ASSESSING THE READINESS OF PUBLIC SECTOR TO EMBRACE E-PROCUREMENT IN UGANDA CASE OF GOMBA DISTRICT

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UGANDA CHRISTIAN UNIVERSITY

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DECLARATION

I SSERULIKA DICKSON, solemnly declare that this research report has never been submitted to any other institution of learning for any award.

Signature.....

SSERULIKA DICKSON

J21B12/273

date.....12/09/2023

APPROVAL

I certify that this report was prepared by SSERULIKA DICKSON under my supervision and is ready for submission with my approval.

Signed: ..... Date: 12th/09/2023

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(SUPERVISOR)

DEDICATION

I dedicate this proposal to my beloved mother Miss MILLY NAMYANYA. Mom it has been you from day one watching my footsteps till now it's still you, you have supported me in this journey even in the tough times it has been you to see me through, for sure you have been a strong pillar. I really appreciate you from the bottom of my heart. May the Almighty God bless you so much with everything you wish for. You have stayed strong even when you had every reason to break down. For I can't stop praising you but allow me shout out my proposal to my brothers, sister and friends for keeping me in their prayers because it has not been easy to walk journey without God.

I also take the opportunity to dedicate this proposal to the procurement department unity at the Local Government which gave me the opportunity to practice with them and also putting a milestone on my academic journey showing me the difference between theory and reality of the field work.

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ABSTRACT

E-procurement adoptions make purchasing activities are more effective in terms of both time and cost. In Uganda the adoption of e-procurement is at infant stage. The focus of this report is on adoption of e-procurement and value that can be achieved in public sector. The study was guided by three objectives namely, to examine the already established electronic procurement systems in the public sectors, to assess the electronic procurement readiness in public sectors of Uganda and to assess the human capital in regards to embracing e-procurement in public sectors of Uganda.

The study was guided by the UTAUT theory of adoption and several works by different scholars on adoption of E-procurement in state corporations. The research methodology used in the study include the data collection techniques which focus on questionnaire as primary data collection, and secondary data collection involved books, journal and internet search engine like Google scholar. Non probability sampling was used in this study.

Public sectors Limited has adopted the E-procurement system even though several procurement functions are still carried out in the traditional manual system. Some of the functions that are yet to be done through the e-procurement system include increased transparency, cost saving because of reduced paper work, easy payment, traceability of documents.

E-procurement is successfully implemented through business level of transaction i.e. organization to organization and not at individual level such as purchasing vehicles online. However, this progress cannot be ignored as it enlightens and exposes individual procurement experts to some practical knowledge on e-procurement such as the e-data interchange, e-sourcing, e-payment and risk management. At the country level they have made little progress towards full application of E-procurement and more efforts are required in order to fast track the process. Hence the government has to be more committed and needs to provide its full support.

CHAPTE ONE

INTRODUCTION

1.0 Introduction

This chapter entails the background of the study, statement of the problem, purpose of the study, research objectives, research questions, research hypothesis, background, research hypothesis, scope of the study and significance of the study.

1.1 Background of the study

According to Orina (2013), e-procurement readiness is the degree to which a company or organization strives to accept, use and benefit from the digital economy such as e-procurement. The public sectors are key players in the adoption of e-procurement and need to be prepared to salve any implantation issues that many arise. Other parties involved in the adoption of e-procurement include institutions that make purchases, as well as legal and regulatory frameworks. Alt and Puschmann (2005) the goal of e-procurement is not only internal process efficiency, Interaction with suppliers and online marketplaces is also necessary. The procurement process has evolved from its primitive sense which involved replacing batteries, managing the function manually, with heavy reliance on paperwork, calling people for updates, etc, to get goods and services from one point to another in a set time frame.

Electronic procurement is the use of various forms of information technology (IT), such as emails, electronic data interchange (EDI), and electronic marketplace, to automate and streamline the procurement agencies, improving efficiency and transparency, and thereby reducing costs to reduce operations within and between government agencies (Joyce& Chan, 2002). E-procurement is therefore the application of electronic trade in procurement. E-procurement refers to the online purchase of goods and services for daily business operation and the authorization of the entire process with the underlying goal of reducing costs. However, it is not just an online purchasing system. If properly implemented it can connect companies and their

business processes directly to the supplier while managing all interactions between them (Malcom Wheattly, 2000). E-procurement uses the Internet to perform the transactional aspects

of requesting, authorizing, ordering, receiving, and paying for the services or products required (The Chartered Institute of Purchasing and Supply (IPS).

The adoption of e-procurement refers to the ability of procurement agencies to use the internet and technologies to support their procurement processes. It includes the willingness and acceptance to use e-procurement. These practices range from identifying, evaluating, negotiating and configuring optimal groupings of changing market needs (Hawkins & Wyld, 2003). Other benefits include: increased compliance with Legislation such as the Uganda Public Procurement and Sale of Assets Act (PPDA, 2003); Streamline the supply base as e-procurement enables more efficient and effective management of the supply base. E-procurement offers both customers and suppliers more transparency over the entire purchasing process. The increasing losses in the procurement processes was accused of being time-consuming and consistently scoring low in achieving value for money and transparency (National Procurement Baseline Survey, 2010). Therefore, the introduction of e-procurement practices in Uganda's PDEs needs to be addressed urgently in order to achieve a reduction in purchasing process costs through maverick buying reduction.

1.2 Statement of the problem

According to European Commission, (2017), United Nations development program (UNDP), the organization for economic co-operation and development (OECD, 2016) and World Bank (2021), e-procurement. All urges that it's important to embrace e-procurement to increase transparency, increase efficiency, cost saving, widen supplier reach among others. They also urged about the components of e-procurement that is e-catalogs, e-tendering, e- contract management, e-ordering and e-invoicing among others.

The United Kingdom has implemented the government procurement services (GPS) as a centralized procurement platform. It allows government departments to conduct procurement electronically, streamlining the purchasing process and enhancing transparency (GPS)-UK. The Kenyan government has established the integrated financial management information system (IFMIS) as a comprehensive e-procurement platform. The system integrates financial management and procurement process, enabling online procurement planning, contract management, and payment processing (IFMIS)-Kenya. Electronic Government procurement (e-GP) systems, the Public Procurement and Disposal of Public Assets Authority (PPDA) in

Uganda has introduced the e-GP systems. It enables electronic tendering, evaluation, and contract management. This provides a centralized platform for government entities and suppliers to conduct procurement processes electronically (PPDA) Uganda.

Despite of the benefits of embracing electronic procurement, Most Public Procuring and Disposing Entities (PDE's) have given a deaf ear to this modern trend of procurement process that is of automation. Yet, with the increased level of technology and automation, e-procurement is a necessary innovation that can increase level of efficiency and effectiveness of PDE's. therefore, the failure to adopt electronic procurement by the public sector in Uganda has been the blame for poor performance of these organizations.

1.3 Purpose of the study

The study sought to examine the readiness of the public sector to embrace electronic procurement using a case study of the public sector of Uganda.

1.4 Objectives of the study

My study was guided by the following objectives:

I. To examine the already established electronic procurement systems in the public sectors.
II. To assess the electronic procurement readiness in public sectors of Uganda.
III. To assess the human capital in regards to embracing e-procurement in public sectors of Uganda

1.5 Research questions

The study answered the following questions:

I. What are the benefits of the already established electronic procurement systems in the public sectors in Uganda?
II. What factors need to be considered to assess the electronic procurement readiness in public sectors of Uganda?
III. What are the key indicators to assess the level of human capital readiness for embracing e-procurement in public sectors of Uganda?

1.6 Scope of the study

1.6.1 Content scope

The study will focus on the already established E-Systems, e-procurement readiness and human capital in embracing e-procurement in public sector of Uganda.

1.6.2 Geographical scope

The study will be taken from Gomba District Local Government. Gomba district is one of the districts in central region also known as Buganda region. It was formed in 2015 breaking away from Mpigi district. The headquarters are located in Kanoni Town Council 85km from Kampala.

The district is made up of four sub countries of Mpenja, Kabulasoke, Kyegonza and Maddu on that we have one Town Council. The district has a total size area of 1,542sq.km which is 0.07% of the country's size. Out of the total area 218. 9sq.km is occupied by water. The district has 37 parishes and 289 villages.

Gomba district borders with districts of Butambala in the East, Mityana in the north, Mubende in the Northwest, Kalungu in the South and Sembabula in West.

1.6.3 Time scope

The research is to be carried out in the time frame of 25years because of the Act (PPDA) being used where written sometime back, and the research will be carried out for a period of 3 months that is May to July 2023.

1.8 Significance of the study

The study findings may help the public sector to learn the practices for embracing electronic procurement in Uganda.

The study will also show how ready the public sector in Uganda embrace electronic procurement in their procurement processes.

Findings of the study may help policymakers to formulate e-procurement management policies that may help improve performance of the public sector in Uganda. The study findings may

supplement the existing literature and form the basis for future research in procurement in the public sector.

1.9 Justification of the study

Mehrten et al. (2001b) argue that organizational readiness and external pressures influence business strategy. Many companies face a number of major problems when implementing e-business projects due to hasty decisions in the presence of significant media and most suitable software (Cox et al, 2001).

There is growing acceptance of E-values among organizations that want to have a voice in the industry in which they operate. A company can adopt e-technologies as part of its overall business strategy, helping to improve business performance and increase competitive advantage. Wu et al. (2003) argue that the strategic use of e-business has been examined in several studies and how the e-business strategy is aligned with an organization's overall business strategy. As Porter (2001) argues, this means that the Internet has become a powerful source of competitive advantage when integrated into the overall business strategy.

User reluctance to change business processes was documented by Day et al. (2003) as the main obstacle to the implementation of e- procurement systems. Whenever a change is proposed in most institutions, there is great reluctance from the members in those institutions. The reluctance arises from the uncertainty associated with the change.

Raju Sheth (2009) goes on to say that the broad spectrum of e-procurement is much more than just a simple online shopping system. It is a comprehensive platform that use the Internet to make it easier, faster and cheaper for companies to source their requirements in a timely manner and in that aligns with the company's goals and objectives. In the current scenario, characterized by a focus on the key strategic initiatives, faster time-to-market and increasing global competition, e-procurement is helping companies streamline their entire purchasing process so they can focus on their core business activities and increase profitability.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents the literature that will be reviewed on the basis of the study objectives. The literature will be selected, studied and arranged according to the themes relating to the readiness of the public sector to embrace electronic procurement. The chapter presentation is under three sections; review of various theories and concepts, highlighting the objectives of the study and synthesis of literature and research gap analysis. Literature sources include books and journals aim at providing insight in what has already been done within this area of study.

2.1 Theoretical Review

The Technological Acceptance Model theory will be adopted in this study.

2.1.1 The Technology Acceptance Model theory

The technology acceptance model theory was proposed by Fred Davis in 1989 to explain information system usage in organizations (Davis, 1989). Davis suggested that the willingness of a user to adopt or not to adopt a new technology is determined by his or her attitude towards using the innovation (Davis, 1989). Many studies have applied the technology acceptance model since its introduction to explain and predict user acceptance and usage of information technology. Technology acceptance model explains that users' adoption of a new information system is determined by his or her intention to use the system, which in turn is determined by the users' beliefs and attitudes about the system (Marangunić & Granić, 2015). Davis (1989) suggested that user's motivation can be explained by three factors of perceived ease of use, perceived usefulness and attitude towards using the system. Perceived usefulness is the degree to which a person believes that use of a particular system would enhance his/her job performance while perceived ease of use refers to the degree to which a person believes that using a particular system would be free of effort.

Technology acceptance model has been tested empirically in different parts of the world. This yields statistically reliable results and it has proved to be one of the most reliable and easy

models of explaining user's intention of adoption of e-procurement (Moon, 2002). Technology acceptance model has been used by many researchers especially in information system to achieve a better understanding of information technology adoption and its success in organization. Technology acceptance model has proven to be a strong and robust framework to clarify adoption patterns of information technology users (Horton et al., 2001). Several studies have utilized the technology acceptance model theory to explore readiness of the public sector to embrace electronic procurement. Quang-Dung & De-Chun (2014) assessed the determinants of e-procurement adoption in construction sector in developing countries context among 112 employees of different construction companies in Hanoi, Vietnam. In their study, the used technology acceptance model to evaluate the level of adoption of e-procurement in construction industries. Findings showed that perceived usefulness and ease of use were significant predicators of employees' intention to adopt e-procurement system.

The perception of the intended user towards information technology predicts the user's acceptance and intention to adopt the information technology. This is in line with the principles pronounced in the technology acceptance model theory. It further discusses the perceptions of the intended users of the technology and how their perceptions impact their adoption of the technology. The technology acceptance model theory was developed by Fred Davis in 1989 as a model that explains and predicts user acceptance of information (Ahimbisibwe et al., 2016). In this study, the two major constructs of technology acceptance model will be utilized to assess the readiness of the public sector to embrace electronic procurement.

2.2 Concept of Electronic Procurement

E-procurement is the use of information and communication technology (ICT) to execute part or all the procurement process (Masudin et al. 2021). Lately, e-procurement has become one of the tools for electronic government (e-Government) efforts to better serve citizens and business in the digital economy (Mohungoo, Brown & Kabanda 2020). In South Africa and globally, governments have transformed their procurement processes to take full advantage of the potential offered by electronic commerce (e-Commerce) by replacing various phases of manual public procurement with electronic means.

E-procurement was previously listed as a priority e-government policy worldwide. One concept says that e-procurement is a complement to a country's e-government system (Abdulla, 2015). It forms part of the latest integrated procurement strategy to enhance sustainability and project execution (Nawi et al., 2014). E-procurement theoretical understanding has been described as a general system model. Another more precise description of e-procurement is to consider the roles of the information technology (IT) in running the procurement process using the software and hardware while understanding very well that the position of the software and hardware would promote the idea of e-procurement (Gihozo, 2020).

E-procurement is a new way to use the Internet and e-mail for online shopping for companies. In addition, it also helps to provide online sales facilities with online technologies. Also described is the exchange of products and services by suppliers and buyers via the Internet and IT applications (Hasan et al., 2013). Kishor et al. (2007) described e-procurement as the use of Internet-based ICT to perform one or more transactional or strategic procurement activities.

E-procurement is the outcome of applying e-commerce to organization purchasing activities. (Lindija, 2004). The action of conducting procurement operation electronically and paper-free is called e-procurement which consists of the whole operation of procurement such as requisition, approval, shipping, etc. and not just the buying process. E-procurement encompasses “requisitioning, purchasing, transportation, and in-bound receiving process”. It starts with a requisition for an item and ends with invoice payment (ibid). E-procurement is defined as purchasing through the internet and other information networks (Malcom, 2009). E-procurement sites can be employed to purchase goods and services, e-procurement software automates purchasing processes, controls inventory reduces purchasing costs, and increases efficiency.

2.3 Electronic procurement systems in the public sectors

Electronic procurement systems, also known as e-procurement systems, are platforms that enable government organizations and public sector entities to manage their procurement processes electronically. These systems streamline the purchasing process, enhance transparency, increase efficiency, and reduce administrative costs (Fernandes & Vieira, 2015). Here are some of the popular electronic procurement systems:

E-Tender portal: One of the OCPO's initiatives is the eTender Publications Portal, which provides access to information on all public sector tenders (National Treasury 2016). The eTender publication platform seeks to streamline the procurement process, as well as to increase possibilities for South African businesses to locate and compete for government bidding opportunities (National Treasury 2015). With the launch of eTender, tender advertisements in newspapers and the government gazette have been phased out (Nene 2015). Consequently, government-procuring entities have saved money by reducing the need to print bid documents (National Treasury 2016). Nonetheless, the sale of bidding documents remains an impediment to potential suppliers getting information about advertised tenders (National Treasury 2015). Some governmental entities have been seen to sell bidding documents, and bidders are forced to purchase the documents in order to get tender information such as specifications and terms of reference. The eTender has promoted fairness and opened up competition by ensuring that suppliers have access to the same information at all times. Simply allowing potential bidders to be alerted of announced, cancelled and awarded bids by visiting the portal, e-Tender has decreased the distance and/or location barrier.

Central supplier database: The CSD is also a part of the OCPO's initiatives, which is a single database that serves as the repository for all government supplier records (Statistics South Africa 2017). Since its inception, the CSD has had a supplier's register with the goal of providing unified, accurate, up-to-date, full and verified supplier information. By minimizing duplication of registration of suppliers at various public entities, the government has saved millions of South African Rands (National Treasury 2016). New potential suppliers interested in doing business with the government must register with the National Treasury once and are urged to use the CSD's website's streamlined self-registration feature (Nene 2015). The initiatives and measures proposed by the government aim to increase SCM performance while reducing operating costs related to the procurement system and software infrastructure maintenance of the database of each government department.

E-Procurement Portal of the United States Government (beta.SAM.gov): The U.S. government operates one of the largest public-sector procurement platforms, known as the System for Award Management (SAM). beta.SAM.gov serves as a centralized portal for federal procurement opportunities, contracts, and awards. It allows suppliers to register and submit bids online for

various government projects, simplifying the procurement process and improving access for businesses of all sizes (Holubieva et al., 2021).

E-Procurement Scotland (PCS): eProcurement Scotland is Scotland's national electronic procurement platform. Developed by the Scottish Government, this system provides a single point of access for suppliers to find and bid on public sector contract opportunities in Scotland. PCS streamlines the procurement process, improves transparency, and promotes fair competition among suppliers (Fazekas & Blum, 2021).

Australian Government Tender System (AusTender): AusTender is the Australian Government's electronic procurement system, providing a central point for suppliers to access and respond to government tender opportunities. It covers various procurement activities, including goods, services, and construction projects. The platform enhances transparency and standardizes the procurement process across Australian government agencies (Rashid, 2018).

South Korea’s Public Procurement Service (PPS) e-Procurement System: The PPS e-Procurement System is utilized by the South Korean government for managing its public procurement processes. The system offers a comprehensive suite of features, including online bidding, supplier registration, and contract management. It promotes competition and fairness among suppliers and contributes to the efficient allocation of public funds (Amanze et al., 2022).

Singapore Government Electronic Procurement System (GeBIZ): GeBIZ is Singapore's one-stop e-procurement portal for government procurement activities. It enables suppliers to view and participate in tender opportunities from various government agencies. The system streamlines the procurement process and fosters a competitive environment for suppliers, resulting in better value for public funds (Rahim, 2015).

European Single Procurement Document (ESPD) and TED Database: The ESPD is a standardized electronic self-declaration form used in the European Union (EU) to simplify the tendering process. It allows suppliers to declare their eligibility and suitability for a specific procurement procedure. Additionally, the Tenders Electronic Daily (TED) database provides access to EU public procurement notices, ensuring transparency and promoting cross-border competition (Bobowski et al., 2018).

2.4 Benefits of the electronic procurement systems in the public sectors

Improvement of communication and information flow: Eadie et al. (2007) argue that eprocurement allows sections of electronic documentation to flow through the supply chain; it improves the speed of returns and subcontractor price visibility. He further states that because communication of requirements is simpler more quickly and affordably, it would also lead to a clearer understanding of requirements and enforcement and enable consumers to assess the current state of the market by looking at how much interest the contract shows. Moreover, A recent survey looking at the benefits of e-procurement (Alionzi, 2018) revealed that around 46% of respondents believed that e-procurement would help improve information flow, and 41% answered that eprocurement would lead to better internal and external communications.

Price reduction in tendering: The Empirical research conducted by Gihozo (2020) in the United States of America mentioned that cost and time are the most significant indicators of an effective procurement process. They added that with the use of e-procurement process there is “no paperwork, postage fee and other costs associated with the preparation and sending tender documents”. Besides that, it is fast to send documents electronically than sending them through a post agency as it is easy to trace and track orders and once there is an error it easy to correct it.

Reduction in time to source materials: time reductions have been demonstrated by Knudsen (2003) quoted in Eadie et al (2007), who says: "E-procurement is a rapidly successful way to identify and link new sources, a lean communication channel." There is a lot of time spent on printing, filing and postal correspondence on paper invoicing, so although in e-procurement, workers have more time for strategic procurement issues, it is much less time than to travel from one city or country to another to search for a potential supplier or consumer as the details can be readily accessible on the internet by just clicking the button. The system helps government agencies make informed and specific decisions by providing easy access and detailed information on-offer and competitors. Furthermore, E-procurement reduces the maverick buying. “Maverick buying is when staff buys from suppliers than those with whom a purchasing agreement has been negotiated” (Eadie et al, 2007). Moreover, (Nawi et.al, 2016) states that applying an e-procurement system is a faster government procurement process and higher transparency compared to traditional procurement.

Improved planning and control: E-procurement systems provide consolidated details of actual spend with each supplier and in each product category, which are an essential input for planning and control. In addition, surveys found that e-procurement companies are investing less time on operational activities and more time on strategic issues (Flicker and Holler, 2000). Another survey indicated that over 40% of respondents believed that e-procurement would lead to improvements in planning (Croom, 2000). Improved cooperation with suppliers: eprocurement applications from Hoque (2000) enable businesses to develop and maintain longterm relationships with suppliers. This can lead to further improvements in terms of contract compliance, collaboration and error rates (Fisher, 2000). Moreover, (Eaddie et al, 2007) state that, suppliers can be monitored on timely delivery and quality delivery of products) and every prospective supplier and buyer is always accessible to his/her convenience. The result is not only greater market access but also increased productivity (Ibid).

Lower administrative costs: Rankin (2006) claims in his research that e-procurement decreases paperwork, contributing to lower administration costs. Organizations deal with large numbers of requisitions every year, many of which refer to low-value items. Traditionally these processes have been paper-based and have required considerable manual labour and other costs such as intra-company mail, phone charges, postage, photocopying and storage. E-procurement automates the entire requisition-to-payment process, increasing efficiency and eliminating unnecessary expenses. Furthermore, the automated system can also reduce those costs associated with data errors and inaccuracies inherent to manual processes (Morris et al., 2000; Rayport and Jaworski, 2001; Smart and Harrison, 2003). Furthermore, since most of the procurement process is done electronically, the number of staff needed to facilitate the process reduces. Eadie et al (2007) indicated that the reduction of employees is an effective way to achieve competitive advantage by reducing costs. This is further confirmed by Egbu et al. (2003), who found that a steel provider was able to complete a multi-million-pound project with just 20 percent of the company's workforce by introducing an e-procurement system.

Inventory reduction and shorter order cycle time: Shorter cycle times reduce stocking requirements, bringing with it a reduction in inventory levels and the cost associated with them. This inventory reduction can also have a strong positive impact on cash flow since the money tied up in inventory can become available for other purposes (Morris et al., 2000). More so, the

automation and workflow facilities of e-procurement applications allow organizations to reduce the cycle time of purchases (Morris et al., 2000), improving the overall flexibility and responsiveness of the system.

2.5 Factors considered in assessing electronic procurement readiness in public sectors

The readiness to adopt e-procurement results in the automation and streamlining of procurement processes, reducing the time and cost of doing business for both the government and suppliers. Because of greater competition, e-procurement adoption readiness leads to better value for money spent, equal opportunity for all suppliers and eventually eliminates corruption (Oppong 2020). In order to determine e-procurement readiness, government departments need to consider e-procurement environments: the operational environment, legal environment, economic environment, organisational environment and technological environment (Australia Department of Finance and Administration 2005; Orina 2013). Assessing the electronic procurement readiness in public sectors involves evaluating various factors that impact the successful implementation and adoption of e-procurement systems. Here are some key factors to consider:

Legal and regulatory framework: The legal and regulatory environment plays a crucial role in determining the feasibility of electronic procurement in the public sector. Regulations must support the use of digital signatures, electronic records, and online transactions. Assessors should examine whether existing laws are aligned with e-procurement requirements and if any changes or updates are necessary to accommodate electronic procurement processes securely and legally (Ngeta & Kisimbii, 2020).

Technological infrastructure: The readiness of a public sector organization to adopt electronic procurement depends on its technological infrastructure. Factors to consider include the availability of stable internet connectivity, data security measures, hardware and software capabilities, and the organization's ability to handle large-scale online procurement transactions. A robust and reliable technological foundation is essential to ensure the smooth functioning of e-procurement systems (Costa et al., 2013).

Stakeholder awareness and training: The successful adoption of electronic procurement systems requires the support and understanding of all relevant stakeholders, including procurement

officers, suppliers, and end-users. Assessors should evaluate the level of awareness and training provided to these stakeholders to effectively use and navigate the e-procurement platform. Adequate training and clear communication are vital to ensure seamless implementation and user adoption (Zitha et al., 2016).

Data security and privacy: Security is a paramount concern in any electronic system, particularly when it involves sensitive financial and procurement data in the public sector. Assessors need to evaluate the security measures in place to safeguard against data breaches, unauthorized access, and cyberattacks. Compliance with data protection regulations and industry standards must be a priority to build trust and confidence among stakeholders (Oppong, 2020).

Interoperability and integration: For effective electronic procurement, the e-procurement system should be able to integrate with existing procurement and financial management systems used by the public sector organization. Assessors should examine the level of interoperability and integration capabilities to ensure a seamless flow of data and processes between different systems, avoiding duplication of efforts and enhancing overall efficiency (Patel et al., 2016).

Procurement process standardization: Before implementing an electronic procurement system, it is essential to standardize procurement processes across the organization. Assessors should evaluate the level of process standardization and whether processes are well-defined, transparent, and consistently followed. Standardization lays the groundwork for successful automation and streamlining of procurement activities (Yano & Nondi, 2018).

Change management and governance: Introducing an electronic procurement system involves significant changes in processes, roles, and responsibilities. Assessors should assess the organization's change management approach to ensure that potential resistance to change is appropriately addressed. Additionally, a clear governance structure must be in place to oversee the e-procurement system's implementation, maintenance, and continuous improvement (Chen et al., 2021).

Supplier readiness and engagement: Electronic procurement systems rely heavily on supplier participation. Assessors should consider the readiness of suppliers to adapt to online bidding and electronic invoicing. Supplier engagement and feedback mechanisms are essential to understand

their needs and challenges, ultimately leading to an inclusive and successful e-procurement ecosystem (Daoud & Ibrahim, 2018).

Cost-benefit analysis: An in-depth cost-benefit analysis should be conducted to understand the financial implications of implementing and maintaining an electronic procurement system. Assessors should examine potential cost savings, efficiency gains, and return on investment. This analysis will help in determining the long-term sustainability and benefits of adopting e-procurement in the public sector (Patel et al., 2016).

Performance measurement and continuous improvement: Finally, assessors should consider the mechanisms in place to measure the performance and effectiveness of the electronic procurement system. Key performance indicators (KPIs) should be established to track progress and identify areas for improvement continuously. A commitment to ongoing enhancement and optimization will ensure that the e-procurement system remains relevant and beneficial over time (Ngeta & Kisimbii, 2020).

2.6 Key human capital readiness indicators for embracing e-procurement in public sectors

Assessing the level of human capital readiness for embracing e-procurement in public sectors involves evaluating the competencies, skills, and attitudes of the workforce to effectively use and leverage electronic procurement systems. Here are some key indicators to consider:

Digital literacy and technological skills: One of the fundamental indicators of human capital readiness is the level of digital literacy and technological skills among the procurement workforce (Yano & Nondi, 2018). This includes the ability to use computers, navigate software applications, and work confidently with online platforms. Adequate digital literacy ensures that procurement professionals can efficiently interact with e-procurement systems, reducing the likelihood of errors and maximizing productivity (Rashid, 2018).

Training and development initiatives: The existence of structured training and development programs focused on e-procurement is a crucial indicator. Assessors should evaluate whether the public sector organization provides ongoing training opportunities to enhance the skills and knowledge of its procurement staff regarding electronic procurement processes. Regular workshops, webinars, and upskilling sessions should be available to promote continuous learning

and keep the workforce abreast of evolving technologies and best practices (Amanze et al., 2022).

Change management awareness: Assessors should determine whether the procurement workforce is adequately aware of the importance of embracing e-procurement and the potential benefits it brings. Understanding the value proposition of electronic procurement encourages employees to embrace change positively and proactively. Change management awareness programs should address any concerns, resistance, or misconceptions that employees may have about adopting new technology (Masudin et al. 2021).

Communication and collaboration skills: Effective e-procurement implementation often relies on seamless communication and collaboration among different stakeholders, both within the procurement department and with external suppliers. The level of communication and collaboration skills among the procurement workforce directly influences how well they can leverage the features of e-procurement platforms, interact with suppliers, and manage the end-to-end procurement process digitally (Mohungoo et al., 2020).

Analytical and data management skills: E-procurement systems generate a significant amount of data that can be used to gain insights, improve decision-making, and optimize procurement processes. The level of analytical and data management skills within the procurement workforce determines how well they can leverage data analytics tools and reports provided by the e-procurement system to identify opportunities for cost savings, process improvement, and supplier performance evaluation.

Problem-solving abilities: Procurement professionals need strong problem-solving abilities to address challenges that may arise during the implementation and operation of e-procurement systems. Assessors should evaluate the workforce's capacity to identify and resolve issues related to the system's functionality, data accuracy, supplier engagement, and other relevant aspects (Ngeta & Kisimbii, 2020).

Procurement process knowledge: A thorough understanding of the organization's procurement processes is essential for effectively embracing e-procurement. Assessors should assess the procurement workforce's knowledge of existing procurement policies, procedures, and

regulations to ensure a seamless transition to electronic procurement without compromising compliance or efficiency (Gihozo, 2020).

Innovation mindset: The readiness of the procurement workforce to embrace innovation and explore new ways of conducting procurement operations is a critical indicator. An innovation mindset encourages employees to experiment with the features and capabilities of the e-procurement system, discover new possibilities, and propose process improvements that drive organizational efficiency and effectiveness (Alionzi, 2018).

Leadership support and buy-in: Assessing the level of support and buy-in from leadership is crucial for successful e-procurement adoption. If top-level management is fully committed to the transformation and actively promotes e-procurement initiatives, it can positively influence the workforce's willingness to embrace and engage with the new technology (Oppong 2020).

User Feedback and Satisfaction: Finally, assessing user feedback and satisfaction with the e-procurement system can provide valuable insights into its usability and effectiveness. Regular surveys and feedback mechanisms should be in place to gather input from the procurement workforce about their experience with the electronic procurement platform. High levels of satisfaction indicate that the system meets user needs and is likely to be embraced effectively (Holubieva et al., 2021).

2.7 Research gap

Studies have been done on e-procurement but majorly on adoption strategies, benefits and challenges. Ahimbisibwe (2016) conducted a study on Adoption of E-procurement Technology in Uganda: Migrating from the manual public procurement systems to the internet without looking at the factors conducive for e-procurement adoption. Mose et al. (2013) contend that successful implementation of e-procurement requires employee and management commitment for successful adoption, reliability of information technology and supplier performance, monitoring the performance of e-procurement systems, user acceptance of e-procurement systems and top management support. This study therefore aims at filling the gap in literature by examining the readiness of the public sector to embrace electronic procurement in Uganda.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This section discusses how the study will be designed and carried out. It covers the research design, study population and sample size, the sampling design and procedure, data collection methods, measurements of variables, data validity and reliability and data analysis.

3.1 Research design

The study employed a cross sectional survey because the researcher had limited time to conduct and finish this study. Quantitative approach was adopted since the study was focused on testing rather than generating a theory.

3.2 Population of the study

A study population of 86 employees of Gomba district local government selected to take part in the study drawn from the procurement department.

3.3 Sample size

Basing on Krejcie and Morgan (1970), a sample of 70 respondents chosen from the population.

n=N/1+N(e)^2

n=86/1+86(0.05) ^2

n=70

3.4 Sample techniques

Purposive sampling technique was used to select senior staff and managers as samples since they conformed to certain characteristics that were relevant to this study. In other words, the researcher deliberately picked elements from the population according to the responsibilities they hold at Gomba district local government.

3.5 Data collection methods and instruments.

3.5.1Data sources

The researcher used both primary and secondary data.

3.5.2Primary data.

This refers to raw facts collected or generated for a given research. It's gathered originally for the first time for a specific research problem. Primary data was obtained from interviews that will be conducted with respondents and self-administered questionnaires.

3.5.3 Secondary data

Secondary data was collected from sources like; organization records, newspapers, text books and other manuals in the related field. This will help to make a comparison between secondary data and primary data that will be collected. This helped the researcher to come up with a meaningful interpretations and support findings in the field.

3.5.4 Data collection instruments

Primary data will be obtaining from the selected employees using self-administered questionnaires consisting of close ended questions targeted to the employees selected. The questionnaire will be designed according to the objectives and study variables and responses to the questions will be designed on a five (5) point Likert scales ranging from 5- strong agree to 1-strongly disagree (Raaijimakers et al, 2000). Part one of the questionnaires will be used to gather biographic information about the objective of the study.

3.6 Data collection procedures

Data was collected using a self-administered questionnaire. This is created anonymity leading to more valid responses as well as allowing respondents to fill them at their own convenience. The questionnaire was designed according to the objectives and study variables and responses to the question were anchored on a five (5) point Likert scale ranging from 5-strongly agree to 1-strongly disagree.

3.7 Validity and reliability

With the help of the supervisor the questionnaire was pre-tested before its final administration. This is to ensure that it measured exactly what it is intended for. The Cronbach coefficient was used to assess the reliability of the measures. Nunnally, (1967) states that reliability coefficients of 0.70 or more are considered good.

3.8 Data analysis and processing

3.8.1 Data processing

The data was tabulated, then analyzed by the use of descriptive statistical analysis technique. Raw data collected was edited to ensure accuracy, uniformity, consistency and check omissions. Classification of data was done so that large volumes of collected information could be manipulated to homogenous groupings and rankings so as to get reliable information.

3.8.2 Data analysis

The descriptive statistics involved the measure of central tendency. The five-points Likert scale was also used to measure the extent of public and private sector employees' perception on the variables under study. Data analysis enabled the researcher to make conclusions on area of study. Descriptive analysis was done and this helped to study the relationship between the variables and it was using SPSS package so as to generate the results.

3.9Presentation of findings

After collection, processing and analyzing of relevant data, findings, results were then summarized in the tables, charts and graphs.

3.10 Ethical considerations

To be ethical entails adhering to set rules and regulation

Before proceeding to the field, the researcher will obtain a letter from the faculty that will act as a pass to show that the research is entirely academic in the organization and also to the respondents.

Before the interview, the consent of the respondents will be sought and the researcher will fully explain the objectives of the study to all the respondents and they will be aware of their choice to participate.

The right to confidentiality and privacy for the researchers will be observed.

3.11 Study limitation

The researcher acknowledges that few limitations were encountered considering that most of the respondents coordinated as required; however, some limitations were identified such as;

The research will be conducted during working hours which may limit some of the respondents to fully exhaust the questions accorded to them. On different occasions respondents will be met on appointment hence taking more time to meet all of the them in order to get reliable and sufficient results.

There will be various expenses encountered such as transport cost and printing out of questionnaires to match the sample size but the researcher will seek assistance from the university to fund the research.

CHAPTER FOUR
PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 introduction

This chapter looks at the detailed analysis of the finding that the researcher collected in the field. The researcher mainly used frequency tables and bar graphs for the presentation of data with some data presented in a descriptive format.

4.1 response rate

Table1: showing the number of respondents

Details	Frequency	Percentage
Responses	62	89
Non response	8	11
Total	70	100

Primary source of data.

The questionnaires that served out to respondents were 70. On the 70 questionnaires that were served only 62 were returned from the study and the 8 were not returned by the respondents. This implies that 89% of the questionnaires were answered.

4.2 Age of respondents

Table2: showing age of respondents

Age	Frequency	Percentage
20 years	5	8
21-30 years	12	19
31-40 years	20	32
41-50 years	16	26
50 years & above	9	15
Total	62	100

Primary source of data.

From the table above, 8% of the respondents were aged below 20 years, 19% were aged from 21-30 years, 32% were from 31-40years, 26% were 41-50 years, 15% were 50year old and above. This implies that the employees are old enough to understand, analyze and give relevant information for the study.

4.3 Gender of respondents

Table3: showing gender of respondents

Gender	Frequency	Percentage
Male	37	60
Female	25	40
total	62	100

Primary source of data.

From table3 above, 60% of the respondents were male whereas 40% were female. This shows that the majority of the employees of Gomba district local government are males.

4.4 Education level of respondents

Table4: showing education level of respondents

Education level	Frequency	Percentage
Certificate	6	10
Diploma	11	18
Degree	28	45
Others	17	27
total	62	100

Primary source of data.

From table above, 10% of the respondents had certificates, 18% had diplomas, 45% had degree holders and 27% of the respondents had others. This implies that employees of Gomba district local government are educated and learnt thereby able to easily understand, analyze thus giving relevant information.

4.5 Period of service of respondents

Table5: showing period of service of respondents

Period of service	Frequency	Percentage
Less than 5 years	18	29
5-10 years	35	56
Over 10 years	9	15
total	62	100

Primary source of data.

From the table above, 29% of the respondents had worked in the organization for less than 5 years, 56% had worked for 5-10 years and 15% had served for over 10 years. This shows that the majority of the employees have experience, thus able to analyze and give relevant information for the study.

4.6 Electronic procurement readiness assessment

Table4: showing the benefits of the already established electronic procurement systems.

BENEFITS	**1**		**2**		**3**		**4**		**5**		**total**	
	F	*%*	*f*	*%*	*f*	*%*	*f*	*%*	*f*	*%*	*f*	*%*
The system increases transparence in the organization	4	6	5	9	8	13	17	27	28	45	62	100
Electronic procurement increases value for money in the organization	10	16	10	16	5	8	21	34	16	26	62	100
Encourages the electronic submission of tenders	4	7	13	20	8	13	14	23	23	37	62	100
Facilitates tender opening on a timely basis	1	3	4	6	9	14	22	35	26	42	62	100
Timely reporting and updates are provided electronically	2	3	6	10	6	10	12	19	36	58	62	100
The ability to audit trailing and tracing documents.	5	8	6	9	9	15	15	24	27	44	62	100
Organization have create and published notices to official electronic bulletin boards.	11	18	5	8	16	26	20	32	10	16	62	100
Organization has integrated the financial systems with automated invoicing and payment (easy payment).	2	3	3	5	5	8	18	29	34	55	62	100
The ability to manage volume capacity for simultaneous submission at closing time	15	24	7	10	7	10	18	28	18	28	62	100
Electronic procurement leads to cost saving through reduction in paper work in the organization	4	6	8	13	12	19	17	28	21	34	62	100
Electronic procurement streamlines the overall procurement cycle.	12	19	4	6	8	13	16	26	22	36	62	100

Primary source of data.

From the table above, shows that 45% of the respondents strongly agreed that the system increases transparence in the organization, 27% agreed, 13% were not sure, 9% disagreed and 6% strongly disagreed. This implies that electronic procurement increases transparence in the organization.

From the table above, shows that 34% of the respondents agreed that electronic procurement increases value for money, 26% strongly agreed, 8% were not sure, 16% disagreed and 16%

strongly disagreed. This implies that electronic procurement increases value for money in the organization.

From the table above, show that 37% of the respondents strongly agreed that electronic procurement encourages electronic submission of tenders, 23% agreed, 13% were not sure, 20% disagreed and 7% disagreed. This implies that electronic procurement makes submission tenders easy.

From the table above, it shows that 58% of the respondents strongly agreed that electronic procurement is vital for timely reporting and updates are provided electronically, 19% agreed, 10% were not sure and 3% strongly disagreed. So electronic procurement is vital for timely reporting.

From the table above, it shows that 44% of the respondents strongly agreed that electronic procurement increases the ability to audit trailing and tracing of documents in the organization, 24% agreed, 15% were not sure, 9% disagreed and 8% strongly disagreed. So it increases traceability of documents.

From the table above, it shows that 55% of the respondents strongly agreed that electronic procurement has integrated with the financial systems and automated invoicing and payments, 29% agreed, 8% were not sure, 5% disagreed and 2% strongly disagreed. So it makes payments easy.

From the table above, 34% of the respondents strongly agreed that electronic procurement leads to cost saving through reduction in paper work in the organization, 28% agreed, 19% were not sure, 13% disagreed and 6% disagreed. So it leads to cost reduction in the organization.

From the above table, 28% of the respondents strongly agreed that electronic procurement manages volume capacity for simultaneous submission at closing time, still 28% agreed, 10% were not sure, 10%disagreed and 24% strongly disagreed, this showed that simultaneous submission at closing time is challenging in electronic procurement.

From the table above, it shows that 36% of the respondents strongly agreed that electronic procurement streamlines the overall procurement cycle, 26% agreed, 13% were not sure, 6% disagreed and 19% strongly disagreed. So in general it helps streamlines the overall procurement cycle.

According to mean and standard deviation of the respondents

Mean = $\sum x/n$

Variance=$\sum(X-x)\ ^2/n-1$

Standard deviation=$\sum[(X-x)\ ^2/n-1]$

Table 5.1

BENEFITS	1	2	3	4	5
The system increases transparence in the organization	4	5	8	17	28
Electronic procurement increases value for money in the organization	10	10	5	21	16
Encourages the electronic submission of tenders	4	13	8	14	23
Facilitates tender opening on a timely basis	1	4	9	22	26
Timely reporting and updates are provided electronically	2	6	6	12	36
The ability to audit trailing and tracing documents.	5	6	9	15	27
Organization have create and published notices to official electronic bulletin boards.	11	5	16	20	10
Organization has integrated the financial systems with automated invoicing and payment (easy payment).	2	3	5	18	34
The ability to manage volume capacity for simultaneous submission at closing time	15	7	7	18	18
Electronic procurement leads to cost saving through reduction in paper work in the organization	4	8	12	17	21
Electronic procurement streamlines the overall procurement cycle.	12	4	8	16	22
Summation (X)	**70**	**76**	**93**	**184**	**261**

Mean (x) =682÷ 5

x =136.4

Table 5:2

Item	X	X-x	(X-x)^2
Strongly disagree	70	-66.4	-4435.56
Disagree	76	-60.4	-3672.36
Not sure	93	-43.4	-1900.96
Agree	184	47.6	2152.96
Strongly agree	261	124.4	15475.36
∑	684	0	7619.44

Variance= 7619.44÷ (5-1)

=1904.86

Standard deviation =√1904.86

=43.6447

From the table above, according to the respondents on average of 136.4 agreed that electronic procurement is very important in the organization, this because number exceeds those who are not sure which is 93. So this implies that electronic procurement should be adopted in organizations especially public entities because of the mentioned benefit according to established electronic procurement systems.

From the table above, according to the standard deviation generated which is 43.6447 for the respondents is high which is also calls for a positive response on the benefits of the already established electronic procurement in the public sector. This calls for the government to put more emphasis on adoption of electronic procurement then the manual system.

4.7 Electronic procurement readiness assessment

Table 6: showing factors considered to assess electronic procurement.

FACTORS	1		2		3		4		5		total	
	f	*%*	*f*	*%*	*f*	*%*	*f*	*%*	*f*	*%*	*f*	*%*
Technological infrastructure (e.g. data security, hardware and software capabilities etc.)	3	5	3	5	6	9	21	34	29	47	62	100
Legal and regulatory framework. (i.e. determining feasibility of e-procurement like digital signatures.)	7	11	11	18	4	6	18	29	22	36	62	100
Data security and privacy (security measures to safeguard data breaches)	8	13	6	10	3	5	17	27	28	45	62	100
Procurement process standardization (is the process transparent and consistently followed?).	6	9	4	7	2	3	19	31	31	50	62	100
Change management and governance (a clear governance structure must be in place to oversee the process)	3	5	6	9	0	0	20	32	33	54	62	100
Supplier readiness and engagement (feedback mechanisms are essential)	18	29	5	8	7	11	14	23	18	29	62	100
Performance measurement and continuous improvement	7	11	0	0	11	19	22	35	22	35	62	100
Stakeholder awareness and training	4	6	8	13	4	6	30	49	16	26	62	100

Primary source of data.

From the table above, it shows that 47% of the respondents strongly agreed with the factor technological infrastructure as the factors to be considered to assess the electronic procurement, 34% agreed, 9% were not sure, 5% disagreed and 5% strongly disagreed. This implies that technology structure is an important factor to embrace when considering e-procurement.

From the table above, it shows that 36%of the respondents strongly agreed with having legal and regulatory framework in place, 29% agreed, 6% were not sure, 18% disagreed and 11% strongly disagreed. In other words, legal and regulatory framework must be in place for easy use of electronic procurement.

From the table above, it shows that 45% of the respondents strongly agreed with the data security and privacy, 27% agreed, 5% were not sure 10% disagreed and 13% strongly disagreed. This indicates with security and privacy should be monitored to safeguard data breaches.

From the table above, it shows that 50% of the respondents strongly agreed with the procurement process standardization, 31% agreed, 3% were not sure, 7% disagreed and 9% strongly disagreed. This implies that the process should be transparent and consistently followed.

From the table above, 29% of the respondents strongly disagreed with supplier readiness and engagement, 8% disagreed, 11% were not sure, 23% agreed and 29% strongly agreed. According to the feedback received people should be educated about the feedback mechanisms for better performance of electronic procurement.

Still from the table above, 49% of the respondents agreed that stakeholder awareness and training is key in embracing electronic procurement, 26% strongly agreed with the statement, 6% were not sure, 13% disagreed and 6% strongly disagreed. So stakeholders should be trained for effective follow of electronic procurement.

According to mean and standard deviation of the respondents

Mean = $\sum x/n$

Variance=$\sum(X-x)\ ^2/n-1$

Standard deviation=$\sum[(X-x)\ ^2/n-1]$

Table 6.1

FACTORS	1	2	3	4	5
Technological infrastructure (e.g. data security, hardware and software capabilities etc.)	3	3	6	21	29
Legal and regulatory framework. (i.e. determining feasibility of e-procurement like digital signatures.)	7	11	4	18	22
Data security and privacy (security measures to safeguard data breaches)	8	6	3	17	28
Procurement process standardization (is the process transparent and consistently followed?).	6	4	2	19	31
Change management and governance (a clear governance structure must be in place to oversee the process)	3	6	0	20	33
Supplier readiness and engagement (feedback mechanisms are essential)	18	5	7	14	18
Performance measurement and continuous improvement	7	0	11	22	22
Stakeholder awareness and training	4	8	4	30	16
Summation (X)	**56**	**48**	**37**	**161**	**199**

Mean(x) =501÷5

=100.2

Item	X	X-x	(X-x)^2
Strongly disagree	56	-44.2	-1953.64
Disagree	48	-52.2	-2724.84
Not sure	37	-63.2	-3994.24
Agree	161	60.8	3696.64
Strongly agree	199	98.8	9761.44
∑	501	0	4785.36

Variance= 4785.36÷5

=957.072

Standard deviation =√957.072

=30.937

From the table above, it gives 100.2 mean of the respondents which shows that on average they agree with the factors put in place to enable electronic procurement system to be used in public sectors effective carry out of procurement.

Still from the table above, it gives 30.937 standard deviation which is moderate meaning more emphasis should be put on the factors that will help electronic procurement systems for better process to happen in the organization and also to avoid wastage of resources.

4.8 Human capital in regards to embracing electronic procurement.

Table7: showing the impact of human capital on electronic procurement.

Human capital	1		2		3		4		5		total	
	f	*%*	*f*	*%*	*f*	*%*	*f*	*%*	*f*	*%*	*f*	*%*
Able to adopt digital literacy and technological skills.	0	0	0	0	0	0	11	18	51	82	62	100
Easy be to train and develop initiatives	0	0	0	0	0	0	13	21	49	79	62	100
Should adopt change management awareness	4	6	5	8	3	5	11	18	39	63	62	100
Efficient communication and collaboration skills	1	2	0	0	0	0	3	5	58	93	62	100
Should have analytical and data management skills	2	3	4	6	2	3	12	20	42	68	62	100
Should have procurement process knowledge	0	0	5	8	5	8	24	39	28	45	62	100
Should have problem-solving abilities	1	2	4	6	0	0	16	26	41	66	62	100
Should have an innovative mindset	1	2	7	11	6	10	22	35	26	42	62	100

Primary source of data.

From the table above, 82% of the respondents strongly agreed with human capital being able to adopt digital literacy and technological skill and 18% agreed. This implies that human capital should be willing to adopt digital literacy and technological skills.

From the table above, 79% of the respondents strongly agreed that people should adopt to new changes by allowing themselves to be trained and develop initiatives and 21% agreed with the statement.

From the table above, 39% of the respondents strongly agreed that they should adopt to change management awareness, 18% agreed, 5%were not, 8% disagreed and 6% strongly disagreed. This implies that employees should be easy to adopt to new change in management.

From the table above, 93% of respondents strongly agreed with effective communication to drive electronic procurement, 5% agreed and 2% of the respondents strongly disagreed. Which implies that employees should be in position to communicate effectively.

From the table above, 68% of the respondents strongly agreed that they should have analytical and data management skills, 20% agreed, 3% were not sure, 6% disagreed and 3% strongly agreed. Which means that employees that are employed should have analytical and data management skills.

From the table above, 45% of the respondents strongly agreed that employees should have procurement process knowledge, 39% agreed, 8% were not sure and 8% disagreed. Which

implies that for the employee employed should have procurement process knowledge to execute work effectively.

From the table above, 42% of the respondents strongly agreed that employees should have an innovative mindset, 35% agreed, 10% were not sure, 11% disagreed and 2% strongly disagreed. Meaning that every employee should have an innovative mindset to execute work effectively. From the table above, 66% of the respondents strongly agreed that people employed should have problem solving abilities, 26% agreed, 6% disagreed and 2% strongly disagreed. Implying that employees should have problem solving abilities for effective use of electronic procurement.

According to mean and standard deviation of the respondents

Mean = ∑x/n

Variance=∑(X-x) ^2/n-1

Standard deviation=∑[(X-x) ^2/n-1]

Human capital	1	2	3	4	5
Able to adopt digital literacy and technological skills.	0	0	0	11	51
Easy to train and develop initiatives	0	0	0	13	49
Should adopt change management awareness	4	5	3	11	39
Efficient communication and collaboration skills	1	0	0	3	58
Should have analytical and data management skills	2	4	2	12	42
Should have procurement process knowledge	0	5	5	24	28
Should have problem-solving abilities	1	4	0	16	41
Should have an innovative mindset	1	7	6	22	26
Summation(X)	**9**	**25**	**16**	**112**	**334**

Mean(x) = 496÷5

=99.2

Item	X	X-x	(X-x)^2
Strongly disagree	9	-90.2	-8136.04
Disagree	25	-74.2	-5505.64
Not sure	16	-83.2	-6922.24
Agree	112	12.8	148.84
Strongly agree	334	234.8	55131.04
∑	496	0	34715.96

Variance =34715.96÷ (5-1)

=8678.99

Standard deviation = √8678.99

=93.161

From the table above, it gives 99.2 mean which shows that most respondents on average agree that human capital should be employed in the organization for proper manage of the electronic procurement.

Still from the table above, it gives 93.161 standard deviation which is too high meaning its critical to employ human capital in the organization for better management of the electronic procurement processes and effective utilization of the system.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS WITH SUGGESTIONS FOR AREAS OF FURTHER RESEARCH.

5.0 Introduction

This chapter looks at the summary of findings, conclusion, and recommendations with suggestions for areas of further research.

5.1 Summary of Findings

The study established that public sectors have successfully implemented e-procurement. It was however clear that most of them implemented e-procurement recently since they have had this system for less than five years. This is a clear indication that e-procurement implementation in public sectors are not a very old concept hence it is at its piloting stage. Despite the fact that public sectors indicated that they have successfully adopted e-procurement, it was clear from the findings that most of the activities associated with e-procurement were still being handled the traditional manual style. For instance, the study found out that public sectors do not advertise their request for proposals online. It was also discovered that short listing of suppliers does not submit their proposal online through websites.

The study established that even though most of the procurement functions in the public and private sectors are still done in traditional manual system. Some of the of the corporations have experienced the effects effective and efficient utilization of the e-procurement system. Most of the respondents indicated that the usage of the system has led to drastic cost reduction in their supply chain. It has also enabled them to provide faster and efficient response to customers as well as better services delivery.

On the way forward for e-procurement in government entities respondents revealed that there is a need for sensitization of masses on the new changes being introduced to avoid taking clients and employees by surprise. There is also need to train the users of the system so that they can be conversant to avoid gambling when executing tasks which causes delay and time wastage. The government should involve all stake holders in the implementation and integration of the new system. They should also formulate policies and amend rules on the e-procurement system should be used. Before implementation of the system government should ensure that entities are ready to adopt the system like purchase of IT equipment e.g. computers, printers, internet among others.

5.2 Conclusion

Despite of the many obstacles and limitations the study serves the role of an important pilot in the assessment for adaptation of e-procurement and value additions to public institutions especially in the e-world. The major condition of this study was identified. Technological factors which were drivers for adoption of electronic procurement mainly compatibility, complexity, technological infrastructures, and perceived benefits in relation to public sectors. The study revealed that in adoption of e-procurement in organization, the cost benefits analysis showed that organization would benefit more than cost (value would be achieved), e-procurement would lead to value addition then cot addition.

Public sectors have adopted the e-procurement system even though several procurement functions are still carried out in the traditional manual system. Some of the functions that are yet to be done through the e-procurement system include: online tendering, online submission of the proposals and advertisement or required items online.

e-procurement is successfully implemented through business level of transaction i.e. organization to organization and not at individual level such as purchasing vehicles online. However, this progress cannot be ignored as it enlightens and exposes individual procurement experts to some practical knowledge on e-procurement such as the e-data interchange, e-sourcing, e-payment and risk management. At the country level they have made little progress towards full application of e-procurement and more efforts are required in order to fast track the process. Hence the government has to be more committed and needs to provide its full support.

5.3 Recommendations

The study has revealed that despite the fact that public sectors have adopted e-procurement system, some procurement activities are still handled manually. There is a need for public sectors to emphasize on the need to carry out all the procurement functions through e-procurement.

Employees need to be trained on usage of the e-procurement system. This will enable them to operate the system. There is also need for commercial state corporations to integrate the various functions so that e-procurement can thrive.

Government should improve the legal infrastructure such as privacy law, e-signature and other cybercrimes law in order to reduce the crime through e-transaction. Now days there in no direct law that can sue the cybercrimes in Uganda and all existing laws were developed before the development of computer technology. The existing laws were made to facilitate the traditional paper based business environment.

5.4 Areas of Further Study

A study should be carried out to establish the reasons behind low utilization of e-procurement among private companies in Uganda even after the system has been fully installed.

There is a need to conduct a comparative study of the effects of e-procurement on performance of the private sector companies and those in the public sector. This will assist in coming up with similarities and differences that can serve as benchmarks.

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Appendix

UGANDA CHRISTIAN UNIVERSITY

A Center of Excellence in the Heart of Africa

QUESTIONNAIRE

Dear respondent

I am, a student of Uganda Christian University undertaking a study of assessing the readiness of the public sector to embrace Electronic- procurement: a case study of Gomba district local government as one of the requirements for the ward of a Bachelors degree of procurement and logistics management. You are kindly requested to fill in this questionnaire exhaustively and as honestly as possible to enable me achieve the objectives of this study. The information provided is strictly for academic purposes and will be treated with utmost confidentiality.

SECTION A

BACKGROUND INFORMATION.

1. Which of the following age groups do you belong to?
   - 20 years ☐
   - 21-30 years ☐
   - 31-40 years ☐
   - 41-50 years ☐
   - 50 years and above ☐
2. To which of the following gender do you belong?
   - Male ☐
   - Female ☐
3. What is your highest level of education?
   - Certificate ☐
   - Diploma ☐
   - Degree ☐
   - Other (specify) ☐

4. Period spent working in the organization

Less than 5 years ☐

5-10 years ☐

Above 10 years ☐

SECTION B:

Benefits of already established electronic procurement systems in the public sector.

To examine the already established electronic procurement systems in the public sector. Using Likert scale of 1-5 (1-strongly disagree, 2-disagree, 3-not sure, 4-agree, 5-strongly agree) indicate the level of agreement or disagreement with the following statements.

BENEFITS	1	2	3	4	5
The system increases transparence in the organization					
Electronic procurement increases value for money in the organization					
Encourages the electronic submission of tenders					
Facilitates tender opening on a timely basis					
Timely reporting and updates are provided electronically					
The ability to audit trailing and tracing documents.					
Organization have create and published notices to official electronic bulletin boards.					
Organization has integrated the financial systems with automated invoicing and payment (easy payment).					
The ability to manage volume capacity for simultaneous submission at closing time					
Electronic procurement leads to cost saving through reduction in paper work in the organization					
Electronic procurement streamlines the overall procurement cycle.					

Suggest any other benefit(s) of the already established electronic procurement system seen or identified in Gomba district local government.

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SECTION C:

Electronic procurement readiness assessment

Factors considered to assess the electronic procurement readiness in public sectors of Uganda. Using Likert scale of 1-5 (1-strongly disagree, 2-disagree, 3-not sure, 4-agree, 5-

strongly agree) indicate the level of agreement or disagreement with the following statements.

FACTORS	1	2	3	4	5
Technological infrastructure (e.g. data security, hardware and software capabilities etc.)					
Legal and regulatory framework. (i.e. determining feasibility of e-procurement like digital signatures.)					
Data security and privacy (security measures to safeguard data breaches)					
Procurement process standardization (is the process transparent and consistently followed?).					
Change management and governance (a clear governance structure must be in place to oversee the process)					
Supplier readiness and engagement (feedback mechanisms are essential)					
Performance measurement and continuous improvement					
Stakeholder awareness and training					

what are the same of the other factors considered to assess the electronic procurement readiness in Uganda according to your opinion?

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SECTION D:

Human capital in regards to embracing electronic procurement.

To assess the human capital in regards to embracing electronic procurement in public sector of Uganda. Using Likert scale of 1-5 (1-strongly disagree, 2-disagree, 3-not sure, 4-agree, 5-strongly agree) indicate the level of agreement or disagreement with the following statements.

Human capital	1	2	3	4	5
Able to adopt digital literacy and technological skills.					
Easy to train and develop initiatives					
Should adopt change management awareness					
Efficient communication and collaboration skills					
Should have analytical and data management skills					
Should have procurement process knowledge					
Should have problem-solving abilities					
Should have an innovative mindset					

As the local government, what are some of the human capital employed for the smooth running of the organization?

……
……

God bless you

UGANDA CHRISTIAN UNIVERSITY

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INTERVIEW GUIDE

I am, a student of Uganda Christian University undertaking a study of assessing the readiness of the public sector to embrace Electronic- procurement: a case study of Gomba district local government as one of the requirements for the ward of a Bachelors degree of procurement and logistics management. You are kindly requested to fill in this questionnaire exhaustively and as honestly as possible to enable me achieve the objectives of this study. The information provided is strictly for academic purposes and will be treated with utmost confidentiality.

I. To examine the already established electronic procurement systems in the public sectors.

Has the system really increases transparence in the organization?
Can electronic procurement increases value for money in the organization?
Has electronic procurement encouraged the electronic submission of tenders?
Has the system increased timely reporting and updates are provided electronically?
Does the system allow the ability to audit trailing and tracing documents?

II. To assess the electronic procurement readiness in public sectors of Uganda.

Is there technological infrastructure?
Do you have the legal and regulatory framework you're working with?
Do you have data security and privacy in the organization?
Is there procurement process standardization?

III. To assess the human capital in regards to embracing e-procurement in public sectors of Uganda.

Are the employees able to adopt digital literacy and technological skills in the organization?

Are the employees easy to train and develop initiatives?
Are the employees willing to adopt to change management awareness?
Is there efficient communication and collaboration skills in employees employed?
Is it a must for employees to have analytical and data management skills?

Thank You, God Bless You

UGANDA CHRISTIAN UNIVERSITY

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SCHOOL OF BUSINESS

1st Aug 2023

TO WHOM IT MAY CONCERN

Name: Ssenkaa Dickson Reg. No. J21B12/273

A bachelor's student who is seeking permission from your office to collect data for his/her dissertation titled

"Assessing the Readiness of Public Sector to Embrace E-Procurement in Uganda."

We shall be grateful if you could render assistance to him/her in collecting the necessary data for his/her dissertation

The Uganda Christian University School of Business thanks you in advance

.....

Mukisa Simon Peter
Research coordinator