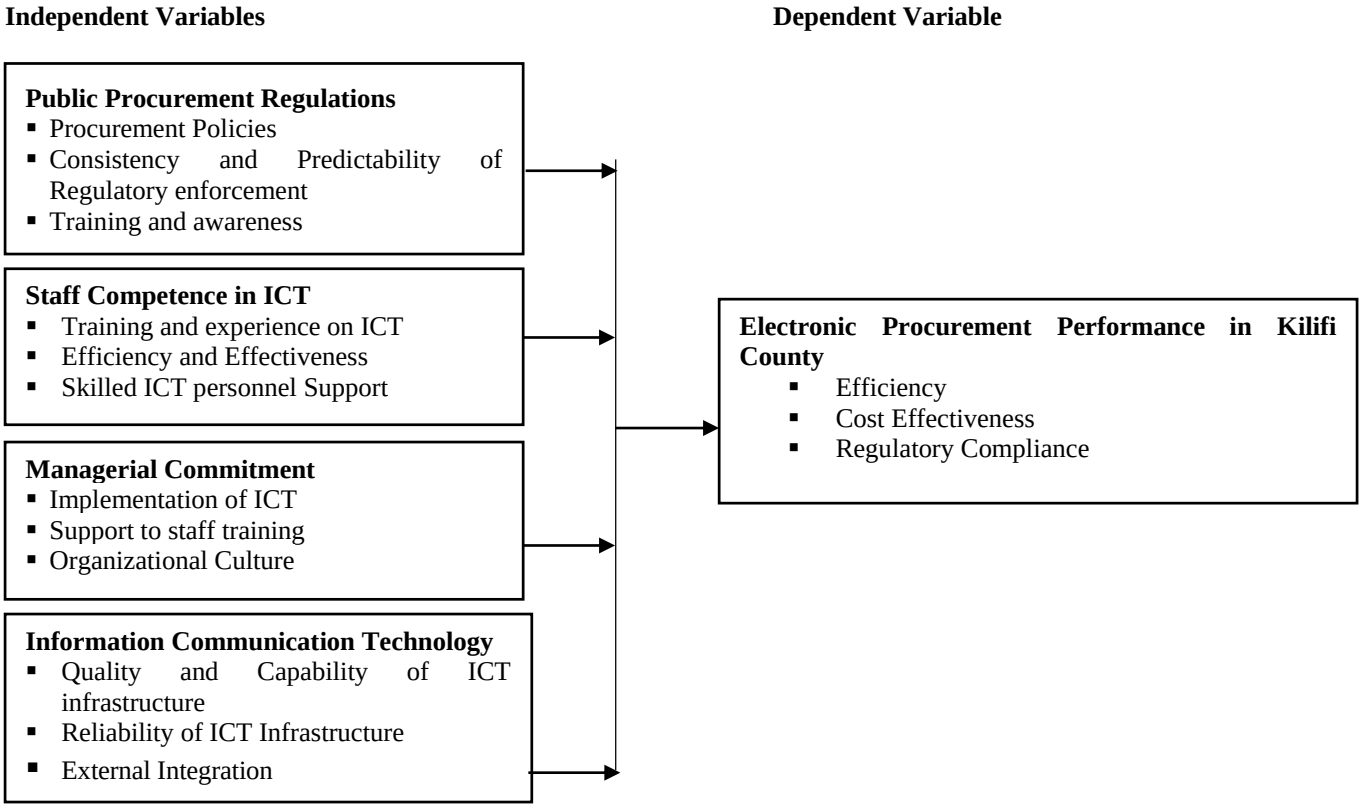

Figure 1: Conceptual Framework
Source: Researcher (2024)

Effect of Public Procurement Regulations on Electronic Procurement Performance in Kilifi County

Lwiga (2017) argues that several studies have examined the influence of public procurement regulations on electronic procurement performance. For instance, Maeri (2022); Mohammed (2018); Chebii (2016) investigated the impact of e-procurement regulations on procurement effectiveness in the public sector. Their findings suggested that well-designed regulations positively affected electronic procurement performance, increasing efficiency, transparency, and cost savings. However, these studies predominantly focus on the impact of regulations on procurement effectiveness in general rather than explicitly exploring their effect on electronic procurement performance within a specific organizational context.

The growth of public procurement in Africa has resulted in the creation of specialized organizations tasked with implementing new rules. These organizations play a significant role in ensuring the effective execution of the laws and focusing on domestic legislation. They are increasingly responsible for keeping an eye on the public procurement process. Comprehensive regulatory frameworks, secondary laws, training programs, manuals, and instructions have been created and made available to various procurement institutions and potential bidders to support the correct implementation of the law's requirements (Choga and Kipkorir, 2017).

Kahiu (2015) notes a research gap regarding how public procurement regulations influence electronic procurement performance in Kilifi County Government. Therefore, understanding how the county government's adherence to these regulations impacts the effectiveness of electronic procurement processes is essential for improving the performance of electronic procurement systems within the county. The Public Procurement and Disposal Act 2015 and the regulations of 2006 are the guidelines used to ensure compliance with procurement processes in Kenya. Failure to comply with the act and regulations by government agencies results into rampant unethical practices in Kenya. Further amendment of the procurement regulations in 2006 has been a key milestone towards public procurement reforms, which has greatly enhanced procurement systems efficiency in state corporations (Nzambu 2015). The government of Kenya implemented these reforms upon realization that there was need to continuously internal procurement policies and procedures.

Effects of Staff Competence in ICT on Electronic Procurement Performance in Kilifi County

The influence of staff competence in ICT on electronic procurement performance has been examined in various studies. For example, Maeri (2022) explored the impact of employee IT competence on e-procurement adoption and usage in organizations. Maeri's findings indicated that the level of staff competence in ICT significantly influenced the success and utilization of e- procurement systems. Similarly, Lwiga (2017) investigated the relationship between employee ICT skills and e-procurement performance in the Malaysian public sector, finding that competent ICT skills positively affected e-procurement system usage and overall performance.

With the development of information and communication technologies (ICTs), people's expectations for services, business models and the effectiveness of information exchange and service delivery have significantly changed (Ambali 2010). Through integrating their information technology (IT) infrastructure, organizational alliances have become more effective due to the broad adoption of information and communication technology, notably the introduction of the Internet. Electronic procurement is a crucial information system that has transformed supply chain operations. Electronic procurement creates a networked system of internal controls by automating public financial procedures, allowing for transparent audit trails and transaction originator identification. This technology has grown essential and is predicted to alter current purchase habits significantly.

While these studies provide insights into the importance of staff competence in ICT for e- procurement performance, there is a research gap regarding the specific context of the Kilifi County Government. Chebii (2016) suggests that it is crucial to examine the level of staff competence in ICT within the county government and its impact on the performance of electronic procurement processes. Identifying and addressing the areas where competence gaps exist can lead to improved utilization and effectiveness of electronic procurement systems in the Kilifi County Government. Intensive training of the procurement professionals leads to increased responsibility and a clear understanding of procurement regulations regarding unethical behaviors like conflict of interest. However, despite installation of presence of an ethics policy, their level of applicability differs. Recent studies indicate that top level officers in organizations are only strict on adherence of rules and guidelines by the junior staff but they follow less on themselves (Waithaka 2021).

Performance in procurement is determined by the extent to which the procurement function achieves its set objectives while at the same time maintaining minimum costs in the process (Eyaa 2011). To this end, effectiveness can only be achieved through staff commitment and expertise in their work, a process which enables an organization to compare the actual against the expected results. Staff competence is therefore the major driver towards achieving organizational goals. Organizational success and competitiveness is greatly anchored on procurement performance as the key driver to service quality improvement. According to Johnson (2011), operational efficiency is

measured by the ability of an organization to minimize wastage of inputs while at the same time maximizing resource utilization in a bid to deliver quality products so that customers get value for their money. Amuhaya (2023) points out that operational efficiency is not only driven by the operational aspects of supply chain control and management, quality control and human resource management but the use of applicable technology plays a very vital role. Technology plays an important role in ensuring efficiency through collection of organizational data, recording it and analyzing it not only to determine the level of profitability but also act as the basis of future planning, monitoring and evaluation. Operational efficiency is attained through minimizing redundancy and waste while at the same time leveraging the resources that greatly contribute to its success like proper utilization of workforce, technology and business processes (Odunga 2015).

Effect of Managerial Commitment on Electronic Procurement Performance in Kilifi County

The role of managerial commitment in electronic procurement performance has been explored in the literature. Ndiiri (2016) investigated the relationship between top management support and the success of e-procurement projects. Ndiiri's (2016) findings highlighted that strong managerial commitment positively influenced the effective implementation and utilization of e-procurement systems. Similarly, Waithaka and Kimani (2021) examined the impact of top management support on the success of e-procurement projects in the healthcare industry, emphasizing the critical role of managerial commitment in ensuring project success.

However, there is a research gap in understanding the effect of managerial commitment, specifically on electronic procurement performance within the context of the Kilifi County Government. Examining the level of managerial commitment and its influence on the performance of electronic procurement processes will provide valuable insights into the factors that promote or hinder the success of electronic procurement systems in the county government. Financial restraint, strategic and practical resource allocation, utilization, value for money, and integrity in public funds are all goals of electronic procurement. Customized solutions are needed for particular phases of public procurement, including invitation, submission, and review. The Organization for Economic Cooperation and Development (OECD) estimates the significance of effective public procurement processes in producing cost savings of up to 15% of GDP, according to Chebii (2016).

Management's work in an organization is to ensure reduced internal costs that result from operational inefficiency inorder to ensure higher gains and success in the volatile operating environment. This can be achieved through streamlining the organization's core processes in order to respond effectively to changing markets cost effectively (Weele 2016). Managers concerned with public procurement need to ensure constant execution of a focused and continuous change management and program improvement aimed at facilitating positive changes in behavior and culture that ultimately results into an efficient and collaborative procurement program (Chiboiwa 2010). This positive move results into administrative efficiencies, better contracts, strong vendor relations and quality assurance from the entity.

Management commitment in the procurement process should not only be seen when giving instructions but also in terms of availing the required facilities to aim the procurement personnel. Public sector management is tasked with the responsibility of demonstrating both economic analysis and leadership capabilities in order to manage the cooperative relationships which are crucial to effective contracting. According to Ndiiri (2016), the demands of managerial role come with the challenge to optimize the limited resources. Today, managers face a changing role of integrating people with information technology and using partnerships in order to obtain expertise in procurement processes. Therefore, for E-Procurement system to thrive in any entity, be it public or private, the management should possess the required competencies which are commercial, pragmatic, political and person-centered and should extent to a wide range (Wanyama 2012). It's therefore worth knowing that the role of management towards the success of E-procurement is greatly an enabling role through provision of the required infrastructure, training, monitoring and evaluation of the success of the whole process.

Impact of ICT Infrastructure on Electronic Procurement Performance in Kilifi County

The impact of information communication technology (ICT) infrastructure on electronic procurement performance has been explored in the literature. Osir (2016) investigated the relationship between ICT infrastructure and e-procurement performance in Chinese local governments. His findings indicated that adequate ICT infrastructure significantly contributed to the effectiveness and efficiency of e-procurement processes. Similarly, Nandankar and Ascham (2020) explored the impact of ICT infrastructure on e-procurement success in the Indian public sector, highlighting the importance of reliable hardware, software, and network connectivity for improved procurement outcomes.

However, as Singh and Pania (2021) argue, there is a research gap concerning the specific context of information communication technology infrastructure and its impact on electronic procurement performance. Assessing the quality and adequacy of ICT infrastructure within the county government and examining its influence on the performance of electronic procurement processes are crucial to identifying potential areas for improvement. The infrastructure on which E- procurement runs may be as simple as mobile telephone, laptop computer or a desktop computer enabled by the relevant sofware. Other supporting technologies like radio Frequency Identification (RFID), Geographic Information System (GIS), Global Positioning System (GPS) and tracking technology aid in the

effectiveness of E-procurement. The use of Information Technology in an organization brings the capability to change the cultural structure with the aim of reducing barriers between different functions (Nantage 2021).

Tools aimed at planning of supply chain management usually integrate resource planning activities in an organization. Some of these planning tools are Material Requirement Planning (MRP), Manufacturing Resource planning (MRP II) and Enterprise Resource Planning (ERP). MRP tool enables an organization to schedule the production activities in order to meet specific deadlines in relation to the bill of materials, production schedule and inventory levels. This infrastructure enables a strong link between an entity the supplier in making informed decisions through sourcing right suppliers, standardized supplier qualification, supplier data, tracking supplier performance (KPIs) and promoting supplier diversity (Osri 2016).

Electronic Procurement Performance in Kilifi County

Choga and Kipkorir (2017) assert that electronic procurement has gained prominence in Kilifi County Government to improve efficiency, transparency, and accountability in the procurement process. The authors note that one of the critical systems utilized for e-procurement in Kilifi County is the Integrated Financial Management Information System (IFMIS). IFMIS is an automated platform integrating financial management functions, including procurement, budgeting, accounting, and reporting (Maeri, 2022). In Kilifi County, IFMIS is a central hub for managing procurement activities, streamlining processes, and enhancing data accuracy and accessibility.

Waithaka and Kimani (2021) note that, the main advantage of utilizing IFMIS for e-procurement is the automation of procurement processes. The system facilitates the creation of electronic requisitions, automated bid evaluations, and electronic supplier registration (Waithaka and Kimani, 2021). This automation reduces manual paperwork, streamlines workflows, and minimizes the chances of errors or fraudulent activities. IFMIS also promotes transparency and accountability in procurement processes (Waithaka and Kimani, 2021). The system provides real-time access to procurement data, including bid notices, tender evaluations, and contract awards. This transparency ensures procurement activities are conducted fairly and openly, enhancing public trust and reducing corruption risks.

Furthermore, IFMIS enables better financial management and budget control. According to Mohammed (2018), the system integrates procurement data with the county's financial management processes, allowing for better tracking and monitoring of expenditures. This integration ensures that procurement activities are aligned with budgetary allocations, preventing overspending and facilitating efficient financial planning.

However, the effective utilization of IFMIS for e-procurement presents challenges. Kahiu (2015) argues there is a need for continuous training and capacity building of staff members. A study by Chebii (2016) found that ensuring procurement officials and end-users have the necessary skills to operate and navigate the IFMIS platform is crucial for maximizing its potential benefits. Nzambu (2015) also calls for robust IT infrastructure to support the IFMIS system. Reliable internet connectivity, secure servers, and adequate hardware and software resources are essential for the smooth and uninterrupted functioning of the system. Investing in and maintaining such infrastructure is critical for implementing IFMIS and contributing to e-procurement performance in Kilifi County.

In the age of technology, IFMIS plays a significant role in enhancing e-procurement processes in the county governments in Kenya. The system's automation capabilities, transparency features, integration with financial management, and reporting functionalities contribute to improved efficiency, accountability, and financial control. However, addressing training and IT infrastructure challenges will be crucial for ensuring the optimal utilization and effectiveness of IFMIS in supporting e-procurement in the county.

3.0 Research Methodology

3.1. Research Design

A research design acts as a comprehensive blueprint for conducting scientific inquiries, ensuring that the research is carried out logically and systematically to address its objectives (Saunders, Lewis & Thornhill, 2000). This study employed a descriptive research design to glean insights from the chosen respondents regarding the current state of the phenomena being explored.

Descriptive research focuses on depicting data and attributes related to the population or phenomena in question. As articulated by Mugenda & Mugenda (2012), the goal of descriptive research is to illustrate and communicate the state of affairs as they exist. Kothari (2012) highlights the significance of a descriptive research design, emphasizing its role in safeguarding against biases and ensuring maximum reliability. Opting for this approach is grounded in the need to deeply understand the principal factors affecting the efficiency of electronic procurement in Kilifi County Government.

3.2. Target Population

This is the set of items or elements that share characteristics and the researcher intends to generalize results of the study (Mugenda, 2013). The target population for this study will be Two hundred individuals working in various roles within Kilifi County Government in Kenya. Specifically, the study aims to gather insights from key stakeholders involved in the electronic procurement processes within the government organization, including Human resource department; Finance department; Inspectorate Department; ICT department; Procurement Department and Budget committee members. Their input will provide valuable information for understanding the elements that impact electronic procurement performance and identifying areas for improvement within the Kilifi County Government. The target population is described in Table 1.

Table 1: Target Population

Respondents	Population
Human resource department	20
Finance department	55
Inspectorate Department	22
ICT department	30
Procurement Department	60
Budget committee members	13
Total	200

Source: HR, Kilifi County Government (2024)

3.3. Sample and Sampling Procedure

According to Kombo and Tromp (2006), a sample is a subset of a broader statistical population, and its characteristics are analyzed to infer information about the entire population. For this study, the researcher employed stratified sampling to choose the participants. A purposive sampling technique within particular strata was utilized to ensure that individuals with expertise and involvement in electronic procurement activities are included in the study. This approach involved selecting participants based on their knowledge, experience, and responsibilities for electronic procurement within the county government.

The initial step involved obtaining a list of potential participants from the procurement department and other relevant departments involved in the electronic procurement processes. From this list, individuals who meet the criteria for inclusion in the study were purposefully selected to form the sample. The selection criteria included roles such as procurement officers, ICT personnel, managers, and other key stakeholders involved in electronic procurement decision-making and implementation. Mugenda and Mugenda (2013), states that when the study population is less than 10, 000, a sample size of 10 to 30% will be a good representation of the target population. The researcher therefore considered 30% in this case as proper for the analysis. Therefore 60 respondents were considered for this study.

Table 2: Sample size

Respondents	Population	Sample Size
Human resource department	25	6
Finance department	55	17
Inspectorate Department	22	7
ICT department	30	9
Procurement Department	60	18
Budget committee members	13	4
Total	**200**	**60**

Source: Researcher (2024)

3.4. Data Collection Method

The research instrument for this study was a semi-structured questionnaire and was used to collect data on the variables of interest, including public procurement regulations, staff competence in ICT, managerial commitment, information communication technology infrastructure, and electronic procurement performance. This study employed questionnaires due to their ability to efficiently gather a vast amount of standardized data on the selected variables and facilitate objective analysis. According to (Chandran, 2004), questionnaires provide a high degree of data standardization and adoption of generalized information amongst any population.

3.5. Validity and Reliability of Research Instrument

3.5.1 Validity of Research Instruments

Validity refers to the extent to which the research instruments accurately measure what they intend to measure (Pandey and Pander, 2022). Barasa, Namusonge, and Iravo (2016) define validity as the degree to which a research methodology adeptly uses measurement techniques to obtain the data essential to address the research objectives. The study involved content validity by subjecting the research instruments to expert review to ensure they adequately cover the measured concepts and variables. Additionally, the study involved criterion validity, which involved comparing the results obtained from the research instruments with established criteria or measures.

3.5.2 Reliability of Research Instruments

Reliability of the Research Instruments is the measure of how the exploration tool would yields the same outcomes or results after administering the same tools to the same respondents over and over. Reliability/trustworthiness refers to the consistency and stability of the research instruments in producing consistent results over time and across different contexts (Gupta and Gupta, 2021). Reliability was tested through measures such as test-retest reliability, where the research instruments are administered to a sample of participants on two separate occasions to assess the consistency of the results.

To enhance the trustworthiness of the research findings, the study used other techniques, such as triangulation and member checking. Triangulation involved using multiple data sources, methods, or researchers to validate the findings. According to Gupta and Gupta (2021), this process helped to ensure that the results are not solely reliant on a single source or method. In contrast, member checking involved sharing the research findings with the participants to verify the data's accuracy and interpretation, enhancing the research's credibility. In this study, reliability was tested using the internal consistency method that is estimated using Cronbach's alpha. Reliability coefficients of 0.70 or higher are considered adequate (Alvesson & Skoldberg, 2017). The results are in Table 3.

Table 3: Table Cronbachs Alpha Reliability Coefficients

Instrument	Cronbach's Alpha	N of Items
Public Procurement Regulations	.945	6
Staff Competence in ICT	.955	6
Managerial Commitment	.948	6
ICT Infrastructure	.971	6
Electronic Procurement Performance in Kilifi County	.927	3

Source: Research Data (2024)

4.0 Data Analysis and Discussion

Effects of Public Procurement Regulations on Electronic Procurement Performance in Kilifi County

In this section, the researcher sought to examine the effect of public procurement regulations on electronic procurement performance in Kilifi County Government. From the results displayed in table 4 and with the average mean of **3.764** and standard deviation of **1.237** that Public Procurement Regulations influence Electronic Procurement Performance in Kilifi County. The respondents agreed with the fact that procurement standards are consistently adhered to in Kilifi County Government as indicated by a mean of **4.22** and a standard deviation of **0.881**. On the other hand, the respondents agreed with the statement that PPDA policy implementation enhances electronic procurement outcomes as shown by a mean of **3.86** and a standard deviation of **1.643**. The respondents also agreed with the view that Kilifi County's procurement policies align with the broader governmental guidelines as per the mean of **3.66** and a standard deviation of **1.446**. A mean of **3.92** and a standard deviation of **0.994** is an indication that the respondents agreed with the statement that there are educational sessions on public procurement policies and standards. However, the respondents were neutral with the statement that Kilifi county Government ensures adherence to procurement rules as shown by the mean of **3.16** and a standard deviation of **2.221**.

Table 4: Descriptive Statistics of Public Procurement Regulations

Statement	N	Mean	Std Dev
Public procurement standards are consistently adhered to in Kilifi County Government.	60	4.22	**0.881**
PPDA policy implementation enhances electronic procurement outcomes.	60	3.86	**1.643**
Kilifi County's procurement policies align with broader governmental guidelines.	59	3.66	**1.446**
There are educational sessions on public procurement policies and standards	60	3.92	**0.994**
Kilifi County government ensures adherence to procurement rules.	59	3.16	**1.221**
Overall mean Score		**3.764**	**1.237**

Source: **Research Data (2024)**

This section sought to establish whether there is a significant relationship between Public procurement regulations and Electronic Procurement Performance in Kilifi County. From the findings as shown in table 5, it's evident that there exists a positive significant relationship between procurement regulations and Electronic Procurement Performance in Kilifi County as shown by the correlation coefficient **(r = 0.839, p = 0.000).** This means that strict implementation and adherence to public procurement regulations is likely to influence positively the Electronic Procurement Performance in Kilifi County

Table 5: *Correlation Analysis of Public Procurement Regulations and Electronic Procurement Performance in Kilifi County*

		Public Procurement Regulations	Electronic Procurement Performance in Kilifi County
Public Procurement Regulations	Pearson Correlation	1	.839**
	Sig. (2-tailed)		.000
	N	60	60
Electronic Procurement Performance in Kilifi County	Pearson Correlation	.839**	1
	Sig. (2-tailed)	.001	
	N	60	60

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

Effects of Staff Competence in ICT on Electronic Procurement Performance in Kilifi County

The researcher aimed at examining the Effects of Staff Competence in ICT on Electronic Procurement Performance in Kilifi County. From the results as shown in table 6, with a mean of **3.96** and a standard deviation of **2.202**; majority of the respondents agreed that Staff Competence in ICT significantly influence Electronic Procurement Performance in Kilifi County. Also, respondents agreed that the procurement team is skilled in ICT with a mean of **3.46** and a standard deviation of **0.447**. The respondents agreed with the statement that regular ICT training sessions are conducted for the procurement team as indicated by the mean of **3.96** and a standard deviation of **0.671**. ICT-skilled staff are prioritized during hiring of staff according to the mean of **3.87** and a standard deviation of **0.992** of the respondents. Consequently, a mean of **3.97** and standard deviation of **0.225** indicates that respondents agree with the statement that proficiency in ICT directly influence on electronic procurement results. In addition, the respondents agreed with the view that procurement staff are well-trained and experienced as shown by the mean of **3.67** with a standard deviation of **0.964**. They strongly agreed with the statement that proficiency in ICT is fundamental for effective digital procurement implementation as shown by the mean of 4.84 and a standard deviation of **1.114**.

Table 6: Descriptive Statistics of Staff Competence in ICT

Statement	**N**	**Mean**	**Std Dev**
Majority of the procurement team is skilled in ICT	60	3.46	0.447
Regular ICT tool training sessions are conducted for the procurement team	60	3.96	0.671
ICT-skilled staff are prioritized during hiring in the procurement department	60	3.87	0.992
The proficiency in ICT directly impacts electronic procurement results	60	3.97	0.225
The procurement department staff are well-trained and experienced	60	3.67	0.964
Proficiency in ICT is fundamental for effective electronic procurement implementation	60	4.84	1.114
Overall Mean Score		**3.96**	**0.7355**

Source: **Research Data (2024)**

From the results in table 7 above, it's evident that there exists a significant positive relationship between Staff Competence in ICT and Electronic Procurement Performance in Kilifi County with the correlation coefficient of (r = 0.572, p = 0.000). This means that increased Staff Competence in ICT is much likely to influence positively on Electronic Procurement Performance in Kilifi County.

Table 7: *Correlation Analysis of Staff Competence in ICT on Electronic Procurement Performance in Kilifi County*

		Staff Competence in ICT	Electronic Procurement Performance in Kilifi County
Staff Competence in ICT	Pearson Correlation	1	0.572**
	Sig. (2-tailed)		.000
	N	60	60
Electronic Procurement Performance in Kilifi County	Pearson Correlation	0.572**	1
	Sig. (2-tailed)	.001	
	N	60	60

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

Effect of Managerial Commitment on Electronic Procurement Performance in Kilifi County

The researcher sought to know the Effect of Managerial Commitment on Electronic Procurement Performance in Kilifi County. From the findings diplayed in table 8 above, Majority of the respondents with overall Mean score of **4.173** and standard deviation of **0.765**. With a a mean of **4.21** and a standard deviation of **0.448**, respondnts agreed with the statement that management is supportive of electronic procurement implementation In addition, they agreed with the statement that sufficient funds and resources from management enhance digital procurement outcomes with the mean of **4.21** and a standard deviation of **0.699**. The respondents agreed with the statement that organizational leadership enforces procurement policies with mean of **4.14**. With a mean of **4.36** and a standard deviation of **1.164**, the respondents agreed with the view that leadership actively promotes electronic procurement in the organization. The respondents also agreed with the view that management shapes the organizational culture towards electronic procurement adoption with the mean of **3.98** and a standard deviation of **0.643**. With a mean of **4.39** and a standard deviation of **1.224** the repondents agreed with the statement that robust managerial backing is crucial for effective electronic procurement.

Table 8: Descriptive Statistics of Managerial Commitment

Statement	N	Mean	Std Deviation
Management is supportive of electronic procurement implementation.	60	3.96	0.448
Sufficient funds and resources from management enhance electronic procurement outcomes	60	4.21	0.699
Organizational leadership enforces procurement policies	60	4.14	0.414
Leadership actively promotes electronic procurement in the organization	60	4.36	1.164
Management shapes the organizational culture towards electronic procurement adoption	60	3.98	0.643
Robust managerial backing is crucial for effective electronic procurement	60	4.39	1.224
Overall Mean score		**4.173**	**0.765**

Source: **Research Data (2024)**

From the correlation analysis as shown in the table 9, the findings indicate that there exists a significant positive relationship between the Managerial Commitment and Electronic Procurement Performance in Kilifi County. This is indicated by the correlation coefficient ($r = 0.627$, $p = 0.000$).

Table 9: *Correlation Analysis of Managerial Commitment on Electronic Procurement Performance in Kilifi County*

		Managerial Commitment	Electronic Procurement Performance in Kilifi County
Managerial Commitment	Pearson Correlation	1	0.627**
	Sig. (2-tailed)		.000
	N	60	60
Electronic Procurement Performance in Kilifi County	Pearson Correlation	0.627**	1
	Sig. (2-tailed)	.001	
	N	60	60

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

Influence of ICT Infrastructure on Electronic Procurement Performance in Kilifi County

This section sought to understant the Influence of ICT Infrastructure on Electronic Procurement Performance in Kilifi County.From the descriptive analysis, ICT Infrastructure influence Electronic Procurement Performance in Kilifi County with overall Mean score of **4.164** and standard deviation of **0.8214.** The findings also indicated that the majority of respondents agreed with the statement that updated technical systems enhance electronic procurement with the mean of **3.75** and a standard deviation of **0.442**. Similarly, it was also agrred that a stable ICT framework is pivotal for electronic procurement operations as shown by a mean of **3.69** and a standard deviation of **1.641**. The respondents were also in agreement with the statement that adequate ICT resources directly impact the digital procurement processes' productivity as shown by a mean of **3.78** and a standard deviation of **1.167**. However, the respondents strongly agreed with the statement that there are guidelines for ICT infrastructure utilization as per the mean of **4.88** and standard deviation of **0.743**. Similarly, the respondents strongly agreed with the statement that ICT is seamlessly integrated into procurement procedures as per the mean of **4.72** and a standard deviation of **0.114.**

Table 10:I Descriptive Statistics of ICT Infrastructure

Statement	N	Mean	Std Deviation
Updated technical systems enhance electronic procurement	60	3.75	0.442
A stable ICT framework is pivotal for electronic procurement operations	60	3.69	1.641
Adequate ICT resources directly impact the electronic procurement process's productivity	60	3.78	1.167
There are guidelines for ICT infrastructure utilization.	60	4.88	0.743
ICT is seamlessly integrated into procurement procedures	60	4.72	0.114
Overall mean score		**4.164**	**0.8214**

Source: **Research Data (2024)**

The correlation analysis findings as shown in table 11, revealed that there exists a significant positive relationship between ICT Infrastructure on Electronic Procurement Performance in Kilifi County. This is indicated by the correlation coefficient (r = 0.971 ,p = 0.000).

Table 11: *Correlation Analysis of ICT Infrastructure on Electronic Procurement Performance in Kilifi County*

		ICT Infrastructure	Electronic Procurement Performance in Kilifi County
ICT Infrastructure	Pearson Correlation	1	0.971**
	Sig. (2-tailed)		.000
	N	60	60
Electronic Procurement Performance in Kilifi County	Pearson Correlation	0.971**	1
	Sig. (2-tailed)	.001	
	N	60	60

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

Electronic Procurement Performance in Kilifi County

Descriptive analysis of Electronic Procurement Performance in Kilifi County was done in this section and the majority of the respondents agreed that there is an increase in Electronic Procurement Performance in Kilifi County with mean of **3.783** and a standard deviation of **0.437**. The findings indicate that the county's procurement procedures are optimized with a mean of **3.77** and a standard deviation of **0.851**. Similarly the respondents agreed with the stement that with electronic procurement, the county's operations are more economical with mean of **3.64** and a standard deviation of **0.121** and finally with mean **3.94** and a standard deviation of **0.338**, regulatory compliance in procurement is upheld in Kilifi County

Table 12: Descriptive analysis of Electronic Procurement Performance in Kilifi County

Statement	N	Mean	Std Deviation
My County's procurement procedures are optimized	60	3.77	0.851
With electronic procurement, operations are more economical in my county	59	3.64	0.121
Regulatory compliance in procurement is upheld in my County	60	3.94	0.338
Overall Mean Score		**3.783**	**0.437**

Source: Research Data (2024)

Regression Analysis on Elements Influencing Electronic Procurement Performance in Kilifi County Government, Kenya

The researcher performed regression analysis to find out the influence of Public Procurement Regulations, Staff Competence in ICT, Managerial Commitment and ICT Infrastructure on Electronic Procurement Performance in Kilifi County Government, Kenya. Regression coefficients, it shows that Public Procurement Regulations, Staff Competence in ICT, Managerial Commitment and ICT Infrastructure predicts the Electronic Procurement Performance in Kilifi County Government, Kenya. There is a strong linear relationship between independent variables and electronic procurement performance in the Kilifi County Government of Kenya, according to the results of the linear regression, which show R^2=0.727 and R= 0.784. The independent variables explained 72.7% of the variability of dependent variable

Table 13: *Model Summary of Elements Influencing Electronic Procurement Performance*

Model	R	R Square	Adjusted R Square	Standard Error of Estimate
1	0.671	0.727	0.784	0.3159

a). Predictors (Constant), Public Procurement Regulations, Staff Competence in ICT, Managerial Commitment, ICT infastructure
b). Electronic Procurement Performance in Kilifi County Government, Kenya

The researcher conducted the Analysis of Variance (ANOVA) inorder to establish the significance of the regression model. For any regression model to be considered as significant, the F-significance value (ρ) should not be more than 0.05, this shows that the model should give more than (95%) confidence level otherwise it would give the wrong prediction. From the Table 14, the results from ANOVA test reveals that Public Procurement Regulations, Staff Competence in ICT, Managerial Commitment, ICT infastructure statistically significantly predicts the Electronic Procurement Performance in Kilifi County Government, Kenya, **F (4, 56) = 42.716, p< .05, R^2 = .727.**

Table 14: *ANOVA of Elements Influencing Electronic Procurement Performance in Kilifi County Government, Kenya*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.28	4	0.886	42.716	.02(a)
	Residual	1.322	56			
	Total	**10.602**	**60**			

a). Predictors: (constant), Public Procurement Regulations, Staff Competence in ICT, Managerial Commitment, ICT infastructure
b). Dependent Variable: Electronic Procurement Performance in Kilifi County Government, Kenya

Regression Coefficients of Elements Influencing Electronic Procurement Performance in Kilifi County Government, Kenya

From the Analysis in table 15, Public Procurement regulations X_1 (β =0.548, p< 0.05) has the strongest relationship with Electronic Procurement Performance in Kilifi County Government, Kenya followed by Staff Competence in ICT X_3(β =0.299, p< 0.05). Managerial commitment X_2 (β =0.267, p> 0.05) and ICT Infrastructure X4 (β =0.241, p> 0.05). It was found that all the independent variables had positive significant relationship with procurement performance.

Table 14: Regression Coefficient Results

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std Error	Beta		
Constant	0.124	.39		0.616	.042
Public Procurement regulations	0.535	.022	.548	7.362	.002
Managerial commitment	0.128	.048	.267	4.996	.042
Staff Competence in ICT	0.437	.036	.299	3.006	.016
ICT Infrastructure	0.126	.002	.241	1.775	.008

a). Predictors (Constant), Public Procurement Regulations, Staff Competence in ICT, Managerial Commitment, ICT infastructure
b). Dependent Variable: Electronic Procurement Performance in Kilifi County Government, Kenya

The established regression equation was therefore formulated as below;
$Y = 0.124 + 0.535X_1 + 0.128X_2 + 0.437X_3 + 0.126X_4 + \varepsilon$

The regression equation above means that holding the factors (Public Procurement Regulations, Staff Competence in ICT, Managerial Commitment, ICT infastructure) constant, the Electronic Procurement Performance in Kilifi County Government, Kenya would be (12.4%). Holding all other factors at zero level, a unit increase in public procurement regulations would lead to (53.5%) increase in Electronic Procurement Performance in Kilifi County Government, Kenya .Similarly, holding all other factor at zero, adherence to staff competence in ICT would lead to (12.8%) increase in Electronic Procurement Performance in Kilifi County Government, Kenya. An increase in managerial commitment would leads to a (43.7%) increase in Electronic Procurement Performance in Kilifi County Government, Kenya. All other factors held at zero level, the institution of ICT infratructure would ensure a (12.6%) increase in Electronic Procurement Performance in Kilifi County Government, Kenya. Through this regression model, it can be ascertained that the greatest contributor to the success of Electronic Procurement Performance in Kilifi County Government, Kenya is public procurement regulations which contributes to (53.5%), followed by managerial commitment at (43.7%), Staff competence in ICT at (12.8%) then ICT infrastructure at (12.6%).

5.0 Summary of the findings.

5.1 Public Procurement Policies and Electronic Procurement Performance in Kilifi County

According to the findings, public procurement regulations are considered to be the greatest contributors to the effectiveness of electronic procurement. However, the respondents were of the view that the County Government of Kilifi does not consistently adhere to the public procurement standards. The abuse of public procurement systems usually occurs as a result of weak and inconsistent enforcement of rules since public procurement regulations are not effectively applied (Nantage 2021). Public Procurement Regulations are essential in ensuring accountability which holds procurement practitioners responsible for their actions. Today, public procurement operates in an environment that is highly interconnected as a result of technology hence much emphasis on accountability.

The findings indicate that the implementation of PPDA policy has been instrumental in enhancing digital procurement outcomes. However, this policy will only be effective where there is the goodwill of both the management and employees. The policies that guide procurement processes majorly mirror around the principles that guide the conduct of procurement practitioners. The principles are instrumental in ensuring human effectiveness in terms of fairness, integrity, honesty, impartiality and excellence. Absence of these principles leads to self-awareness and command and can lead to bias, partial decisions and ultimately conflict of interest. Without self-discipline which is guided by the principles, even the presence of technology will not ensure effectiveness in the procurement process. Therefore, the institution of public procurement policies in the County Government of Kilifi has not been given much emphasis despite its importance.

From the findings, the respondents agreed with the view that Kilifi County's procurement policies usually align with the broader governmental guidelines. According to Savas (2010), some of the commonly witnessed shortfalls in the planning and management of procurement include needs that are not well estimated, unrealistic budgets as well as procurement officials who are not skilled. Nowadays, governments worldwide are supporting the view that procurement should be integrated in to a more strategic view which improves the value for money. With the County Government of Kilifi failing to align its procurement policies with those of the national government, value for money is not ensured meaning priority projects are not considered and well planned for.

The respondents agreed with the statement that educational sessions on public procurement policies and standards are usually undertaken. This is a good step in the right direction in terms of enhancing professionalism in procurement. However, these training sessions have not yielded the desired results and outcomes since the results also indicated that Kilifi County Government does not ensure adherence to procurement rules. Training should cultivate the art of professionalism which ensures consistency in doing the best in the right way and strict adherence to the set rules and regulations (Raymond 2018).

5.2 ICT Proficiency and Electronic Procurement Performance in Kilifi County

The results indicate that majority of the procurement team is not skilled in ICT. This is an implication that there lacks the aspect of professionalism in the procurement department. Procurement as a profession is largely dependent on theoretical knowledge, perfected through frequent training and education which is ultimately tested and examined in the actual workplace coupled with strict adherence to the professional code of ethics (Arrowsmith 2012). Despite the regular training sessions that are carried out by the county government of Kilifi, this is not replicated in the actual workplace. Effectiveness in the procurement profession is usually as a result of having in place staff that comprises of professionals who are recognized by their respective professional bodies in the country.

The County Government of Kilifi does not prioritize ICT-skilled staff during hiring according to the findings. According to Delaney (2012), governments have attached a lot of importance to the procurement function owing to its strategic nature and therefore need to strictly ensure only well trained and qualified personnel are employed to manage this process. The absence of professionalism coupled with non-conversant with procurement regulations and procedures results into breaches of the codes of conduct through the application

of unsound decisions. The findings also indicate that the proficiency in ICT directly impacts on digital procurement results. One aspect that the administration of the County Government of Kilifi does not seem to realize is that professionalism in public procurement does not solely relate to education levels and personal qualifications but the professional approach to the business activities.

The findings seem to dispute the fact that procurement staff in every government entity should be well trained and experienced in their specific fields of specialization. In Kenya, the Kenya Institute of Supplies Management (KISM) is the corporate body that promotes learning, development of best practices and the application of the same to the practice of procurement and supply chain. This body is also actively involved in providing a code which dictates the ethical standards which assists its members to address the ethical dilemmas faced in their line of duty. It's therefore imperative that the County Government of Kilifi finds it necessary to institute mechanisms that enhance professionalism in the procurement staff in order to cope with the dynamics of the procurement profession that are evolving with each passing day. Training is not enough but also monitoring the staff in the actual work place is essential.

5.3 Management Support and Electronic Procurement Performance in Kilifi County

The findings indicate that the respondents were in agreement with the statement that the management of Kilifi County Government is supportive of the digital procurement implementation. This is quite encouraging considering the fact that the results also indicate that respondents agreed with the view that organizational leadership enforces procurement policies. This is in line with a study that was undertaken by Kiragu (2012) on the impact of information technology on the procurement process in Kenya. The study observed that the ability to employ technology in the contracting process relies on the cooperation between the organization that maintains the data and the organization that uses the data.

However, the findings indicated that the County government of Kilifi does not invest sufficient funds and resources to enhance procurement policies. This shows lack of goodwill from the county administration. It's worth noting that significant implementation of procurement practices and subsequent performance is basically a result of staff motivation. The findings also indicated that the respondents disagreed with the view that management shapes the organizational culture towards digital adoption. It has become a matter of concern that public procurement reforms can only be effective when addressed from the management level. Many government functions are currently engaging in undertaking procurement reforms with the major aim of reducing costs while at the same time accelerating the speed with which procurement transactions are undertaken (Mrope,2017).

The findings showed that robust managerial backing is crucial fo effective digital procurement. This is contrary to the kind of investment that the County Government of Kilifi has put in its procurement function. It should be noted that public procurement is a delegated function. This is because public procurement involves the use of government resources, with the procuring entity acting on behalf of the government. Therefore, public procurement is not only regarded as an economic activity but also a legal activity (Chiboiwa 2010). It's therefore necessary for the administration of County Government of Kilifi to invest heavily in terms of both financial and human resources in order to ensure that the procurement function is vibrant and well facilitated in order to undertake its functions effectively.

5.4 ICT Infrastructure and Electronic Procurement Performance in Kilifi County

From the findings, it's evident that updated ICT Infrastructure enhance electronic procurement. However, from the low investment that the County Government of Kilifi has put in the procurement function, it's less likely that there will be any proportionate outcome in terms of efficiency. The respondents also agreed with the statement that a stable ICT framework is pivotal for digital procurement operations. They also agreed with the statement that adequate ICT resources directly impact the digital procurement process's productivity. This scenario is similar to a study that was undertaken by Eyaa (2011) about why investment of technology in organizations has not been effective. In her study, it was concluded that many countries and entities are still grappling with inefficient and ineffective public procurement despite their hefty investments inform of financial resources with the aim of bringing reforms in their procurement processes. This was attributed to lack of motivation on the side of the staff.

On the other hand, the respondents disagreed with the statement that there is guideline for ICT infrastructure utilization within the County Government of Kilifi. This means that procurement officers are not limited on the range of activities that they can undertake using the County government's ICT infrastructure. This therefore opens room for manipulation and malpractices in the whole procurement processes. Corruption in procurement thrives where there are no checks and balances because this limits accountability and transparency. This trend is not limited to Kilifi County only since many corruption cases have been witnessed in majority of the 47 counties in Kenya and which mostly involve procurement officers. The respondents also disagreed with the view that ICT is seamlessly integrated in to the procurement procedures. From the findings, it is evident that there are gaps that have not been addressed by the introduction of technology in the procurement process. The County Government of Kilifi seems to be only interested in training of the staff by has not facilitated them with the necessary ICT infrastructure as well as employment of staff with the necessary skilled and expertise. The level of investment ii digitization of the procurement function is still low.

6.0 Conclusion

Despite the significant role that public procurement policies play in enhancing digital procurement efficiency, the County Government of Kilifi has not utilized these policies in the procurement function. This is because public procurement standards are not adhered to as shown by the findings. The standards which include procurement policies and procedures are contained in the PPDA Act and act as the basis upon which the procurement process conducted. The findings also show that the county does not align the procurement policies with the broader governmental guidelines. This therefore creates room for procurement malpractices like conflict of interest, supplier collusion and corruption. All these malpractices occur in places where ethical standards are not adhered to and enforced to guide the profession.

On ICT proficiency it's regrettable that the County Government of Kilifi has not embraced professionalism in the procurement function. The findings indicate that majority of the procurement team is not skilled in ICT. With virtually every operation in the national and county governments being digitized, proficiency in ICT is of utmost importance. The results also show that ICT skills are not seriously considered during recruitment of staff. This denies the county the advantage of having professionals and staff who can make direct impact in the procurement function. It should be understood that on- job trainings that are done to enhance professionalism are costly and usually done over short periods of time which cannot adequately equip the employees for the job ahead of them. Lack of expertise in any job opens the room for mistakes and flaws in procurement processes which may be costly to the county.

The County Government of Kilifi has been supportive in the electronic procurement implementation. However, the county has not invested sufficient resources both financial and human into the process. For this project to succeed, there should be administration's goodwill and support. Supporting is not enough without action which involves laying the groundwork for implementation, monitoring and evaluation of the whole process. Technology may be expensive to implement and run. It needs investment through finances and human capital and therefore it becomes expensive in the short run. However, the efficiency and effectiveness that it brings goes a long way in ensuring that the county gets the value for money as well as streamline the whole process. The county should ensure that the procurement function is facilitated with experienced staff to match the installed technology.

The ICT infrastructure is essential in facilitating electronic procurement efficiency. The system should run on a set of hardware which should be in place. The findings show that an updated technical system enhances digital procurement. Adequate ICT resources directly impact the digital procurement process's productivity. This ICT framework plays a pivotal role for the digital procurement operations. However, despite the findings finding all these requisite elements appreciated by the county, there lacks guidelines for ICT infrastructure utilization. This paves way to comprise the integrity of the whole procurement process. This inherent problem emanates from the low regard to the set rules and guidelines stipulated in the PPDA act which guide how procurement function should be conducted.

7.0 Recommendations

On Public Procurement Policies, the County Government of Kilifi should ensure not only the implementation of these procurement policies but also enforcement through strict monitoring and evaluation of the progress. The staff should be trained regularly on the importance of the public procurement policies and invite trainers from recognized regulatory bodies in order to equip them with the necessary knowledge on the policies. There should be also a reward and punishment systems for staff who contravene these policies.

On ICT proficiency, the County Government of Kilifi does not embrace personal expertise during the recruitment process of its staff. The recruitment criteria should be designed and followed strictly to ensure that the County hires staff with the necessary job experience and expertise. This will help to eliminate mistakes in the procurement process which may be costly to the county government and which may go a long way in denying it the value for money. Expertise also ensures the efficiency of the processes since staff do not need to be coached all the time. The expertise coupled with regular training sessions will enhance efficiency and effectiveness in the workplace.

On Management Support, the management should also ensure that controls are in place through rule and guidelines that stipulate how the work is done. Management support and goodwill also acts as a motivation to the staff who feel facilitated to undertake their roles within the organization. The County Government of Kilifi should not only ensure that the electronic procurement system is put in place but also ensure that it's up to date with the technological changes that are dynamic in nature. They should also ensure that experienced and skilled staffs are hired to run the system.

On ICT Infrastructure, the County Government of Kilifi should ensure that it invests heavily in the ICT infrastructure like computers and an effective system as well as reliable internet which will facilitate the efficiency in electronic procurement process. These might be expensive to purchase and install, however, the efficiency and effectiveness that comes with it goes a long way in minimizing costs that would have been incurred through the use of the manual system. An efficient ICT infrastructure also acts as a motivator to the staff

since it lightens up their work through consolidating the voluminous paperwork which is also time consuming. Digital procurement comes with many advantages which can be enjoyed through having an efficient ICT infrastructure.

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