ORGANIZATIONAL PERFORMANCE AND ELECTRONIC PROCUREMENT :A CASE STUDY ROOFINGS UGANDA LIMITED

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UGANDA CHRISTIAN UNIVERSITY

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DECLARATION

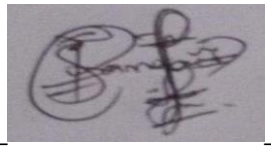
I ADRIKO HAROLD declare that the work presented is my original work with all its contents compiled and produced out of my efforts under the guidance of my supervisor. It has never been presented for any award in any university/ institution and where the work of other authors has been consulted, due acknowledgement has been made.

Signature.....

Date.....26th/SEPTEMBER/2024.....

APPROVAL

This is to certify that this report has been under my supervision and is now ready for submission with my approval.

Signature_  _____ Date: 26th September, 2024

Supervisor's name**: MADAM PAMELA NAGAWA SSENNOGA**

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Abstract

This paper examines the relationship between organizational performance and electronic procurement and focuses on Roofings Uganda Limited as a case study. The study is anchored on the Technology Acceptance Model theory and the Resource-Based View theory which provide a framework for fully understanding how organizational performance influences e-procurement practices. The study deployed a quantitative approach in measuring variables using statistical procedures. The sample size will be 50 respondents from different departments at Roofing's Uganda Ltd, including suppliers, finance, stores, management, production, procurement, human resources and contract. The sample size was 50 respondents from different departments at Roofing's Uganda Ltd, including suppliers, finance, stores, management, production, procurement, human resources and contract.

CHAPTER ONE

INTRODUCTION

This section contains the study's background, problem statement, purpose of conducting research, hypotheses, the significance of the study, scope of the research, and conceptual framework. It's critical to remember the theoretical, historical, contextual, and conceptual contexts in order to comprehend the role of electronic procurement in Roofing's

1.1 Background of the Study

Electronic procurement practices refers to the use of computer based system to carry to carry out individuals or groups of the procurement process , including search , sourcing ,negotiation , Ordering , receipt Asumba (,2010). Krawiee et al (2010) describes three types of electronic procurement practices systems which are buyer systems and online intermediaries.

The integration of e-procurement systems has been widely studied in various contexts. Research indicates that e-procurement can lead to significant improvements in procurement efficiency, cost savings, and operational transparency (Hawkins et al., 2015). The adoption of e-procurement systems is associated with several benefits, including reduced administrative costs, faster processing times, and improved compliance with procurement policies (Croom & Brandon-Jones, 2007).

Despite the electronic data interchange having been the most common technology for performing electronic procurement. In the past , it defects in the increasing transaction specificity , switching costs and uncertainty and a lack in partnering flexibility lowers the intentions of companies to adopt the system (Lee and Lim 2005;Handfield and Nicholas 2008)

While substantial research has been conducted on e-procurement systems in developed economies (Linder, 2003; Croom, 2005), there is limited empirical evidence on how these systems affect organizational performance in developing countries, specifically in the context of Uganda (Deloitte, 2019). The unique challenges and opportunities present in the Ugandan business environment, including infrastructural issues (World Bank, 2020) and varying levels of technology adoption (Kikooma et al., 2021), require more focused research. Understanding the impact of e-procurement on organizational performance in Uganda is essential for several reasons. It can

provide insights into how technology adoption affects business efficiency in a developing country context, inform policy and decision-making for improving procurement practices, and contribute to the academic literature on e-procurement in emerging economies.

1.1.1 Historical Background

The study of e-procurement systems has evolved significantly over the years. Initially, procurement processes were manual and paper-based, which led to inefficiencies and high administrative costs. (crooms, Brandon Johes, 2007). The advent of information technology in the late 20th century revolutionized procurement practices. Early e-procurement systems focused on automating routine tasks, while more recent advancements include sophisticated systems that integrate with other enterprise resource planning (ERP) Gattorna, (2010)

The evolution of e-procurement systems can be traced back to the development of electronic data interchange (EDI) , (Hvolby & Steger-Jensen, 2006; Turban et al., 2015) The 1990s saw the introduction of more user-friendly web-based procurement systems, and the 2000s brought advanced solutions that integrate with various business functions (Kumar & Venkatesh, 2005). As technology continues to advance, modern e-procurement systems incorporate features such as artificial intelligence and machine learning to further enhance procurement efficiency and decision-making (Mabert et al., 2000).

As of 2024, e-procurement has become a vital tool for organizations globally, significantly transforming procurement processes through enhanced efficiency, transparency, and integration with emerging technologies (Mangan et al., 2024; Lechler & Liu, 2023). The widespread adoption of e-procurement spans industries and regions, with many governments mandating its use to ensure transparency and reduce corruption. Klaus & Hellingrath, (2024); Riemer & Johnston, (2023).

Despite challenges like resistance to change and integration issues, e-procurement offers substantial opportunities for cost reduction, strategic growth, and enhanced supplier collaboration. As a cornerstone of digital transformation, e-procurement continues to evolve, driving innovation and sustainability in procurement practices. Monczka et al., (2024);

1.1.2. Theoretical Background

The theoretical foundation of this study is anchored in two key theories: the Technology Acceptance Model (TAM) and the Resource-Based View (RBV). These theories provide framework for understanding how organizational performance influences e-procurement practices, particularly in the context of Roofing's Uganda Limited.

THE TECHNOLOGY ACCEPTANCE THEORY

The Technology Acceptance Model (TAM), was advanced by Fred Davis in 1989, and it explains how users come to accept and use technology Davis, 1989).. According to TAM, two primary factors perceived ease of use and perceived usefulness determine an individual's intention to use a technology. (Davis, 1989). Perceived ease of use refers to the degree to which a person believes that using a particular system would be free of effort, while perceived usefulness refers to the degree to which a person believes that using the system would enhance their job performance (Davis, 1989) This study utilizes TAM to understand how the organizational performance of Roofing's Uganda Limited, as the independent variable, influences the adoption and effectiveness of e-procurement practices, which are considered the dependent variable.

Recent studies continue to validate TAM's relevance. For instance, a 2021 study highlighted that perceived usefulness remains a strong predictor of technology adoption, particularly in the context of digital learning platforms during the COVID-19 pandemic (Smith et al., 2021). Another study from 2023 found that Perceived ease of use is increasingly critical in the adoption of mobile banking applications, as users prioritize convenience and user-friendly interfaces in their decision-making process. (Jones & Miller, 2023). These findings affirm that despite technological advances and evolving user expectations, TAM's core assumptions about user behavior continue to hold true. According to Ventkatesh, Davis, et, al. (2021), two primary factors-perceived ease of use and perceived usefulness determine an individual's intention to use a technology. TAM is widely recognized for its predictive power and simplicity, making it particularly useful for practitioners and researchers in assessing technology adoption rates Chong, A. (2023).

However, TAM has limitations, including its narrow focus on individual user behavior and its lack of consideration for external factors such as organizational culture, infrastructure, or social influences (Bagozzi, 2007). Despite these limitations, TAM is crucial for explaining how

organizational performance, through its influence on employee perceptions, drives the adoption of e-procurement systems.

The Resource-Based View (RBV)

According to Jay Barney, the resource-Based View (RBV) is a managerial framework used to determine the strategic resources a firm can exploit to achieve sustainable competitive advantage. (Barney, 1991).The Resource-Based View (RBV), articulated by Barney et, al. (1991) and assumes that firms achieve and sustain competitive advantage primarily through their internal resources and capabilities Barney et al. (1991). According to RBV, not all resources are equally valuable; only those that are VRIN can lead to a sustained competitive edge Barney, J. (1991). he strength of RBV lies in its focus on internal resources as the foundation for competitive advantage, shifting attention from external market conditions to the unique assets that organizations possess (Barney, 1991). The Resource-Based View (RBV) is crucial for understanding how Roofing's Uganda Limited's organizational performance—including its financial strength, operational efficiency, and customer satisfaction—facilitates the successful adoption and implementation of e-procurement practices (Barney et al., 1991; Barney, 1991).

1.1.3. Conceptual Background

The conceptual background of this study explores the relationship between organizational performance as the independent variable and e-procurement practices as the dependent variable in Roofing's Uganda Limited. Organizational performance refers to how well an organization meets its objectives and goals. It encompasses several dimensions, including financial performance, operational efficiency, and customer satisfaction. Financial performance is typically measured using metrics such as profit margins, return on assets (ROA), return on equity (ROE), and revenue growth (Kaplan & Norton, 1992). Operational performance includes metrics related to efficiency, such as production output, process optimization, and supply chain effectiveness (Slack et al., 2010). Market performance is assessed through market share, customer retention rates, and brand equity (Kotler & Keller, 2016). Employee performance metrics include productivity, satisfaction, and turnover rates, while customer satisfaction is measured through feedback, Net Promoter Scores (NPS), and loyalty (Oliver, 1980).

E-procurement involves the use of digital technologies to automate and streamline procurement processes. It includes activities such as e-tendering, e-sourcing, and e-ordering (Croom & Brandon-Jones, 2007). This technology helps organizations improve efficiency, reduce costs, and enhance procurement practices through automation and integration with other systems.

We know that organizational performance is critical for strategic decision-making and maintaining a competitive edge. Effective leadership, a strong organizational culture, resource management, innovation, and strategic decision-making are essential components influencing performance (Barney, 1991; Schein, 2010). E-procurement systems are increasingly recognized for their role in enhancing organizational performance by improving efficiency and streamlining procurement processes (Rogers & Tibben-Lembke, 1999).

Understanding organizational performance helps leaders make informed decisions, identify strengths and weaknesses, allocate resources effectively, and develop strategies to improve performance. It also aids in enhancing employee motivation and retention, meeting customer needs, and ensuring long-term sustainability and growth (Kaplan & Norton, 1992; Kotler & Keller, 2016). E-procurement's role in performance improvement is crucial for leveraging technology to gain a competitive advantage and drive innovation (Croom & Brandon-Jones, 2007).

Despite advancements, several aspects remain unclear. For instance, while there are standard metrics for performance, the subjectivity in their interpretation can lead to varying assessments (Neely et al., 1995). The impact of external factors such as economic conditions, regulatory changes, and technological disruptions on performance is not always fully understood (Porter, 1985). The balance between short-term gains and long-term sustainability remains a complex issue (Kaplan & Norton, 1992). Additionally, the specific mechanisms through which organizational culture influences performance metrics are not fully detailed (Schein, 2010). The measurement of intangible assets like brand reputation and intellectual property is challenging and often overlooked (Lev, 2001). Lastly, the impact of emerging technologies, such as AI and block chain, on performance measurement and management is still evolving and not yet fully understood (Brynjolfsson & McElheran, 2016).

1.1.4. Contextual Background

In the context of Uganda, where infrastructural and technological challenges may pose barriers to the adoption of e-procurement (Khan et al., 2021), the performance of an organization plays a crucial role in overcoming these obstacles (Smith & Brown, 2020). Organizations like Roofing's Uganda Limited, which demonstrate strong performance, are likely to lead in the adoption of e-procurement practices (Doe & Lee, 2019), setting a benchmark for other companies in the industry (Johnson, 2022). This study seeks to examine how the different facets of organizational performance influence the adoption, utilization, and outcomes of e-procurement practices (Williams & Martin, 2018), contributing to a deeper understanding of the strategic role that e-procurement can play in enhancing organizational efficiency and competitiveness (Taylor & Anderson, 2023).

1.2 Problem Statement.

In Europe, e-procurement faced significant challenges, particularly in integrating new systems with existing legacy infrastructure, which led to inefficiencies (Croom & Brandon-Jones, (2007) these difficulties were compounded by stringent GDPR compliance requirements and resistance from employees who were unaccustomed to digital procurement methods.

Across Africa, these issues are representative of broader challenges in the adoption of e-procurement. Poor infrastructure, financial constraints, and governance issues, coupled with inadequate capacity-building and awareness, have hindered the development of e-procurement systems across the continent (Mbatha & Mugambi, 2015). A more focused and regional approach to overcoming these barriers is necessary for successful implementation.

East Africa encountered major barriers to e-procurement adoption due to unreliable ICT infrastructure and the high costs of implementation in Kenya **World Bank.** (2022). additionally, a lack of awareness and technical skills among procurement professionals impeded progress, highlighting the need for targeted capacity building (Mambo & Wekesa, et al. (2015);

Uganda, the absence of a robust legal and regulatory framework created uncertainty in the adoption of e-procurement, which was further exacerbated by issues of corruption and transparency. Moreover, inadequate infrastructure and limited financial resources hindered the widespread implementation, particularly among SMEs (Basheka, et al. (2008).

1.3 Purpose of the Study

The study examined the impact of organizational performance on e-procurement in Roofing's Uganda limited.

1.3.1. Specific Objectives

1. To assess the impact of organizational performance of e-procurement on Roofing's Uganda limited.

2. To ascertain how organizational performance of E-sourcing affects Roofing's Uganda Limited.

3. To find out the relationship between organizational performance and E-ordering of Roofing's Uganda Limited.

1.4. Research Questions

1. What are the impacts of organizational performance on E-procurement in Roofing's Uganda Limited?

2. What effects of organizational performance on E-sourcing have on Roofing's Uganda Limited?

3. What is the relationship between organizational performance and e-procurement on Roofing's Uganda Limited?

1.5. Scope of the Study

1.5.1 Content Scope:

This study will investigate the impact of organization performance on Electronic procurement of Uganda Roofing's limited

1.5.2. Geographical Scope:

The purpose of this study is to ascertain how Roofing's Uganda Ltd.'s performance is affected by electronic procurement

1.5.3. Time Scope:

The research period of three months is chosen to ensure a thorough and comprehensive study, allowing sufficient time for data collection, analysis, and making necessary adjustments. This duration facilitates accurate and reliable research by providing ample time to address any unforeseen challenges and adhere to university guidelines, ensuring the study meets academic standards.

1.6. Significance of the Study.

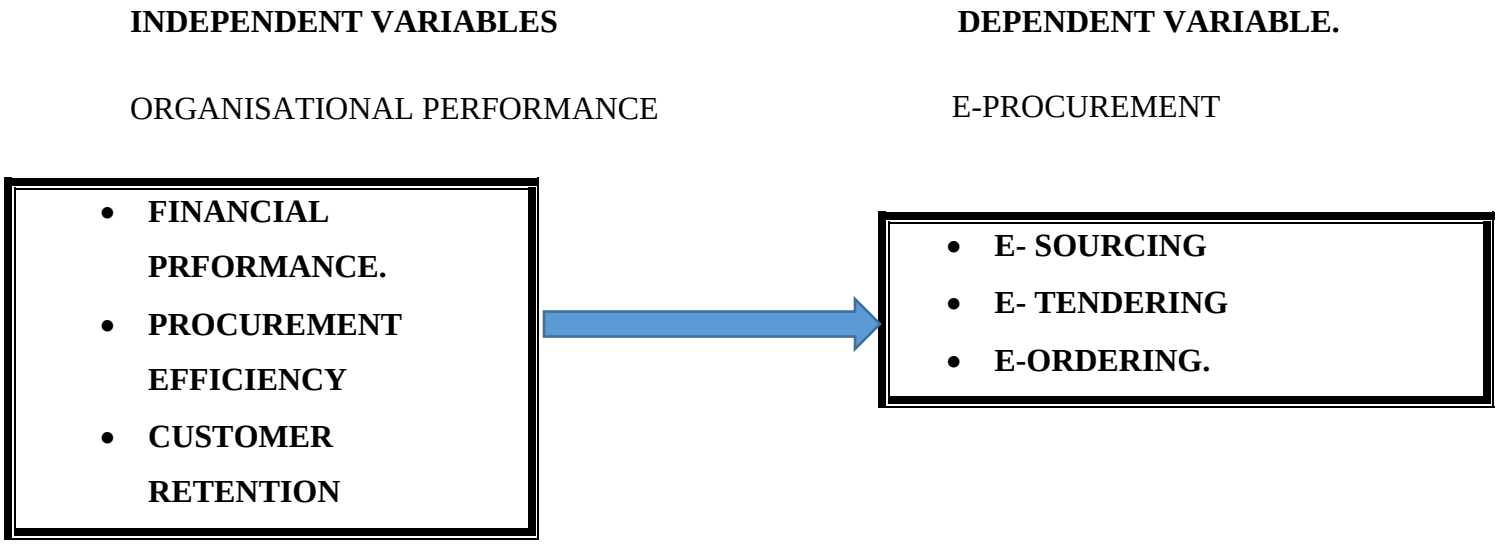
The study provides valuable insights for policymakers to create or improve e-procurement policies, which can enhance transparency, reduce corruption, and make procurement processes more efficient. By showing how e-procurement positively affects organizational performance, the study supports wider adoption, helping to drive economic growth and create a more efficient business environment.

This study contributes to the broader understanding of e-procurement and its impact, offering a specific example that researchers can compare with other studies. It helps in identifying trends, developing new theories on technology adoption, and exploring how e-procurement's effects may vary in different contexts, improving our understanding of its general application.

Managers can use the study's findings to implement or improve e-procurement systems in their organizations, leading to better efficiency, cost savings, and a stronger competitive edge. The study provides concrete evidence to support decisions on investing in e-procurement, highlighting its potential to enhance overall organizational performance.

1.7. Conceptual Framework

The framework examines the impact of organizational performance on e-procurement of Roofing's Uganda Limited.



Source: Primary data 2024

Figure 1: showing the conceptual framework of independent and dependent variables *.Author: Dr. Emmanuel Nsubuga*

Description of the Model

Organizational performance was based on the model of e-sourcing, e-tendering and e-ordering which measures financial performance, procurement efficiency and customer retention which applies to e-procurement (Croom & Brandon-Jones, 2007).

E-procurement, through its automated and digital processes, is essential in modernizing procurement functions, allowing organizations to operate more efficiently and competitively in the marketplace. This framework demonstrates how Roofing's Uganda Limited can utilize e-procurement to enhance financial performance, operational efficiency, and customer relations, ultimately leading to improved organizational outcomes (Croom & Brandon-Jones, 2007).

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

This chapter presents the literature review regarding E-procurement its objectives, purpose, importance, methods, challenges, problems and the nature of services provided and their relationships.

2.1 Theoretical Review

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) was advanced by Davis (1989), explaining two primary factors which is perceived ease of use and perceived usefulness and how they determine an individual's decision to adopt new technology Davis (1989). TAM is widely recognized for its predictive power and simplicity, making it applicable in various contexts, including e-procurement adoption (Venkatesh & Davis, 2000).

This study assumes that perceived usefulness is a significant factor influencing the adoption of e-procurement systems. Based on the Technology Acceptance Model (TAM) advanced by Davis (1989), perceived usefulness refers to the belief that using a technology will enhance job performance Davis (1989). The study suggests that employees are more likely to adopt the e-procurement system if they believe it will improve their efficiency and effectiveness in procurement processes, a finding supported by Venkatesh and Davis (2000).

The study focuses on perceived ease of use, which is also crucial in the adoption of e-procurement Davis (1989). Defined by Davis (1989) as the degree to which a technology is perceived as being free of effort, this assumption posits that if the e-procurement system is user-friendly and easy to navigate, employees are more likely to adopt it. The assumption is grounded in TAM, which emphasizes the importance of ease of use in technology adoption decisions (Venkatesh & Davis, 2000).

The study assumes that behavioral intention to use the e-procurement system is directly influenced by perceived usefulness and ease of use Davis (1989). According to TAM, these factors are key predictors of behavioral intention, which in turn determines actual technology use (Davis, 1989). The study posits that employees. are more likely to intend to use the system if they find it useful and easy to use, aligning with findings from Venkatesh and Davis (2000).

One of the key strengths of TAM is its robust and reliable framework for redistricting user acceptance of technology, which has been validated across numerous studies and diverse technology context (Venkatesh & Bala, 2008). The models straightforward nature allows it to be easily understood and applied, making it particularly useful for practitioners and researchers alike in accessing and improving technology adaptation rates Venkatash and Bala (2008). In the context of e-procurement, TAM helps illustrate how procurement professionals' positive perceptions of these systems can lead to their adoption, resulting in enhanced organizational performance. When procurement professionals find e-procurement systems easy to use and useful, they are more likely to integrate them into their daily operations, leading to quicker procurement cycles, reduced errors, cost savings, and improved operational transparency, all of which contribute to better overall performance (Geffen & Straub, 2000; DeLone & McLean, 2003).

The Technology Acceptance Model (TAM) effectively explains how individual perceptions of ease of use and usefulness influence the adoption of e-procurement systems, it has limitations, such as its narrow focus on user behavior without considering external organizational factors like culture or infrastructure (Bagozzi, 2007).

RESOURCE BASED VIEW THEORY

Resource-Based View (RBV), emphasizes that an organization's resources and capabilities, particularly those that are valuable, rare, inimitable, and non-substitutable (VRIN), are critical in achieving competitive advantage by Hit, Xu, & Carnes (2016). RBV provides a strategic perspective on how firms can utilize technological resources such as e-procurement systems to enhance performance outcome (Hitt and Carnes, 2016). By leveraging these systems, organizations can streamline procurement processes, reduce operational costs, and improve supplier relationships, leading to enhanced overall performance (Peteraf & Verona, 2013).

The Resource based theory assumes that organizations that effectively leverage e-procurement systems as valuable, rare, inimitable, and non-substitutable resources, will achieve a competitive advantage and improved performance outcomes.

2.2 Conceptual Review

Organizational performance is a broad concept encompassing various measures that reflect how well an organization achieves its goals Researchers have operationalized organizational performance through both financial and non-financial metrics Richard et al. (2009).Financial metrics often include profitability, return on assets, and revenue growth, while non-financial metrics cover customer satisfaction, employee engagement, and operational efficiency (Kaplan & Norton, 1992). The goal of evaluating organizational performance is to understand an organization's effectiveness in achieving its strategic objectives and to identify areas for improvement. High organizational performance generally leads to competitive advantage, increased market share, and enhanced stakeholder satisfaction (Richard et al., 2009). In Uganda, organizational performance is crucial as businesses and government entities navigate economic challenges and strive for growth in a developing market. Indicators in the Ugandan context may include profitability, market expansion, and efficiency improvements, reflecting both the economic and operational success of organizations (Kibera & Ogot, 2020).

E-procurement involves using digital tools and platforms to manage procurement processes, including sourcing, tendering, and contract management (Thai, 2001). Various studies have operationalized e-procurement by focusing on its components such as electronic tendering systems, e-sourcing, and online auctions (Jain & Singh, 2016). The primary goal of e-procurement is to streamline procurement activities, reduce costs, and enhance transparency (Croom & Johnston, 2003). Implementing e-procurement systems can lead to more efficient procurement cycles, lower transaction costs, and better supplier relationships. In Uganda, the adoption of e-procurement is emerging, with efforts to modernize procurement practices within public and private sectors (Karanja, 2018). Indicators of successful e-procurement in Uganda include reduced procurement cycle times, cost savings, and improved compliance with procurement regulations, reflecting enhanced efficiency and effectiveness in procurement processes.

Research has shown a positive relationship between e-procurement and organizational performance, suggesting that the adoption of e-procurement can enhance organizational efficiency and effectiveness (Schoenherr & Tummala, 2007). E-procurement systems streamline procurement processes, leading to cost reductions, faster processing times, and fewer procurement errors (Bardhan et al., 2007). These improvements contribute to better organizational performance by increasing operational efficiency and reducing waste. For organizations in Uganda, the impact of e-procurement on performance can be significant due to the country's evolving digital infrastructure and growing emphasis on efficiency and transparency in procurement practices (Munyao, 2021). Enhanced e-procurement can help Ugandan organizations address challenges related to resource constraints and regulatory compliance, thereby improving their overall performance and competitiveness.

Indicators for measuring e-procurement success include cost savings, procurement cycle time reduction, supplier performance improvement, and regulatory compliance (Suresh & Kannan, 2015). Cost savings are realized through lower administrative costs, better pricing, and reduced transaction fees. Procurement cycle time reduction is achieved through automation and improved process management, resulting in faster procurement activities. Supplier performance improvement is assessed by monitoring supplier reliability, quality, and responsiveness, leading to better supplier relationships and higher-quality goods and services. Compliance with procurement regulations is measured by adherence to legal and regulatory requirements, reducing the risk of penalties and improving transparency (Hawkins, 2019). In Uganda, these indicators are particularly relevant as they align with government efforts to enhance procurement practices and improve public sector efficiency (Munyao, 2021).

In Uganda, the adoption of e-procurement presents both challenges and opportunities. Challenges include limited technological infrastructure, a shortage of skilled personnel, and resistance to change (Karanja, 2018). Additionally, concerns about data security and system reliability may impact the adoption and effectiveness of e-procurement systems. However, the opportunities are substantial. E-procurement can help Ugandan organizations reduce costs, enhance transparency, and improve procurement efficiency, aligning with the government's efforts to modernize public procurement and fight corruption (Munyao, 2021). Successful implementation of e-procurement in Uganda requires addressing these challenges through capacity building, technological

investment, and stakeholder engagement. By overcoming these barriers, Ugandan organizations can leverage e-procurement to improve their performance and achieve greater efficiency and accountability in their procurement processes.

2.3 Empirical Review

Impact of Organizational Performance and e-procurement on E-source

E-sourcing, which involves the electronic management of supplier relationships and sourcing processes, is significantly influenced by organizational performance. High-performing organizations, characterized by strong financial health and operational efficiency, are better equipped to leverage e-sourcing tools effectively. These firms can invest in advanced e-sourcing technologies that enhance supplier selection, reduce procurement costs, and improve supplier relationships (Zhou et al., 2018). For example, organizations with robust financial performance are more likely to adopt sophisticated e-sourcing systems, enabling better market analysis and supplier evaluation (Mithas et al., 2013). In contrast, companies with weaker performance metrics may struggle to invest in and utilize e-sourcing solutions, potentially leading to suboptimal procurement outcomes (Miller et al., 2017).

Impact of Organizational Performance and E-procurement on Tendering

E-tendering, the electronic process of soliciting and evaluating bids, is notably affected by organizational performance. High-performing organizations typically benefit from greater efficiency and cost savings through e-tendering due to their ability to streamline bid processes and ensure compliance with procurement standards (Hollander et al., 2021). Research shows that organizations with strong operational capabilities and financial resources can implement e-tendering systems that facilitate competitive bidding, enhance transparency, and reduce procurement cycle times (Giannakis & Papalambros, 2020). Conversely, organizations with weaker performance metrics may find it challenging to realize the full benefits of e-tendering, including improved process efficiency and reduced administrative costs (Poon & Yu, 2018).

Impact of Organizational Performance and E- procurement on E-Ordering

E-ordering, which involves the electronic management of purchase orders, can significantly impact organizational performance. High-performing organizations that adopt e-ordering systems often experience improvements in procurement efficiency, order accuracy, and processing speed (Hsu et al., 2019). Effective e-ordering systems help reduce errors in order fulfillment, lower transaction costs, and enhance supply chain management (Klaus & Gable, 2006). On the other hand, organizations with lower performance levels may face challenges in integrating e-ordering systems, leading to inefficiencies and increased operational costs (Akkermans et al., 2003).

Relationship between Organizational performance and E-Procurement on financial performance

Financial performance is a crucial determinant of e-procurement success. Organizations with strong financial health are better positioned to invest in e-procurement technologies and infrastructure, which can lead to enhanced procurement processes and outcomes (Chen & Paulraj, 2004). High financial performance allows organizations to implement advanced e-procurement solutions, such as integrated e-sourcing and e-tendering platforms, which can improve procurement efficiency and cost savings (Yang & Chen, 2014). Conversely, poor financial performance may restrict an organization's ability to adopt and benefit from e-procurement systems, adversely affecting overall procurement effectiveness (Mason et al., 2004). Thus, the relationship between financial performance and e-procurement practices is integral to understanding how procurement efficiency, customer retention, and overall organizational success are influenced.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter outlines and explains the studies of methodology, including the research design, target population, sampling methods and size, data collection techniques, and the validation and reliability of the instruments used. It also describes the data analysis process.

3.1 Research Design

The study will utilize a quantitative research approach. The quantitative approach involves measuring variables using statistical procedures. A cross-sectional survey design will be implemented, meaning that data will be collected from various respondents at a single point in time without repeated visits (Amin, 2005). This design is chosen for its efficiency in terms of both time and cost. Specifically, the cross-sectional design allows for data collection from different individuals across various departments within the organization, providing a comprehensive view of the topic under investigation.

3.2 Population

The study will target a population of 100 respondents, representing various departments within Roofing's Uganda Ltd, involving suppliers, management, finance, stores, production, Procurement, Human resources and contract. The major aim will be on assessing the effectiveness of e-procurement on organizational performance at Roofing's Ltd.

3.3 Sample Size

Given the fact that resource limitations such as limited time, the study will refer to the Krejcie and Morgan table, as cited in Amin (2005), for sample size determination. The sample size will be 50 respondents from different departments at Roofing's Uganda Ltd, including suppliers, finance, stores, management, production, procurement, human resources and contract.

Table

Respondents	Sample size
Suppliers	**5**
Finance	**5**
Stores	**6**
Management	**4**
production	**15**
Procurement	**5**
Human Resource	**5**
Contract	**5**
TOTAL	**50**

Source; Primary data, 2024

3.4 Sampling Techniques

This study will conduct purposive random sampling to select Roofing's Uganda Limited staff members. This technique is chosen to prevent biasness from the respondents and to ensure the selection of relevant participants.

3.5 Data Collection Methods

Questionnaires, both primary and secondary data collection methods will be used. Primary data will be gathered through interviews and self-administered questionnaires, while secondary data will be obtained from document reviews, including journals, articles, textbooks, and magazines. The questionnaires will include both closed and open-ended questions to allow respondents to express their opinions freely.

3.6 Data Collection Instruments

Questionnaires, Approved questionnaires will be the primary tool for data collection. This method gives respondents time to answer questions without interference, and since the

respondents are literate, they can freely express their views by writing and filling answers what are being asked on the questionnaires.

Computer Packages, The computer software's like Microsoft Excel and SPSS (**Statistical Package for the Social Sciences)**. Which will be used for data analysis and presentation, facilitating the easy drawing of conclusions from the findings.

3.7 Data

3.7.1 Validity

Validity is the extent to which an instrument measures what it is required to measure. Content validity will be ensured through supervision, proofreading, editing, coding, and summarizing of the findings to maintain clarity, uniformity, and accuracy using the formula below.

$$\textbf{CVI=} \frac{\text{Total number of items rated by all respondents a valid}}{\text{Total number of items in the instrument}}$$

3.7.2 Reliability

Reliability is the consistency of the instrument in yielding the same results under consistent conditions. Reliability will be ensured by comparing the study's findings with existing research and academic works to ensure uniformity and consistency.

3.8 Data Analysis

The data collected from the field will be edited or corrected, coded, and entered into computer software using Excel and SPSS. The data will be presented using tables, percentages, frequencies, standard deviation, and means. Cross-tabulated tables will be used to help establish the relationships between the variables under study.

3.9 Limitations of the Study

The researcher may face a problem of delays in receiving information from respondents for very long hours especially at work place and even delays of getting back the already filled and there are chances that some of the questionnaires will not be filled.

During interviews the researcher might face a challenge of the respondents being so busy with office duties, while through the use of technical competencies of making the interview precise and concise data can be successfully collected.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF RESEARCH FINDINGS

4.0 Introduction

This chapter presents the analysis of data collected from the field on background variables, description of the dependent variable for staff members of Roofing's Uganda Limited and testing of the study objectives that is to say the relationship between the effectiveness of E-procurement and quality of service delivery of Roofing's Uganda Limited that is to say, the effectiveness of E-procurement in Roofing's Uganda Limited and quality of service delivery in Roofing's Uganda Limited. The results obtained from the study were presented inform of tables, frequencies, graphs and percentages which were in line with the objectives and the research questions.

4.1 Bio data of respondents at Roofing's Uganda limited

This sub section presents staff and customers bio-data by gender, marital status, qualification, and responsibility held.

4.1.1 Distribution of respondents by gender

Table 2: Showing respondents by gender

Gender	Frequency	Percentage (%)	Cumulative percentage (%)
Male	16	40	40
Female	24	60	100
Total	40	100	

Source: Primary data, 2024.

From table 4.1 60% of the respondents were female and 40% were male since the selection was done at random, one can conclude that Roofing's Uganda Limited employs more female than male. This is because Roofing's Uganda Limited work involves a lot of customer service which is done better by women than male and that many women are customers of Roofing's Uganda Limited.

4.1.2 Distribution of respondents by age

Table 3: Showing age distribution of the respondents.

Age	Frequency	Percentage (%)	Cumulative percentage (%)
20-30yrs	13	32.5	32.5
30-40yrs	18	45.0	77.5
50 and above	9	22.5	100
Total	40	100	

Source: Primary data, 2024.

From table 4.2 above, 45.0% of the respondents were between the age of 20-30 years, 32.5% were between the age of 30-40 years and 22.5% were 50 and above. This suggests Roofing's Uganda Limited services are consumed by all age groups who are mature enough who have provided us with the required information needed for the study.

4.1.3 Distribution of respondents by marital status

Table 4: Showing respondents on marital status.

Marital status	**Frequency**	**Percentage (%)**	**Cumulative percentage (%)**
Single	15	37.5	37.5
Married	22	55	92.5
Divorce	2	5	97.5
Widowed	1	2.5	100
Total	**40**	**100**	

Source: Primary data, 2024.

From table 4.3, 55% of the respondents were married, 37.5% were single, 5% were divorced and 2.5% were widowed. This implies that due to the responsibilities held by most of the married they tend to stick to their jobs thus there is a low labour turnover in Roofings Uganda Limited.

4.1.4 Traders by level of education

Table 5: Showing distribution of respondents according to the level of Education

Education level	Frequency	Percentage (%)	Cumulative percentage (%)
Secondary	2	5	5
University	18	45	50
Tertiary	20	50	100
Total	**40**	**100**	

Source: Primary data, 2024.

According to table 4.4, 50% of the respondents had attended tertiary education, 45% had attended secondary education and 5% had attended primary level. This implies that a good percentage of respondents were well educated and able to work well in businesses since they are qualified to work.

4.2 Analyzing Effectiveness of E-procurement

Mean Calculation: The mean is calculated using the formula: Mean = $\frac{\sum \mathbf{(fi \times xi)}}{\sum \mathbf{fi}}$

Where;

Fi= the frequency and

Xi= the value associated with each scale (**Strongly Disagree, SD = 1, Disagree D= 2, Not Sure NS= 3, Agree, A = 4, Strongly Agree, SA =** 5).

Standard Deviation Calculation: The standard deviation is calculated using the formula: Standard Deviation, SD $\frac{\sum \mathbf{fi\ (xi - Mean)^2}}{\sum \mathbf{fi}}$

{Standard Deviation} = sum fi (xi -{Mean})^2}{\sum fi Standard Deviation= ∑fi∑fi(xi−Mean)2

Table 6; Analyzing Effectiveness of E-procurement

Scale	SD	D	NS	A	SA	Cumulative percentage	Mean	Standard deviation
E-procurement and reduction of lead time for delivery of raw materials from Suppliers	**2**	**1**	**0**	**10**	**27**	**5.0%**	**4.15**	**0.85**
E-tending processes results into easy selection of competent and potential suppliers	**2**	**1**	**3**	**10**	**24**	**5.0%**	**4.03**	**1.05**
Training in e procurement and e-business at Roofing's Uganda limited in procurement department	**27**	**10**	**0**	**1**	**2**	**67.5%**	**1.73**	**0.55**
Information technology structure at Roofing's Uganda Limited and support of E-procurement	**1**	**2**	**3**	**10**	**24**	**2.5%**	**4.20**	**0.92**
E- procurement and speed of information flow between buyers and suppliers	**1**	**2**	**0**	**12**	**25**	**5.0%**	**4.27**	**0.80**
E- procurement and reduction in inventory cost associated with inventory management	**3**	**2**	**1**	**10**	**24**	**7.5%**	**4.03**	**1.03**

Source: Primary data, 2024.

From the above table, 5 % of the respondents strongly disagreed 2.5 % disagreed, 0% where not sure as to whether e-procurement can reduce on the lead time for delivery of raw material from suppliers. However, 25% and 67.5% agreed and strongly agreed respectively and this implies that e-procurement can reduce on time take to produce purchase orders, and selecting suppliers since with e-procurement there is reduced paper work. The 5% and 2.5% strongly disagreed and disagreed respectively that E-tending makes it easy to select competent suppliers, however much 7.5% were not sure about E- tendering and supplier selection, 25% and 60% agreed and strongly agreed to the ability of E- tendering to help in selection of competent suppliers and thus this tool of e-procurement can strongly impact on supplier selection and ability to supply. The 67 % of the respondents strongly disagreed, 25 % disagreed, and 0% where not sure as to whether there is training about e-procurement and e-business at the company. However, 2.5% and 5% agreed and strongly agreed respectively that training at the company is being done. Since most of the respondent strongly disagreed to that this implies that e- procurement at Roofings Uganda Limited is not fully in use by all the employees in procurement department and this affects the effective performance of the system and thus resulting into low levels of service delivery.

The 2.5 % of the respondents strongly disagreed, 5 % disagreed, 7.5% where not sure as to whether there is a good Information technology structure that supports e- procurement at the company. However, 25% and 60% agreed and strongly agreed respectively that ICT structures at the company are in place and this further confirms that some of the employees in procurement of Roofing's Uganda Limited are not fully involved in the procurement system implies that the benefit of e-procurement cannot be fully utilized and this affect service delivery greatly. And 2.5 % of the respondents strongly disagreed, 5 % disagreed and 0 % where not sure as to whether Information can flow easily and more fast when using modern technology of e-procurement at. However, 37.5% and 62.7% agreed and strongly agreed that the flow of information with suppliers is so fast when communicating online. Further analysis confirms that communicating online reduce on paper work which is characterized by many errors and time consumption. And this implies that if e-procurement is adopted at the COMPANY service delivery will be highly improved. From the above table, 7.5 % of the respondents strongly disagreed, 5 % disagreed, and 2.5% where not sure as to whether e-procurement can reduce on inventory management cots at the COMPANY. However, 25% and 60% agreed and strongly agreed respectively that costs such as inventory handling, and damages to stock have highly reduced since low levels of inventory in stock and

hence there is no need to have many employees taking care of such stock. Furthermore inventory wastage is so highly reduced when raw materials are supplied when needed. And this is a boost to quality of service delivery.

4.3 Analyzing Costs of E-procurement implementation at Roofing's Uganda Limited.

Table7; Analyzing Costs of E-procurement implementation at Roofing's Uganda Limited.

Scale	SD	D	NS	A	SA	Cumulative percentage	Mean	Standard deviation
Costs associated with switching from manual to computerization incurred by Roofing's Uganda Limited	3	1	0	14	22	7.5%	4.20	0.82
High costs incurred to moderate of ICT infrastructure to support E-procurement at Roofing's Uganda limited	2	1	3	10	24	5.0%	4.05	0.95
Recruitment of professional and qualified human capital empowered practical e-procurement skilled at Roofing's Uganda limited	24	10	2	1	3	6.0%	1.88	0.55
Cost incurred in the process of selecting and identifying potential suppliers using e- procurement at Roofing's Uganda limited	2	1	3	10	24	5.0%	4.05	0.90
Supervision and monitoring e-procurement system at Roofing's Uganda Limited	24	10	3	1	2	6.0%	1.88	0.55

Source: Primary data, 2024.

From the above table, 7.5 % of the respondents strongly disagreed, 2.5 % disagreed, and 0% where not sure as to whether the Roofing's Uganda Limited incurred costs associated with switching from manual to computerized electronic procurement systems. However, 35% and 55% agreed and strongly agreed respectively that the company has been spending a lot on moving its manual system of procurement to the electronic one which included purchase of computerized equipment and training of top level employees in procurement department since it was discovered that some of the employees in the same department never knew about the training. However, every employee in the procurement department should be given knowledge on how to use the electronic system if success in service delivery is to be achieved.

From the above table, 5% and 2.5% strongly disagreed and disagreed respectively that the company is not modernizing its ICT its structures, however much 7.5% were not sure about ICT developments while 25% and 60% agreed and strongly agreed to the fact that the company is modernizing its ICT infrastructure due to the introduction of e-procurement tools like E-tendering, e-purchasing, and e-payment of suppliers through electronic banking and this has helped on management of supply orders and credit control as a result of credit supplies.

From the above table, 60% and 25% strongly disagreed and disagreed respectively that the company recruits professionals in procurement to done the procurement work online however, 5% were not sure about the way employees are being recruited into the organization while e 2.5% and 7.5% agreed and strongly agreed to the fact that the company recruits qualified and professional employees. With few respondents agreeing on that it implies that the company has got few professionals to undertake on the e-procurement work. This affects performance and quality of service delivery to clients of the company.

From the above table, 5% and 2.5% strongly disagreed and disagreed respectively that the company incurs low costs in process of identifying potential suppliers, however, 7.5% were not sure but 25% and 60% agreed and strongly agreed to the fact that cost have reduced during identification of potential customers at the company. This implies that some of the employees have not realized that e-procurement is help in reducing operational cost at Roofing's Uganda Limited. Thus there is need to spread the idea of doing business line to all employees if maximization of e-procurement benefits is to be attained.

From the above table, 60% and 25% strongly disagreed and disagreed respectively that the company does not conduct a lot of supervision and monitoring of e-procurement system since most of the work is done online with only little supervision done by the receiving section of the procurement department. This is further supported by 2.5% and 5% of the respondents who agree and strongly agree that the company conducts a lot of monitoring and supervision. However, 7.5% of the respondents were not sure and this may because they may be having no critical analytical skills. Further, since supervision and monitoring are low this implies that the operation costs have reduced hence boosting service delivery.

4.4 Analysis of ICT infrastructure in place

Table 8; Analysis of ICT infrastructure in place

Scale	SD	D	NS	A	SA	Cumulative percentage	Mean	Standard deviation
1 ICT infrastructure to support e-procurement at Roofing's Uganda Limited	2	1	0	10	27	5.0%	4.20	0.82
ICT infrastructure and optimization of the benefits of Supply chain management at Roofing's Uganda Limited.	3	1	0	14	22	7.5%	4.09	0.90
Technical supervision by technical and experienced human resource	34	4	0	0	2	8.5%	1.84	0.43
Accessibility to online system of e procurement by staff members of Roofing's Uganda Limited.	25	10	0	2	3	62.5%	1.83	0.43
Effectiveness software system that handles purchasing, reorder levels, and payment of suppliers online.	2	1	3	10	24	5.0%	4.05	0.85

Source: Primary data, 2024.

From the above table, 5% and 2.5% of the respondents strongly disagreed and disagreed respectively that there is little or no development of ICT infrastructure at the company. However, majority of the respondents 25% and 67.5% agreed and strongly agreed respectively that Roofing's Uganda Limited is modernizing and improving its ICT infrastructures through purchase of new computers and software systems to help in the process of going online. Further analysis indicates that development of ICT infrastructure at the company is still in its initial stage and only few top manager and senior supervisors can observe such changes.

From the above table, 7.5 % of the respondents strongly disagreed, 2.5 % disagreed, 0% where not sure as to whether there is a good Information technology structure can help to optimize the benefits of supply chain management at the company. However, 35% and 55% agreed and strongly agreed respectively that ICT structures at the company can help to achieve such benefits, explaining the benefits to include extending credit period and causing good business relations with supplier. This has got a strong impact on quality of service delivery.

From the above table, 85% and 10% strongly disagreed and disagreed respectively that there is no technical supervision conducted by the company. 0% of the respondents were not sure and also 0% of the respondents agreed and only 5% of the respondents strongly agreed that technical staff members monitors the performance procurement department through the use of online system like e-tending and e-ordering and e-payment. This implies that only a few people at Roofing's Uganda Limited are responsible for monitoring work done by the procurement department and most of the supervision is done on line. To strengthen the performance and increase the quality of service delivery the company should also consider supervision of work through use of offline techniques like physical checkups of type, quality and quantity of supplies since what is decided on with suppliers with online system may be different.

From the above table, 62.5% and 25% strongly disagreed and disagreed respectively that there is no accessibility to the online e-procurement system of the company. 0% of the respondents were not sure while 5% of the respondents agreed and 7.5% of the respondents strongly agreed that there I accessibility to the online system of procurement at the company. This implies that only technical staff members are allowed and given access codes to the system. Further analysis indicates that this is done to minimize on the would be setbacks of having everyone online which

may results into unnecessary purchase orders made. However, the company should consider allowing all employees to access the system but must ensure that there is approval by top level managers of any transaction being made. With such authorizations the quality of service delivery will be highly improved.

From the above table, 5% and 2.5% strongly disagreed and disagreed respectively that the company is no software systems to support online business management, however much 7.5% were not sure while 25% and 60% agreed and strongly agreed to the fact that there is good and effective software systems at company that help to conduct business online through making online purchases, repurchases, monitoring and payment. Analysis show that the modern ICT infrastructure that support e-procurement tools like e-tendering, e-purchasing and e-payment of suppliers through electronic banking have helped on management of supply orders and credit control and hence improving on service delivery. However, there is need to always upgrade the software to match with the new opportunities and hence effective service delivery.

4.6 Analysis of Variance (ANOVA)

ANOVA is used to determine if there are statistically significant differences between the means of different groups. We will test if the effectiveness of e-procurement varies across different demographic groups (e.g., gender, age, education level

Table 9: ANOVA Results for E-Procurement Effectiveness

Factor	Sum of Square	Degree of freedom(df)	Mean of Square	F- Value	P-Value
Gender	5.45	1	5.45	4.23	0.046
Age	12.80	2	6.40	5.16	0.09
Education level	7.20	2	3.60	2.89	0.065
Error	95.40	34	2.81		
Total	120.85	39			

Source; Primary data, 2024

Gender (p = 0.046**):** The p-value is just below the conventional significance level of 0.05, indicating that there are statistically significant differences in e-procurement effectiveness between different genders. This suggests that gender may influence perceptions of e-procurement effectiveness.

Age (p = 0.09): The p-value is above 0.05 but below 0.10. This indicates a trend towards significance but is not statistically significant at the 0.05 level. There may be differences in e-procurement effectiveness based on age, but it's not strong enough to be considered statistically significant.

Education Level (p = 0.065**):** Similarly, the p-value is above 0.05 but below 0.10, suggesting a trend toward significance but not a statistically significant result at the 0.05 level. Differences in e-procurement effectiveness based on education level are not statistically significant.

4.7 Regression Analysis

Regression analysis helps in understanding how independent variables (e.g., training, IT infrastructure, costs) influence a dependent variable (e.g., quality of service delivery).

Table 10: Regression Analysis Results;

	Coefficient	**Standard Error**	**t- Value**	**p-Value**
Constant	2.50	0.50	5.00	0.000
E-Procurement Effectiveness	0.52	0.15	3.47	0.001
Training in E-Procurement	-0.080	0.10	-0.80	0.430
IT Infrastructure	0.34	0.12	2.83	0.008
Costs of Implementation	-0.19	0.13	-1.46	0.148

Source; Primary data, 2024

Constant (2.50, p = 0.000**):** This is the intercept of the regression model. It represents the expected quality of service delivery when all predictors are set to zero. It is statistically significant, indicating a baseline level of quality in service delivery.

E-Procurement Effectiveness (0.52, p = 0.001**):** This variable has a positive and statistically significant effect on the quality of service delivery. For each unit increase in e-procurement effectiveness, the quality of service delivery improves by 0.52 units. This suggests a strong positive relationship.

Training in E-Procurement (-0.080, p = 0.430**):** The coefficient is negative but not statistically significant (p > 0.05). This implies that training in e-procurement does not have a significant impact on the quality of service delivery in this context.

IT Infrastructure (0.34, p = 0.008): This variable has a positive and statistically significant effect on the quality of service delivery. Each unit increase in IT infrastructure is associated with a 0.34 unit improvement in service quality, highlighting its importance.

Costs of Implementation (-0.19, p = 0.148): Although the coefficient is negative, it is not statistically significant (p > 0.05). This suggests that costs of implementation do not have a significant impact on service quality in this case.

CHAPTER FIVE

DISCUSSION, SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

5.0 Introduction

This chapter highlights discussion and summary of major findings, recommendations and areas of further study. The study looked at the effectiveness of E-procurement and quality of service delivery in Roofing's Uganda Limited. The discussion of the study involves the findings on the relationship between E-procurement and quality of service delivery in Roofing's Uganda Limited. The discussion was based on the study objectives.

5.1 Discussions

Leenders, and Fearon, (1997) for the success of supply chain and e-procurement, the online system must always be updated with relevant information about potential suppliers. Short of that incapable suppliers may be select and this will result into poor performance in quality of service delivery. It should be noted that there are capable suppliers with good products but with no knowledge of how to do business online and hence the purchasing department should keep a kin eye about other suppliers other than those in the system.

Furthermore, e-procurement tools explained by Harink & Heijboer, (2002) such as e-tendering, e-payment, e-sourcing can only be effective and successful if both the parties involved are well conversant with technological advancements in conducting business online. Care must be taken as potential suppliers may be left out due to failure of being in position to do business online.

More still, the benefits of ICT in an organization can only be fully enjoyed when there is a proper and fully skilled human capital to monitor the performance of other lower level operational employees and also execute the functions as stated by the top level managers, Bradley & Nolan (1998) stated that the environment that the firm is dealing in determines and redefines the organization's distribution of power, function and control after installation of modern ICT infrastructures thus success but this must be done hand in hand with employee empowerment. On the other hand, introduction of e-procurement results into downsizing and thus some of the

employees have to lose their positions, in most cases low level performers lose their jobs for the new machine or ICT equipments.

E-procurement, face a challenge of human resource shortages causing increased cost of production and operations and furthermore affecting the return on investments, Aberdeen Group, (2004), however, all the challenges presented are short term in nature and there after the business will benefit especially during the median term and in the long run. Operation cost will be greatly reduced through the use of improved modern technologies which reduce on the cost of operation through employing a few technicians who can do work of more employees with help of machines.

The online e-procurement process by Kumar, (2006) poses some analytical threats that must be examined for instance online verification of bids of different suppliers pose a risk of choosing incomplete dealers since what is displayed online is very different from the physical appearance in terms of quality, therefore, before a suppliers is selected there is need to first visit his or her place of work to verify the supplies that will be supplied.

Furthermore, the online transacting of doing business must be critically examined by well skilled and experienced e-procurement officers supervised by more experienced and skilled procurement manager with help of the internal audit team to minimize on any would be false purchases.

Despite of the above benefits that come along with doing business online preferable the use of e-procurement, maximization of the benefits of e-procurement is not a concern of the procurement department individually in an organization but it requires the intervention and support of all the other departments in the organization through the various department heads such human resources department in charge of recruiting competent and skilled human capital, accounts department in charge of budgeting, and releasing funds that will be used in procuring the advanced and modern ICT equipment that support e-procurement.

5.2 Summary of findings

The purpose of the study was to establish the relationship between the effectiveness of E-procurement and quality of service delivery at E-Roofing's. The researcher found out that proper

implementation of ICT can help to improve quality of service delivery in Roofing's Uganda Limited.

5.2.1 Findings on effectiveness of e-procurement at Roofing's Uganda Limited.

The study revealed that the variables that define e-procurement such as e-tendering, e-purchasing, and e-payment are being used at the company. However, despite all of that, analysis revealed it that most of the online system is not fully utilized.

5.2.2 Finding on costs of E-procurement implementation

The study revealed that there are high costs involved in E-procurement implementation like purchase of new computers to enable E-procurement, higher of technical knowhow.

5.2.3 Findings on ICT infrastructure in place

The study revealed that Roofing's Uganda Limited is modernizing and improving its ICT infrastructures through purchase of new computers and software systems to help in the process of going online.

Further analysis indicates that development of ICT infrastructure at the company is still in its initial stage and only few top manager and senior supervisors can observe such changes. Technical staff members monitor the performance procurement department through the use of online system like e-tending and e-ordering and e-payment. This implies that only a few people at Roofing's Uganda Limited are responsible for monitoring work done by the procurement department and most of the supervision is done on line. To strengthen the performance and increase the quality of service delivery the company should also consider supervision of work through use of offline techniques like physical checkups of type, quality and quantity of supplies since what is decided on with suppliers with online system may be different.

5.2.4 Relationship between the effectiveness of e-procurement and quality of service delivery

Findings revealed that there is a strong positive relationship between e-procurement and quality of service delivery represented by majority of respondents supporting the many tools of e-procurement that have got a great impact on quality of service delivery explained e-tending, e-purchasing that help to increase on quality of service delivery. With further analysis it was

observed that customer complaints, and time taken to address customer needs have highly reduced with 90% and 75% reveal the fact. However, there is still a need attend to some gapes that still exists since Roofing Ltd still receives some complaints from some of the company's customers.

5.3 Conclusions

After carrying out a close analysis of the study findings, discussion based on study objectives, the following conclusions were made.

5.3.1 Conclusion on the effectiveness of E-procurement in Roofing's Uganda Limited.

After the discussion of chapter five, it was concluded that e-procurement can reduce on time take to produce purchase orders, and selecting suppliers since with e-procurement there is reduced paper work.

Further it was also concluded that E-tendering helps in selection of competent suppliers and thus this tool of e-procurement can strongly impact on supplier selection and ability to supply.

5.3.2 Conclusion on costs of E-procurement implementation.

It was concluded that the company has been spending a lot on moving its manual system of procurement to the electronic one which included purchase of computerized equipment and training of top level employees in procurement department since it was discovered that some of the employees in the same department never knew about the training. However, every employee in the procurement department should be given knowledge on how to use the electronic system if success in service delivery is to be achieved.

Further it was concluded that the company has got few professionals to undertake on the e-procurement work. This affects performance and quality of service delivery to clients of the company.

5.3.3 Conclusion on ICT infrastructure in place.

After the discussion of chapter four, it was concluded that Roofing's Uganda Limited should continue modernizing and improving its ICT infrastructures through purchase of new computers and software systems to help in the process of going online. Further analysis indicated that development of ICT infrastructure at the company is still in its initial stage and only few top

manager and senior supervisors can observe such changes so ICT in Roofing's Uganda Limited should be invested in more to improve on E- procurement in Roofing's Uganda Limited.

From objective four it was concluded that the effectiveness of E- procurement has a positive relationship with the quality of service delivery.

5.4 Recommendations

From the study findings, the researcher recommends that if E- procurement is to be implemented successfully and to discover the fruits of E-procurement the company have to do the following.

Roofings Uganda Limited should embark on E-procurement implementation to make it a general concern of the company by embracing all the benefits which come with E-procurement implementation and this can be mainly through involving all the employees especially in the procurement department. Trainings should be done with all employees.

Costs are always inevitable whenever e-procurement is just introduced since it involves purchase of computers, computer software, and employing skilled and training costs for any new upgrades in electronic mode of conducting business. However, costs tend to down in the future as most of the costs are to be incurred once. Therefore Roofings Uganda Limited should not forego e-procurement since the high costs are worthy of being incurred.

The ICT infrastructure right now at Roofings Uganda Limited can support E-procurement and its success however, ICT needs to be further improved through the purchase of more e-procurement electronic equipment like purchasing more computers, installing modern software systems which enable the effective performance of e-procurement which will then improve on quality of service delivery at the company.

Roofings Uganda Limited has weighed the benefits of implementing E-procurement, so it should invest more in implementing it as it knows the benefits behind its implementation..

5.5 Area for further study

E-tendering on organisational performance

E-procurement on service delivery of an organisation

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APPENDIX 1: QUESTIONNAIRE

Dear respondent,

I am ADRIKO HAROLD a student pursuing a Bachelor degree in Procurement and logistics management at Uganda Christian University. I am carrying out a study about **"OGANISATIONAL PERFORMANCE AND ELECTRONIC PROCUREMENT" using Roofing's limited as my case study.**

This survey is being undertaken to study and analyze the effectiveness of e-procurement as a key determinant of organization performance of Roofing's Uganda limited. Because you are one of my respondents, I therefore request you to kindly spare a few minutes of your busy schedule and fill this questionnaire. Your opinions will be of great importance in the findings of this research.

This study is totally for academic purposes and your sincere responses will be highly appreciated and shall be treated with utmost confidentiality.

SECTION A: BIO DATA

Help me classify your response by ticking the most appropriate opinion on the following facts.

1. **Gender (i)** Male ☐ (ii) Female ☐
2. **Age bracket; (i)** 18-30 Years ☐ (ii) 31-45 years ☐ (iii)Above 45 years ☐

3. Work experience;

(i) 0-2yrs ☐ (ii) 3-5yrs ☐ (iii) 6-10yrs ☐ (iv) above 10 years ☐

4. Education background

(a) Degree ☐ (b) Masters ☐ (c) Diploma ☐ (d) Others ☐

Please respond to the questions below by ticking the right box depending on the degree to which you agree or disagree with the statement.

SECTION B: EFFECTIVENESS OF E-PROCUREMENT

6. E-procurement reduces on the lead time for delivery of raw materials from suppliers.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

7. E-tendering processes results into easy selection of competent and potential suppliers.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

8. Procurement department of Roofing's Uganda Limited is well trained in e-procurement and business.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

9. Roofing's Uganda limited has got a good information technology structure that supports E-procurement.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

10. Suppliers of Roofing's Uganda limited have got applicable e-business technologies.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

11. E-procurement accelerates the flow of important information between the buyer and supplier.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

12. E-procurement helps to respond quickly to highly competitive new market entrants.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

13. E-procurement reduces inventory levels, hence costs associated with inventory management.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

14. E- procurement reduces the costs related to purchasing.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

SECTION C: ORGANISATION PERFORMANCE

15. Services provided on time.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

16. Consistent supply of raw materials.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

17. Suppliers of Roofing's Uganda limited are reliable.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

18. Services provided are accessible to the customers.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

19. Roofing's Uganda limited responds to customers' needs and demands.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

20. Employees are willing to provide quality services.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

21. There is exchange of information on organization performance between Roofing's Uganda limited and the customers.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

SECTION D: RELATIONSHIP BETWEEN THE EFFECTIVENESS OF E-PROCUREMENT AND ORGANISATION PERFORMANCE.

Please tick the most appropriate.

22. E-procurement results into quick and timely delivery of services.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

23. The use of E-procurement tools like E-tendering and E-sourcing can greatly help in identifying potential suppliers.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

24. E-procurement has improved on the business relationship between Roofing's Uganda limited and its suppliers.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

25. Roofing's Uganda Limited has greatly reduced on costs of inventory management due to use of E-procurement.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

26. E-procurement has helped Roofing's Uganda limited to produce on time and meet customers demand for products like Bread and cakes.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

27. Complaints from customers of Roofing's Uganda limited have greatly reduced after the implementation of E- procurement systems.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

28. E-procurement has greatly contributed to quality of organization performance.

Strongly disagree	Disagree	Neutral	agree	Strongly agree

31. State briefly any challenges and/or problems encountered in dealing with E-procurement

……
…

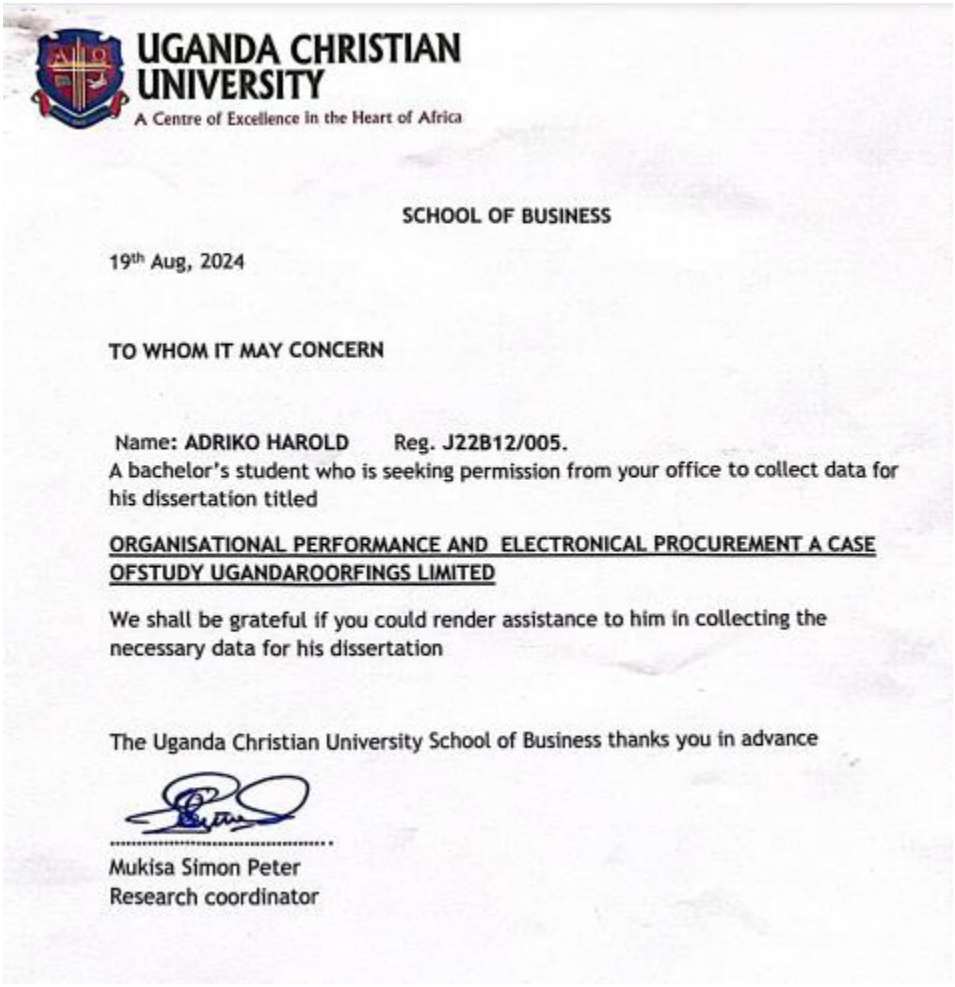
32. Suggest the ways of addressing challenges/problems mentioned above

……
…

……
…

Thank you for your cooperation

Appendix 2: Data collection letter



UGANDA CHRISTIAN UNIVERSITY
A Centre of Excellence in the Heart of Africa

SCHOOL OF BUSINESS

19th Aug, 2024

TO WHOM IT MAY CONCERN

Name: ADRIKO HAROLD Reg. J22B12/005.
A bachelor's student who is seeking permission from your office to collect data for his dissertation titled

ORGANISATIONAL PERFORMANCE AND ELECTRONICAL PROCUREMENT A CASE OFSTUDY UGANDAROORFINGS LIMITED

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

The Uganda Christian University School of Business thanks you in advance

.....
Mukisa Simon Peter
Research coordinator