

THE IMPACT OF E-PROCUREMENT ON ORGANIZATIONAL EFFICIENCY: A CASE STUDY OF KAMPALA CAPITAL CITY AUTHORITY

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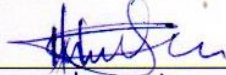
DECLARATION

I, **NAMBOZO WINFRED**, declare that this dissertation titled “The Impact of E-Procurement on Organizational Efficiency: A case study of Kampala Capital City Authority” is my original work and has not been submitted to any other university or institution of higher learning for the award of any academic qualification.

I also state that all information sources employed in this research have been appropriately recognized and referenced using the guidelines of the accepted scholarly sources.

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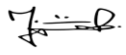
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APPROVAL

This dissertation, which is entitled The Impact of E-Procurement on Organizational Efficiency: A case study of Kampala Capital City Authority, has been presented to me as the academic supervisor to be examined.

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DEDICATION

This research work is dedicated to my favourite husband, Mwodi Martin K, whose support, encouragement, and understanding during all my academic years have been a compelling factor and my strength. Your patience, love, and faith in my skills made me stick to reaching this milestone.

This work is also dedicated to my dear sister, Kantono Shadiah Zaake, who has always loved me, encouraged and supported me throughout my studies. The moral support and kindness of yours played an important role in the successful fulfillment of this work.

Lastly, this research is dedicated to my beautiful and loveable children. The support you gave me, the love you showed me, and the happiness you provided me in my life gave me the strength to continue moving on even when I was faced with a difficult situation. I deeply love each of you and this success is as much yours as it is mine.

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LIST OF ABBREVIATIONS

ATLAS.ti	Qualitative Data Analysis Software
e-GP.....	Electronic Government Procurement
ICT.....	Information and Communication Technology
MIS	Management Information Systems
MTIC.....	Ministry of Trade, Industry and Cooperatives
PEOU.....	Perceived Ease of Use
PPDA.....	Public Procurement and Disposal of Public Assets Authority
PU.....	Perceived Usefulness
SRM.....	Supplier Relationship Management
SMEs.....	Small and Medium Enterprises
TAM.....	Technology Acceptance Model
UBOS.....	Uganda Bureau of Statistics
UNDP.....	United Nations Development Programme
KCCA.....	Kampala Capital City Authority

ABSTRACT

The study investigated the influence of e-procurement on cost efficiency of the Kampala Capital City Authority (KCCA) in particular, the level of e-procurement adoption, its influence on cost efficiency and the factors that hinder its successful adoption. The Technology Acceptance Model (TAM) and organisational e-readiness were used as theoretical framework. A quantitative cross-sectional survey design was adopted, with a survey sample size of 56 respondents from procurement, finance, ICT and administration departments at KCCA, of which 54 were properly responded to (96.4% response rate). The questionnaires were administered and analysed using descriptive statistics, Pearson's correlation and regression analysis with the help of SPSS.

The results showed that e-procurement adoption at KCCA is average with a grand mean of 3.49, suggesting that e-procurement is in place, but not yet fully integrated. It was also revealed that e-procurement has a positive impact on cost efficiency with a grand mean of 3.81, especially in terms of cost reduction, reduction in expenses for printing and distribution of documents and improved budget management. E-procurement also showed a positive impact on organisational efficiency with a grand mean of 3.74, suggesting that respondents generally believe e-procurement enhances efficiency. But results from Pearson correlation analysis showed that e-procurement adoption has weak positive but statistically insignificant correlation with organizational efficiency ($r = 0.218$, $p = 0.114$), and cost efficiency has weak positive but statistically insignificant correlation with organisational efficiency ($r = 0.064$, $p = 0.645$). There was also a weak negative and insignificant link between implementation challenges and organizational efficiency ($r = -0.083$, $p = 0.552$). The key challenges of e-procurement implementation include security, lack of coordination among departments, insufficient ICT infrastructure and poor internet connectivity with a grand mean of 4.27.

The study finds that while e-procurement can increase efficiency at KCCA, it is limited by partial implementation and implementation challenges. The study suggests strengthening the full integration of e-procurement systems, enhancing ICT infrastructure, staff training and capacity building, and coordination and monitoring processes to optimise efficiency benefits. The study adds to the evidence on e-procurement and efficiency in the Ugandan public sector.

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CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter will include the background of the study, statement of the problem, Purpose of the Study, Objectives of the Study, Scope of the Study, Significance of the Study, Limitations and Delimitations and Conceptual Framework.

1.1 Background to the Study

In the current business and public administration era, there is a growing use of information technology by organisations to enhance performance, transparency and delivery of services. Among the key technologies is e-procurement, which involves the use of electronic platforms and internet-based technologies to execute procurement processes such as requisition, sourcing, tendering, supplier selection, ordering, invoicing and contract administration. E-procurement is increasingly being used by organizations to enhance efficiency, lower administrative expenses and enhance accountability in procurement (Harelimana, 2018; Muhia & Afande, 2015).

The use of e-procurement has gained traction around the world as a way to digitise procurement from a paper-based and time-consuming activity into an integrated and information-driven process. In advanced economies, government agencies and businesses have embraced electronic procurement systems to improve efficiency, minimise paperwork, provide greater information access and transparency in dealing with suppliers (Ali, 2025). E-procurement has also been associated with organisational efficiency, including reduced procurement cycle times, improved record keeping and control of costs and adherence to procurement rules and regulations (Muhia & Afande, 2015).

The use of e-procurement has been increasing in Africa, particularly in countries that have undertaken e-government reforms. Many governments have introduced electronic government procurement systems to enhance value for money, minimise corruption and streamline procurement processes. But the outcomes have varied due to variations in infrastructure, institutional preparedness, human resource capacity and policy implementation (Chegugu, 2018). In some instances, they have successfully achieved their aim of improving efficiency, while in others, the organisations are still grappling with technical and operational challenges to effective implementation.

In Uganda, the adoption of digital procurement has been supported by reforms by the Public Procurement and Disposal of Public Assets Authority (PPDA) such as encouraging the use of the Electronic Government Procurement (e-GP) system in public organisations. These changes aim to enhance procurement processes' transparency, accountability and efficiency. However, many organisations still struggle with limited information and communications technology (ICT) infrastructure, change resistance, lack of staff training and poor integration of the digital systems

with the procurement process (Budthapa et al., 2024). Therefore, it is crucial to understand the role of e-procurement in improving organizational efficiency.

Kampala Capital City Authority (KCCA) offers a case in point to assess the effects of e-procurement on efficiency. KCCA is a public body that is responsible for many aspects of urban governance, service provision, infrastructure management, and administrative oversight in the capital city, and is involved in various procurement activities, which demand efficiency, transparency and accountability. It has increasingly adopted the use of computer systems to enhance its operations and service delivery. But the actual role of e-procurement in its efficiency in terms of cost reduction, time to complete procurement, information exchange with the suppliers, and procurement data integrity, is yet to be determined. This is important in the context of KCCA, where it is critical to deliver services in a timely manner and use public resources judiciously.

This study therefore aims to assess the effect of e-procurement on efficiency of the organisation at Kampala Capital City Authority. It looks at the influence of e-procurement on the procurement process speed, cost, transparency and performance within the authority.

1.2 Statement of the Problem

It's essential for organisations to administer procurement processes in a manner that's efficient, transparent and delivers value for money. Electronic procurement (e-procurement) is thought to advance these objectives by automating processes, cutting transaction costs, increasing information transparency and speeding up procurement processes (Ali, 2025). Ideally, these systems should improve the efficiency and responsiveness of procurement processes.

Yet, procurement in public institutions in Uganda remains inefficient. Manual approvals, slow communication, the use of paper-based documents and lack of system integration can all slow down procurement. This can lead to high administrative expenses, lack of coordination with suppliers and lack of transparency (Chegugu, 2018; Budthapa et al., 2024). While some institutions have adopted e-procurement systems, little research has examined the impact of e-procurement systems on efficiency.

Procurement is an essential function at KCCA, enabling service delivery in various departments. But there is little empirical evidence to demonstrate if e-procurement has enhanced efficiency at KCCA. We are yet to find out whether e-procurement has led to faster procurement process, reduction in procurement costs, improved transparency and better procurement decision making. In the absence of this evidence, it is challenging for managers and policymakers to develop strategies to enhance e-procurement. This research therefore aims to provide evidence by assessing the effects of e-procurement on efficiency at KCCA. The study will offer insights into the benefits and pitfalls of e-procurement and inform improved procurement policy and practice in the public sector.

1.3 Purpose of the Study

The purpose of this study is to examine the impact of e-procurement on organizational efficiency, using Kampala Capital City Authority as a case study.

1.4 Objectives of the Study

The study will be guided by the following objectives:

- i. To examine the extent to which e-procurement is adopted at Kampala Capital City Authority.
- ii. To assess the effect of e-procurement on cost efficiency at Kampala Capital City Authority.
- iii. To investigate the challenges affecting the effective implementation of e-procurement at Kampala Capital City Authority.

1.5 Research Questions

The study will seek to answer the following questions:

- i. To what extent is e-procurement adopted at Kampala Capital City Authority?
- ii. How does e-procurement influence cost efficiency at Kampala Capital City Authority?
- iii. What challenges affect the implementation of e-procurement at Kampala Capital City Authority?

1.6 Scope of the Study

1.6.1 Geographical Scope

Kampala Capital City Authority (KCCA), in Kampala, Uganda, will be the study site.

1.6.2 Time Scope

The study will look at 2019 to 2025 to cover the recent developments in e-procurement and efficiency.

1.6.3 Content Scope

The study will focus on e-procurement and its impact on organizational efficiency. Specifically, it will examine adoption levels, cost efficiency, and implementation challenges within KCCA.

1.7 Justification of the Study

E-procurement is adopted in public organisations to achieve transparency, curtail wastage and achieve better service delivery. But there is still a need for improvement in organisations to achieve these. This study is justified because it will provide empirical evidence of how e-procurement is contributing in improving efficiency at KCCA. It will provide insights to determine if e-procurement systems are realising the expected benefits and where to focus improvement efforts. The study will also help inform policy makers and managers to implement e-procurement in the public sector in Uganda.

1.8 Significance of the Study

The findings of this study are expected to be useful to several stakeholders.

For Kampala Capital City Authority and other public institutions, the study will benefit them in getting an insight into how to improve e-procurement to boost efficiency, reduce costs, and enhance accountability.

For policy makers and public institutions, especially those responsible for procurement and e-government, the study will give insights to guide reforms to improve the adoption of e-procurement in public institutions.

For scholars, it will contribute to the available knowledge on efficiency with e-procurement in Ugandan public institutions and may serve as a basis for more research building on these insights and evidence.

For IT vendors and software developers it may provide insights on features and functions of procurement systems that may be more suited for the public sector.

1.9 Limitations and Delimitations of the Study

1.9.1 Limitations

A limitation of the research could be respondents involved in procurement activities at KCCA may not be accessible.

Respondents might not be willing to share all information due to confidentiality concerns.

Time and financial resource constraints on data collection and analysis may occur.

Technology adoption is fast changing and so some of the findings may change in line with the new systems and policies adopted.

1.9.2 Delimitations

The study will only be confined to Kampala Capital City Authority (KCCA).

It will not be addressing all procurement issues but will be focusing on e-procurement and efficiency.

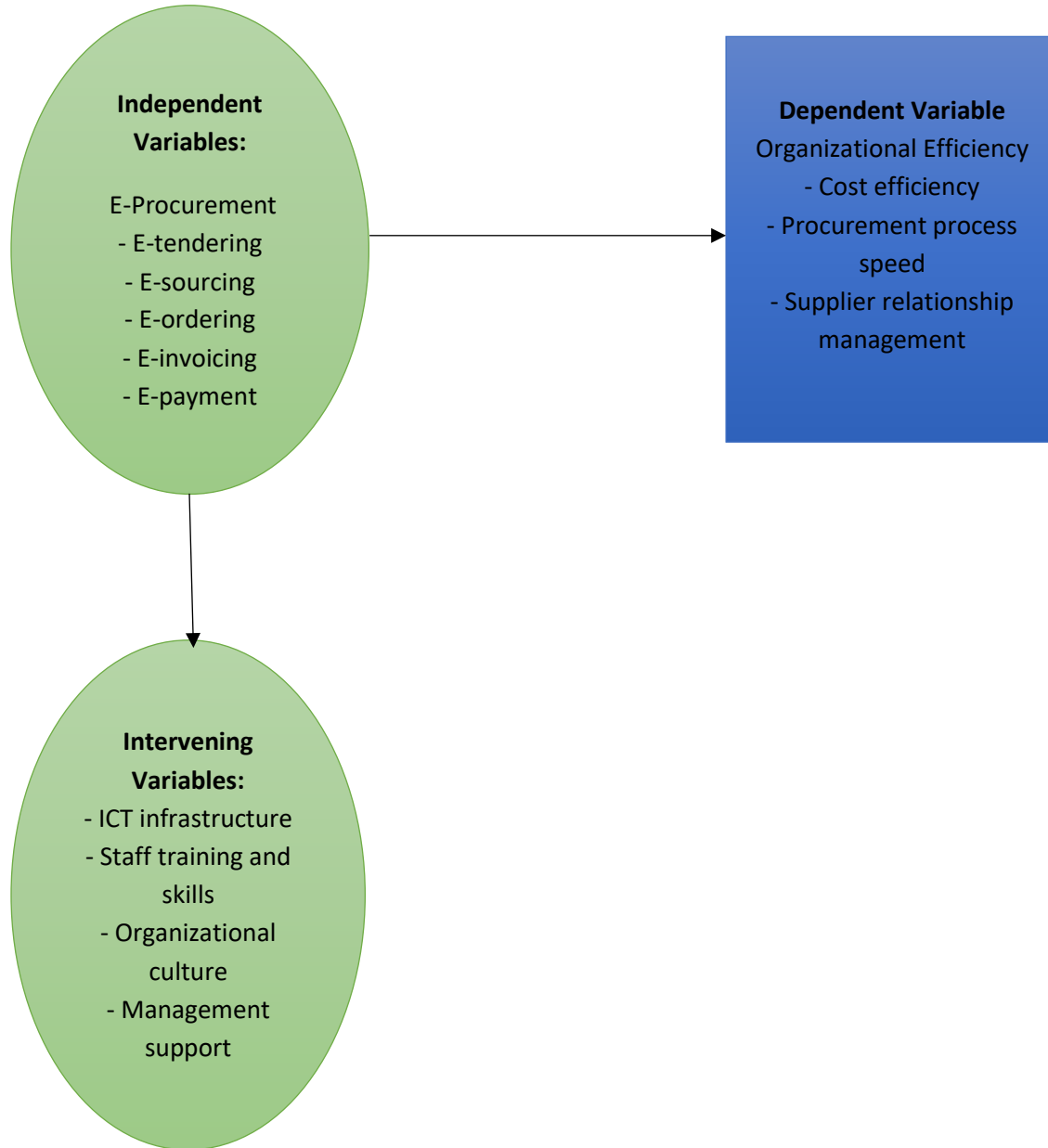
The study will not cover all government agencies in Uganda, but will be limited to KCCA.

It will particularly take into account the efficiency variables of cost, time and process improvement.

1.10 Conceptual Framework

The research is based on the assumption that e-procurement is the explanatory variable and efficiency is the outcome variable. E-procurement may influence efficiency by speeding-up

procurement processes, reducing paperwork, improving communication, facilitating easy record management, and reducing transaction costs. However, the relationship might be moderated by other factors such as ICT infrastructure, skills of employees, organisational and management readiness (Harelimana, 2018; Chegugu, 2018).



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews critically the theoretical and empirical studies on the adoption of e-procurement and its effect on the efficiency of organizations with specific attention on Kampala Capital City Authority (KCCA). This chapter will take the theoretical to the global and regional empirical evidence and synthesise this information to identify a knowledge gap in research that this study will seek to address.

2.1 Theoretical Review

This study draws heavily on the Technology Acceptance Model (TAM) and e-readiness, as theoretical framework. These offer two distinct perspectives on the behavioural aspect and organisational aspect of e-procurement use in the public sector.

2.1.1 Technology Acceptance Model (TAM)

Davis (1989) first proposed the Technology Acceptance Model Postulates that individuals' intentions to use a certain technology are largely based on two factors, perceived usefulness and perceived ease of use. These reflect, respectively, the extent to which a user sees that a system will be useful in helping them achieve their goals, and the degree to which the system will be perceived as being easy to use. According to the model, a positive perception on these measures results in favourable adoption intentions while a negative perception has a negative effect.

In the context of e-procurement, TAM provides a useful lens to explore potential drivers for acceptance or rejection of digital procurement platforms among employees within organisations like KCCA. Unless procurement officers' perceive the system is to be an error-prone work-around, or redefined their role to use the system, voluntary adoption is likely to be limited even if institutional directives mandate use. By contrast, if procurement officers see electronic platforms as being faster for approvals, less document-intensive and better for managing suppliers, it is likely that they will be more engaged with the technology. Yet, an important deficiency of TAM is its level of analysis (micro) which fails to incorporate macro-level considerations such as e-readiness (institutional and organisational readiness to adopt the technology), policy architecture for adoption or resource issues faced in the adoption of the technology in the public sector in developing countries.

2.1.2 The Concept of E-Readiness

This study also draws on the concept of e-readiness to complement the under-theorised organisational, infrastructural and resource-related factors that are relevant in the public sector of developing countries. E-readiness is defined by Mutula and Brakel (2006) as the ability of an organisation (and by implication an institutional milieu) to properly adopt, implement and maintain digital systems. E-readiness is multi-faceted and interrelated: it covers access to a reliable ICT

infrastructure, digital literacy of staff, internet access, interoperability of systems and organisational readiness to undergo the cultural and procedural changes that ensue from digital transformation.

E-readiness provides useful insights in public sector applications in sub-Saharan Africa where resource and institutional bottlenecks often come in the way of successful technology adoption. A system may be deployed to support e-procurement, and its utilisation mandated, but may have little impact if other conditions are not met. Under such circumstances, partial adoption, with the need to remain reliant on various manual procedures for parallel system operations becomes standard practice and the gains in efficiency expected from e-procurement fail to materialise. The e-readiness model therefore accounts for the gap between e-procurement adoption and process change in many government organisations.

2.1.3 Critical Success Factors in E-Procurement Implementation

Vaidya, Sajeew and Callender (2006) offer a related view of a set of critical success factors that influence the success of e-procurement reform. These comprise unmistakable active leadership, thorough training, strong data security, technical integration of departmental databases and continuous alignment during and beyond the period of reform. Their discussion confirms the need to conceptualise e-procurement not simply as a technology, but rather an organisational change management project that requires strategic and sustained leadership support, iterative user training and other forms of cross-functional coordination.

These theoretical insights produce a theoretical framing for this research. E-procurement will likely contribute to improved organisational efficiency where users feel the technology is useful and easy to use, where institutional conditions for e-operating exist, and where e-procurement implementation is well led with sufficient support. Any shortfalls in these dimensions create impediments that limit the use of the system and the efficiency gain. This perspective guides our exploration of the e-procurement system at Kampala Capital City Authority along the three lines of enquiry in this study.

2.2 Empirical Literature Review

2.2.1 Extent of E-Procurement Adoption in Organisations

Use of electronic (e-) procurement systems has grown exponentially in the past two decades worldwide, with organisations seeking to streamline procurement processes, promote transparency and manage costs. According to Ali (2025), with the advent of online procurement systems, procurement has shifted from being purely an administrative function, to a function that drives organisational performance and accountability. This perspective is supported by Harelimana (2018) who finds that having online procurement capabilities allows organisations to more efficiently communicate with vendors, minimise documentation and time effectively taken to conduct transactions. The result of which has been the upgrade of procurement from being viewed as an organisational inefficient bureaucratic process to be a value enhancer.

In developed economies, e-procurement is no longer an innovation but has been institutionalised. The technological and regulatory environment has enabled organisations to automate the process of procurement from initiation (identify requirement) and authorisation (authorise purchase), to selection of supplier, creation of purchase order and finance oversight of payment. In this case, the research question is not about the use or why e-procurement is important, but how to integrate it with other IT systems and supply chain management processes.

The story is different in Africa. Using Kenyan public institutions as a case study, Siricha and Theuri (2016) show that e-procurement systems have been an improvement in transparency and cost reduction of procurers, but adoption is uneven due to a persistent digital divide among the institutions. For some, there have been significant improvements in digitising important procurement processes but for others they were still relying on manual procedures despite being able to theoretically access online platforms. Panda, Sahu and Gupta (2010) also report that though several developing countries have initiated e-procurement reforms as part of broader PFM reforms, there is a significant gap between the e-procurement reforms planned and operationalised. The adoption is based on infrastructure, institutional and human resource capacity.

In Uganda, institutional mechanisms for e-procurement are mostly provided by the Public Procurement and Disposal of Public Assets Authority (PPDA) and other e-governance initiatives. Both efficiency, accountability and value for money have been the overarching goal of the reforms in Uganda, notes Agaba and Shipman (2018). However, the outcomes are mixed., according to Katana (2011), while organisations are generally not opposed to electronic procurement, the process is constantly retarded by low e-readiness in organisations, a lack of capacity building activities for their staff, and adverse attitudes in organisations familiar with manual procurement practices. Muhia and Afande (2015) also reveal a majority of public organisations in Uganda operate a blended procurement system with e-tools, but alongside manual processes, resulting in the diffusion of the benefits of e-procurement.

Adoption of e-procurement has implications for KCCA's operations. Being the lead government authority in the provision of urban services, infrastructure management and administrative governance of the capital city of Uganda means procurement is vital for KCCA to fulfil its role. The lack of equal adoption affects procurement efficiency and transparency, the auditability of procurement activity and the stakeholder validity of procurement decisions. The majority of evidence suggests that adoption by KCCA is likely to be piecemeal and fragmented, and whilst this raises a need for empirical study in itself, it's likely to shape expectations of the current research.

2.2.2 Effect of E-Procurement on Cost Efficiency

Better cost efficiency is surely the most anticipated outcome from e-procurement systems, and there is an empirical confirmation of this with some key qualifications on implementation success. The rationale for cost efficiencies with e-procurement is simple: e-procurement systems reduce the cost of paper form, storage, and shipping of forms; reduce the time cost (opportunity cost) of

requisition approval; and enable systematic controls of procurement processes, which minimises the potential for leakages and procurement waste (due to duplicate procurement spending). The above argument is substantiated by Budthapa et al. (2024), which establishes a positive statistically significant impact of e-procurement use on organisational performance outcomes, by virtue of improvements in procurement performance costs.

Meanwhile, Bruno et al. (2005) offers a transaction cost argument, in which e-procurement reduces transaction costs mainly in two ways, computerised automation of mundane procurement tasks reduces the resource costs of labour for procurement processes and computer-to-computer integration of procurement agencies and their suppliers eliminates intermediaries that traditionally introduced delays and cost with respect to approval of procurement requisition, selection of suppliers, and preparation of procurement orders. Overall, the procurement process is more efficient with fewer organisation resources required per dollar through-put. Ali (2025) builds on this idea by demonstrating that e-procurement initiatives also increase resource efficiency before procurement, as real-time data collection and automatic monitoring of the budget stop under-procurement (insufficient qualification of service contribution) and over-procurement (waste of capital resources).

The public sector academic literature adds to this by linking e-procurement to value for money - which combines the elements of cost, quality, compliance and accountability. Harelimana (2018) illustrates how e-procurement boosts mechanisms of public procurement through public tenders through increased bid comparison and procurement oversight. This is particularly important for sites where previously there have been procurement anomalies that have led to distrust of procuring public institutions. The results of Siricha and Theuri (2016) in Kenya agree, with substantial reductions in transaction costs, and improvements in transparency due to e-procurement use in public institutions.

In Uganda, cost efficiencies stemming from the use of e-procurement are made more relevant given the realities of resource scarcity that public institutions operate in and the demands for greater accountability expected of public institutions. Chegugu (2018) argues one of the benefits of e-procurement is that budget accountability can be improved by the more timely and accurate expenditure data that is made available and the audit trail that enables waste to be removed. But, as is important for our discussion, the authors caution that cost efficiency benefits will only be realised if e-procurement implementation is pervasive. The inclusion of parallel manual processes and manual (staff) data entry, means that the e-procurement software is a cost and not a support for cost efficiency, and any efficiency gain is potential rather than actual.

For KCCA in particular, potential cost efficiency gains from e-procurement may be realised in a number of ways; shorter time taken for each procurement transaction, reduced costs incurred on printing, hard filing, and managing documents, improved competitiveness of the selection process (as it facilitates more rigorous bidding assessment), and better tracking of outstanding commitments for procurement against authorised procurement budgets. There is sufficient basis

in the literature to anticipate cost improvements in each case from successful e-procurement implementation; there is equally sufficient basis to urge caution in making a cost improvement to e-procurement adoption if e-procurement is only partially implemented.

2.2.3 Challenges Affecting the Effective Implementation of E-Procurement

Although e-procurement has been shown to have efficiency promise, realisation of this promise often falls short. The literature has identified a coherent array of challenges and bottlenecks (technical, behavioural, institutional, capacity) which are observed across different organisations and geographies, and are especially present in developing country public sector organisations.

A key constraint is infrastructure shortcomings. Mutula and Brakel's (2006) e-readiness model notes the need for robust ICT infrastructure to support digital systems and resource deficits in this area are thus a direct catalyst for implementation problems. The inability to connect to the system at all points (today, often with inconsistent internet connectivity) or the incompatibilities of old data management practice with new electronic tools and processes disrupts the continuous access to systems that e-procurement relies on. Outages therefore push employees to fall back on manual processes even when there is a will to adopt new digital systems, perpetuating hydration inconsistent with maximum efficiency. This challenge has been well documented in Uganda, where network provision remains patchy, as an impediment to digital public administration generally.

The second impediment is resistance to change, at the personal level. In line with Davis's (1989) understanding, resistance often comes from perceptions by employees that the new system is not as easy to use, not as effective or more personally risky than the previous manual system. In organisations where procurement officers have established procedural proficiency and informally built up power based on the manual procurement systems, adoption of digital systems may be seen as an assault or threat. Their resistance can take a passive form demonstrated by limited use of digital systems and tools or as an active form where they choose to retain paper-based procedures that sidestep requirements to digitise formal procurement processes.

Lack of training and skills compound both infrastructural and resistance issues. Budthapa et al. (2024) emphasise that successful implementation of e-procurement is heavily reliant on the skills of the individuals; if not well understood e-procurement systems are either underutilised or misused in a manner that generates new inefficiencies and entrenches existing ones. This is supported by Muhia and Afande (2015), who report that many public organisations in Uganda continue to cite inadequate technical training as a key reason why e-procurement reforms have yet to be adopted, with many users not having the necessary IT competency to use e-procurement systems, especially when systems are revised or reengineered.

Government and institutional factors compound the issues. Katana (2011) suggests that uncertainties around procedural rules, lack of enforcement of compliance and weak engagement at senior levels of management contribute to organisational cultures where e-procurement reform is adopted but not operationalised. Unclear responsibilities for system monitoring, lack of

coordination across procurement units and other administrative units, and the lack of meaningful consequences for non-compliance, all decrease the likelihood that e-procurement will be institutionalised as business practice. Agaba and Shipman (2018) further add to this list of factors impediments to procurement reforms in developing country contexts that are attributable to bureaucratic resistance and inadequate administrative capacity that make sustained adoption of complex digital procurement systems challenging.

The association of these factors is likely and indeed, expected at KCCA. User resistance grounded in the comfort with familiar manual processes, uneven system uptime, limited and intermittent training and lack of co-ordination between different departments in the procurement process may place constraints on the Authority's capacity to achieve efficiency gains that would potentially be unleashed by the adoption of e-procurement systems. The nature of these challenges and their relative importance at KCCA are therefore critical to understanding how and why the use of e-procurement systems may fall short of impacting productivity and efficiency, and form a key empirical focus of this study.

2.3 Synthesis and Research Gap

This chapter's review of the literature reveals some clear empirical and conceptual trends essential to this research. First, there is an increase in the e-procurement adoption across the world but with varying degrees of implementation across organisations and there is a disproportionate representation of developing country public sector organisations with partial and intermittent adoption rather than digital transformation. Second, when successful, e-procurement has the potential to enhance cost efficiency with reduced transaction costs, streamlined administration, increased competition among suppliers and improved expenditure monitoring. Third, this potential is not always realised; it depends on ensuring a suitable infrastructure environment, user skills, maintaining institutional support and managing the transition towards change. Failure to meet these requirements makes e-procurement systems a cost and not an efficiency factor.

Despite this wealth of knowledge, there remains a substantial gap in the literature with regard to e-procurement in the Ugandan context and the KCCA in particular. Most of the extant work on e-procurement either focuses on high-income countries, in which institutional arrangements differ significantly from those found in Uganda, or at a general level, in which a large sample of public sector institutions are discussed without consideration of the institutional differences that might explain outcomes in individual institutions. There is relatively little research that does explore specific institutions and that does look at multiple aspects of e-procurement (adoption, cost-efficiency effects and barriers to implementation) within a single institutional framework. This means that the factors underlying differences in e-procurement in individual Ugandan public institutions including KCCA remain little understood.

This study seeks to address that by providing primary evidence from KCCA, an institution that given its size, operational complexity and role in the management of urban affairs in Uganda is a critical location for such research. Through analysis of e-procurement adoption, cost efficiency

and implementation challenges - within a single empirical lens - the study seeks to inform both the academic literature on public sector e-procurement in sub-Saharan Africa, and the evidence for practitioners and policymakers looking to enhance procurement performance in similar organisational contexts.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter outlines the research design of how the study of e-procurement impact on organisational efficiency will be done at Kampala Capital City Authority (KCCA). It includes the research design, population, sample size, sampling techniques, data collection methods, data collection instruments, validity and reliability, data collection procedures, data management and analysis and ethical considerations.

3.1 Research Design

The study aims to adopt a quantitative, descriptive and cross-sectional survey research design. The cross-sectional design refers to a collection of data at a point in time from a specified population to allow the researcher to look at the distribution of variables and relationships between variables (Kesmodel, 2018; Kothari 2009). This type of design is appropriate for the current study since the three main research objectives of establishing the extent of e-procurement uptake, the influence of e-procurement on cost efficiency and assessing the challenges e-procurement implementation at KCCA are best answered by using current information.

The descriptive aspect of the design allows for a comprehensive description of the e-procurement status quo at the Authority (such as the uptake, efficiency improvements and obstacles encountered). The correlational part, powered by a regression analysis, provides the extent and direction of the statistical association between e-procurement and efficiency. The quantitative approach is desirable because the study aims at explaining, measuring and generalising the study results by drawing statistical inferences, in line with the underpinning positivist approach being adopted in a study of this kind (Creswell, 2014).

3.2 Study Population

The population for the study is KCCA staff with roles that have any direct or indirect association with procurement. The target population was identified by focusing specifically on those four departments who have direct operational links to the procurement system: the Procurement and Disposal Unit, who is mainly responsible for procurement processes; the Finance Department, who gives authorisation for payment disbursement; the ICT Department, who controls the IT infrastructure supporting the e-procurement system; and the Administration Department, who provides supportive administrative functions and procurement documentation control. These four departments represent a target population of 65 staff (see Table 3.1 below).

Table 3.1: Study Population Distribution by Department

S/N	Department	Population (N)	% of Total
1	Procurement and Disposal Unit	15	23.1%
2	Finance Department	18	27.7%
3	ICT Department	12	18.5%
4	Administration Department	20	30.8%
	Total	65	100%

Source: KCCA Staff Records (2025)

3.3 Sample Size Determination

Because of the small size and accessibility of the target population of 65 staff, it seemed prudent to adopt an approach approaching to census to ensure sample representativeness. Yamane (1967) recommends an approximation of the sample size for a finite target population, a common formula in used in sampling:

$$n = N / [1 + N(e)^2]$$

Where:

n = required sample size

N = total population size (65)

e = acceptable margin of error (0.05, representing a 95% confidence level)

Substituting the values:

$$n = 65 / [1 + 65(0.05)^2]$$

$$n = 65 / [1 + 65(0.0025)]$$

$$n = 65 / 1.1625$$

$$n \approx 56$$

Based on this, a sample size of 56 was established. This sample was then spread proportionately across the four departments using the formula $n_i = (N_i/N) \times n$, where n_i is the sub-sample in department i and N_i the population in department i (see table 3.2).

Table 3.2: Sample Size Distribution by Department

Department	Population (N _i)	Calculation ($N_i/N \times n$)	Sample (n _i)	Technique
Procurement & Disposal Unit	15	$15/65 \times 56$	13	Purposive
Finance Department	18	$18/65 \times 56$	15	Simple Random
ICT Department	12	$12/65 \times 56$	10	Purposive
Administration Dept.	20	$20/65 \times 56$	18	Simple Random
Total	65		56	

Source: Researcher's Computations.

3.4 Sampling Techniques

A combination of sampling techniques, purposive and random sampling, will be used in order to mix the data collection sampling techniques to be inclusive of departmental populations, while at the same time making the sample representative of a population with specialised knowledge.

3.4.1 Purposive Sampling

Purposive sampling was used for the Procurement and Disposal Unit and the ICT Department. Employees from these units were chosen because of their particular connection with e-procurement systems: procurement officers are responsible for the day-to-day procurement transactions using digital platforms while ICT staff are involved with the configuration and maintenance of the digital platforms. Their feedback is highly specialised and valuable to the research. This is a justified use of purposive sampling, as it allows access to information-rich subjects who can give the most relevant information about a particular phenomenon (Patton, 2002).

3.4.2 Simple Random Sampling

The Finance and Administration Departments were selected using simple random sampling, as positions in these departments tend to be more balanced and uniform in comparison, as well as the level of e-procurement expertise amongst these staff is more minimal. This method guarantees the probability of selection for all members of the eligible population is equal and independent of that for each other member, thus minimising selection bias, while preserving statistical

representativeness of the sub-samples (Kothari 2009). Through a lottery, all staff with access to an e-procurement system will be numbered and they will be selected randomly without replacement.

3.5 Data Collection Methods

A self-administered questionnaire survey will be used to gather data. The questionnaire survey is adequate for a number of reasons. First, it permits the simultaneous gathering of standardised data from a diverse group across KCCA's offices, facilitating efficient data collection within the time frame of this study (Kothari, 2009). Second, a formal instrument means that every participant will face the same questions in the same order, which is crucial for the generation of standardised quantitative data, which can be statistically analysed. Third, the staggering effect often attributed to anonymity in a self-administered survey may increase the candour of the user's responses to questions on sensitive issues such as non-compliance with the system or institutional weaknesses.

3.6 Research Instrument

The key data collection tool is a questionnaire with closed-ended questions, which is divided into four sections that each relate to a variable of interest.

Section A focuses on respondents' personal details: their gender, age, level of education, department and time spent with KCCA. This section allows descriptive overview of the data, and the ability to compare across respondent types.

Section B deals with the adoption of e-procurement at KCCA. As items, this section measures the extent of use of e-procurement systems, use of e-procurement system to complete procurement processes, user familiarity with functions of the systems, and perceived organisational support for e-procurement.

Section C looks into the impact of e-procurement on cost efficiency. Items measure respondents' perceptions of change to the time taken in the procurement process, the cost of preparing documents, error rates, the accuracy of budget control and total procurement costs since the adoption of e-procurement systems.

Section D focuses on the barriers to successful e-procurement. The items deal with the design of IT infrastructure, the provision of training, the level of resistance to shift in practice, system reliability and institutional governance of e-procurement process.

Items in Sections B, C and D are assessed on a five-point Likert scale, anchored at 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree and 1 = Strongly Disagree. Using a Likert scale allows us to gather ordinal data that reflect the direction as well as the intensity of respondents' attitudes, perceptions, and judgements of experience (Bryman, 2016).

3.7 Validity of the Research Instrument

3.7.1 Content Validity

Expert review, a commonly practised technique for measuring content validity, was used to ensure that the questionnaire items comprehensively cover the theoretical constructs of the variables (Lynn, 1986). The questionnaire was reviewed by the supervisor of the study and two experts in the relevant area, from the Faculty of Business and Administration. The experts reviewed the items for clarity, relevance, and representativeness of the study constructs, and their suggestions were incorporated to revise or re-arrange items or delete them if deemed appropriate.

3.7.2 Construct Validity

During the piloting process, the construct validity of the measure was assessed in part through item-total correlations (within scales). Any item with inter-item correlations less than 0.30 was examined and either modified or dropped, in line with the recommendation that items within a scale should be correlated to reflect measurement of the same underlying construct (Field, 2018).

3.8 Reliability of the Research Instrument

Reliability is the extent to which a measurement tool yields consistent and accurate results under similar measurement conditions (Tavakol & Dennick, 2011). The instrument's internal consistency was measured by piloting it among a sample of 10 respondents from a similar public institution not in the sample. The pilot sample was chosen to match the sample of the main study in terms of their age, level of education and occupation to ensure that the reliability estimates were relevant.

The study measured internal consistency with Cronbach's coefficient alpha (α), which reflects the extent to which items in a scale collectively represent a common construct. I adopt the criteria recommended by Peterson (1994) and Tavakol and Dennick (2011) that accept $\alpha \geq 0.70$ for similar studies. The results of the pilot test's reliability analysis are tabulated in Table 3.3.

Table 3.3: Reliability Statistics from Pilot Test

Variable / Scale	No. of Items	Cronbach's α	Decision
E-Procurement Adoption	7	0.78	Accepted
Cost Efficiency	7	0.81	Accepted
Implementation Challenges	8	0.75	Accepted
Organisational Efficiency	5	0.72	Accepted

Source: Pilot Study Data.

The Cronbach's alpha coefficients for the four scales ranged between 0.72 and 0.81, with each score equal to or above 0.70. These statistics validate the fact that the instrument is very reliable and the items contained in each scale correlate well enough to allow for the composite scores to be computed and used for inferential purposes.

3.9 Data Collection Procedure

I will conduct the questionnaires via google forms, sending it to each concerned department. I will be on hand to clarify any questions and to increase response rates. The time allowed for completing and returning the questionnaires will be between 5-7 days, after which questionnaires will be collected. Responses with over 20% of items uncompleted will be purged from the analysis. The expected response rate (using personal administration method) is 90% or higher.

3.10 Data Management and Analysis

3.10.1 Data Preparation

Upon completion, all questionnaires will be checked for completeness and consistency. A unique code will be allocated to each questionnaire for data entry tracking purposes and to ensure anonymity will be maintained. The data will be entered into the software SPSS version 25. Before data analysis, the data will be checked for data entry errors, missing values and outliers, and any issues addressed according to standardised data cleaning processes.

3.10.2 Descriptive Analysis

Descriptive data will be generated for all variables to describe the data distribution. These will be frequencies and percentages for background and categorical variables, and means and standard deviations for the items rated on a Likert scale. Means will be interpreted as follows, according to the decision rule for the five-point scale: 1.00-1.79 = strongly disagree; 1.80-2.59 = disagree; 2.60-3.39 = neutral; 3.40-4.19 = agree; 4.20-5.00 = strongly agree. For reporting purposes, 'Strongly Agree' and 'Agree' will be combined to indicate overall agreement, and 'Strongly Disagree' and 'Disagree' to indicate overall disagreement.

3.11 Ethical Considerations

This study will be conducted in accordance with the ethical guidelines for research with human participants in the social sciences. Prior to data collection, institutional ethical approval will be sought from the University through my supervisor, and permission will be sought from KCCA management for the research.

Since the data is being collected digitally, consent shall be thought through accepting to take part in the study and respond to the questionnaire.

Anonymity and confidentiality will be ensured. The questionnaire will only include a code number, and no individual questionnaire responses will be published in a way that might allow the identification of respondents or departments. All data will be held securely on password-protected

devices and will be accessible only to me and my supervisor, held as long as is required by the institution's research data retention and disposal policy, and then disposed of securely.

All sources of secondary data used in the preparation of this study will be properly referenced and cited, in line with principles of academic integrity and to prevent plagiarism.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Introduction

This chapter discusses the presentation, analysis and interpretation of the data gathered from the respondents of the Kampala Capital City Authority (KCCA). It is structured according to the objectives of the study: level of e-procurement adoption; impact of e-procurement on cost efficiency; and factors hinder the effective implementation of e-procurement.

4.1 Response Rate

Fifty-six questionnaires were sent to sampled staff of four departments at KCCA. A total of 54 questionnaires were returned and the response rate was 96.4% as indicated in Table 4.1 below. Only two questionnaires were not returned; one from the Finance Department and one from the Administration Department as the respondents were not available to answer the questionnaire during the follow-up visits. Fincham (2008) contends that a response rate of 50% is acceptable for a survey. This means that the response rate in this study, 96.4%, is very good and the results can be generalised to the target population.

Table 4.1: Response Rate by Department

Department	Questionnaires Issued	Questionnaires Returned	Response Rate (%)
Procurement & Disposal Unit	13	13	100%
Finance Department	15	14	93.3%
ICT Department	10	10	100%
Administration Department	18	17	94.4%
Overall	56	54	96.4%

Source: Primary Data (2026)

4.2 Background Information of Respondents

This chapter describes the background information of the 54 respondents that took part in the study. The background characteristics being looked at include; gender, age, educational level, years of experience with KCCA, and department. These are summarised in Table 4.2 below.

Table 4.2: Background Information of Respondents

Item	Details	Frequency	Percentage (%)
Gender	Male	32	59.3%
	Female	22	40.7%
	Total	54	100.0%
Age Bracket	20–29 years	14	25.9%
	30–39 years	23	42.6%
	40–49 years	14	25.9%
	50 years and above	3	5.6%
	Total	54	100.0%
Level of Education	Certificate	2	3.7%
	Diploma	13	24.1%
	Bachelor's Degree	29	53.7%
	Postgraduate Degree	10	18.5%
	Total	54	100.0%
Years of Experience	Below 1 year	7	13.0%
	1–3 years	17	31.5%
	4–6 years	20	37.0%
	7 years and above	10	18.5%
	Total	54	100.0%

Item	Details	Frequency	Percentage (%)
Department	Procurement & Disposal Unit	13	24.1%
	Finance Department	14	25.9%
	ICT Department	10	18.5%
	Administration Department	17	31.5%
	Total	54	100.0%

Source: Primary Data (2026)

As revealed in Table 4.2, the majority of the respondents were males (59.3% n=32) while females contributed 40.7% (n=22). This gender distribution is reflective of the demography of procurement-related departments in Uganda's public sector where the number of males employed is higher than females, similar to what Agaba and Shipman (2018) reported about the demography of Uganda's public procurement institutions.

In terms of age, the largest category was 30-39 years who accounted for 42.6% (n=23). This was followed by the 20-29 and 40-49 age groups, each having a share of 25.9% (n=14), while the 50 years and above age group had a share of 5.6% (n=3). This age spread suggests that most of those engaged in procurement activities at KCCA are in their peak earning years, and this is likely to impact positively on their attitude towards the use of digital technologies.

In terms of education levels, most respondents had a Bachelor's Degree (53.7%, n=29), followed by Diploma (24.1%, n=13), Postgraduate Degree (18.5%, n=10) and Certificate (3.7%, n=2). The high level of education among the respondents suggests that KCCA staff possess the educational background needed to use digital procurement systems.

In terms of years of experience, the largest group had 4–6 years of experience (37.0%, n=20), followed by 1–3 years (31.5%, n=17), 7 years and above (18.5%, n=10), and below 1 year (13.0%, n=7). The high proportion of those with moderate to long years of experience in KCCA suggests they would be familiar with KCCA procurement processes and systems, and their views on the adoption of e-procurement and efficiency of procurement would thus be significant.

In terms of departmental representation, the largest representation was from the Administration Department (31.5%, n=17), followed by Finance (25.9%, n=14), Procurement and Disposal Unit (24.1%, n=13) and ICT (18.5%, n=10). This is in line with the proportional sampling plan, as outlined in Chapter Three.

4.3 Description of the Dependent Variable: Organisational Efficiency

Organisational efficiency, the dependent variable, was measured by the questionnaire item C10 that asked respondents to indicate whether the use of e-procurement had enhanced organisational efficiency at KCCA. It was rated on the 5-point Likert scale with 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree and 1 = Strongly Disagree. Table 4.3 shows the descriptive statistics for this item.

Table 4.3: Descriptive Statistics for Organisational Efficiency (Dependent Variable)

No.	Statement	SA	A	N	D	SD	Agree F(%)	Disagree F(%)	Mean	SD
1	E-procurement has improved organisational efficiency at KCCA	7	24	14	9	0	31 (57.4%)	9 (16.7%)	3.54	0.926

Source: Primary Data (2026)

In Table 4.3, it can be seen that 57.4% (n=31) of the respondents agreed or strongly agreed that e-procurement improved organisational efficiency at KCCA, 16.7% (n=9) disagreed and 25.9% (n=14) were neutral. The mean of the item (3.54) and the standard deviation (0.926) for this item (interpreted on the scale proposed in Chapter Three (3.40-4.19 = agreement) indicate agreement. But the significant percentage of neutral responses and the middle range of the mean indicates that while efficiency improvements are felt, they are not yet universally felt by all respondents. This perception is in line with Karuhanga and Ahimbisibwe (2021) who reported improved efficiency from e-procurement is dependent on the extent and consistency of system adoption.

Further, to the question, "Has e-procurement improved efficiency at KCCA" (Section E, Question 1), 72.2% of respondents (n=39) answered Yes, 14.8% (n=8) No and 13.0% (n=7) were Not Sure, which also verifies the positive, but not overly enthusiastic, response to e-procurement's impact on efficiency.

4.4 Extent of E-Procurement Adoption at KCCA

The first goal of the study was to assess the level of e-procurement adoption at Kampala Capital City Authority (KCCA). Eight items (B1-B8) scored on a five-point Likert scale were used to measure this construct. Table 4.4 shows the results.

Table 4.4: Descriptive Results for E-Procurement Adoption (Section B)

No.	Statement	SA	A	N	D	SD	Agree F(%)	Disagree F(%)	Mean	SD
1	KCCA uses e-procurement systems in procurement activities	10	27	12	5	0	37(68.5%)	5(9.3%)	3.78	0.861
2	Staff are familiar with available e-procurement systems	13	29	7	5	0	42(77.8%)	5(9.3%)	3.93	0.866
3	Most procurement activities are conducted electronically	11	24	10	9	0	35(64.8%)	9(16.7%)	3.69	0.987
4	Tendering processes are handled electronically	11	25	13	5	0	36(66.7%)	5(9.3%)	3.78	0.883
5	Purchase orders and approvals are processed electronically	9	26	11	8	0	35(64.8%)	8(14.8%)	3.67	0.932
6	E-procurement has been fully integrated at KCCA	0	6	17	21	10	6(11.1%)	31(57.4%)	2.35	0.914
7	Management supports use of e-procurement systems	11	25	11	7	0	36(66.7%)	7(13%)	3.74	0.935
8	Staff receive adequate training on e-procurement systems	6	13	14	15	6	19(35.2%)	21(38.9%)	2.96	1.197

Source: Primary Data (2026)

Table 4.4 shows a varied but overall moderate level of e-procurement uptake at KCCA. The highest mean of 3.93 (SD = 0.866) was found in staff awareness of the e-procurement systems (77.8% agreement), which could indicate a high level of knowledge. This is followed by support from management for the use of e-procurement (Mean = 3.74; SD = 0.935, 66.7% agreement), the use of e-procurement systems in procurement processes (Mean = 3.78; SD = 0.861, 68.5% agreement), and electronic tendering processes (Mean = 3.78; SD = 0.883, 66.7% agreement). This

suggests that certain areas of the procurement cycle, especially the areas directed by management have realised moderate to good levels of adoption.

But the data also highlight ineptitudes. The mean (2.35; SD = 0.914) for complete integration of e-procurement at KCCA was the lowest among the items, with only 11.1% of respondents agreeing and 57.4% disagreeing. This suggests that while various procurement activities have been digitised, there is no e-procurement solution covering the entire procurement process. Likewise, the adequacy of training of staff in the use of e-procurement software systems only scored a mean of 2.96 (SD = 1.197), with 38.9% of respondents disagreeing that training was adequate the highest disagreement rate among all Section B items. These results corroborate the concerns expressed by Tumwebaze and Nduhura (2022), who reported that inadequate training capacity is one of the most persistent challenges in the adoption of e-procurement system in Ugandan public organisations.

The section mean for the eight items on e-procurement adoption was 3.49 (SD = 0.371), which falls in the agreement range of the interpretation scale, suggesting a moderate level of adoption. Overall, the evidence suggests a scenario where KCCA has made some progress in some e-procurement areas (particularly awareness and management commitment) but has not yet reached a point where it is fully integrated into its operations, as is the case with the hybrid adoption identified by Tumwebaze and Nduhura (2022) in Ugandan public organisations.

4.4.1 Correlation Analysis: E-Procurement Adoption and Organisational Efficiency

A Pearson's correlation coefficient was calculated to determine the level of relationship between e-procurement adoption and organisational efficiency. The results are shown in Table 4.4.1.

Table 4.4.1: Correlation Analysis; E-Procurement Adoption and Organisational Efficiency

		Org_Efficiency	EP_Adoption	N
Org_Efficiency	Pearson Correlation	1	0.201	54
	Sig. (2-tailed)	.	0.146	
	N	54	54	
EP_Adoption	Pearson Correlation	0.201	1	54
	Sig. (2-tailed)	0.146	.	
	N	54	54	

Source: Primary Data (2026)

The Pearson correlation coefficient in Table 4.4.1 between e-procurement adoption (X1) and organisational efficiency (Y) is $r = 0.201$ with a two-tailed p-value of $p = 0.146$. The p-value of 0.146 is greater than 0.05, so the correlation is not significant at the common significance level of 5%. Although the positive sign of $r = 0.201$ indicates a weak linear relationship between e-procurement adoption and organisational efficiency (i.e. higher adoption associated with slightly higher perceived efficiency) this relationship cannot be extended to the population with statistical certainty. Such a finding is also in line with that of Karuhanga and Ahimbisibwe (2021) who also found that while the mere adoption of e-procurement rather than its full integration into the organisation and supporting institutional arrangements may not lead to cost efficiency. The lack of significance may also be attributed to the partial adoption of e-procurement as shown in Section 4.4 where the system is not yet fully integrated.

4.5 Effect of E-Procurement on Cost Efficiency at KCCA

The second aim of the study is to determine the impact of e-procurement on cost efficiency at Kampala Capital City Authority. Nine items (C1 to C9) on a five-point Likert scale were used to assess cost efficiency. The overall organisational efficiency (C10) is a dependent variable and is discussed separately. Descriptive statistics for C1-C9 are shown in Table 4.5.

Table 4.5: Descriptive Results for E-Procurement and Cost Efficiency.

No.	Statement	SA	A	N	D	SD	Agree F(%)	Disagree F(%)	Mean	SD
1	E-procurement has reduced paperwork	19	16	11	8	0	35(64.8%)	8(14.8%)	3.85	1.071
2	E-procurement has reduced administrative costs	17	23	10	4	0	40(74.1%)	4(7.4%)	3.98	0.901
3	E-procurement has reduced transaction costs	14	20	15	5	0	34(63%)	5(9.3%)	3.8	0.939
4	E-procurement has lowered printing and filing costs	17	23	8	6	0	40(74.1%)	6(11.1%)	3.94	0.96
5	E-procurement has improved budget control	13	27	9	5	0	40(74.1%)	5(9.3%)	3.89	0.883

No.	Statement	SA	A	N	D	SD	Agree F(%)	Disagree F(%)	Mean	SD
6	E-procurement has improved supplier price comparison	10	28	11	5	0	38(70.4%)	5(9.3%)	3.8	0.855
7	E-procurement has reduced delays in procurement processing	11	20	16	7	0	31(57.4%)	7(13%)	3.65	0.955
8	E-procurement has improved record accuracy	14	25	10	5	0	39(72.2%)	5(9.3%)	3.89	0.904
9	E-procurement has improved transparency	15	20	9	10	0	35(64.8%)	10(18.5%)	3.74	1.067

Source: Primary Data (2026)

The results in Table 4.5 show that respondents were positive about the cost efficiency effects of e-procurement at KCCA, with the mean for items C1-C9 of 3.84 (SD = 0.321), well into the agreement category. The highest-rated item was the reduction in administrative costs (C2: Mean = 3.98; SD = 0.901, 74.1% agreement), followed closely by reductions in printing and filing costs (C4: Mean = 3.94; SD = 0.960, 74.1% agreement), improvements in record accuracy (C8: Mean = 3.89; SD = 0.904, 72.2% agreement), and improvements in budget control (C5: Mean = 3.89; SD = 0.883, 74.1% agreement). This is in line with Croom and Brandon-Jones (2005) who suggest that e-procurement lowers transaction costs by automating processes and simplifying documentation management.

Reductions in paperwork (C1: Mean = 3.85; SD = 1.071, 64.8% agreement) and increased transparency (C9: Mean = 3.74; SD = 1.067, 64.8% agreement) were also positively rated, but with greater variation in opinion as reflected in the relatively high standard deviations of 1.071 and 1.067 respectively, implying that these effects are not uniform across departments. The lowest cost efficiency effect was recorded for the reduction of procurement processing delays (C7: Mean = 3.65; SD = 0.955, 57.4% agreement) suggesting that while there are cost savings being made in document and staff costs, the speed of the procurement process has not improved as much. Vaidya et al.(2006) also warn that speed gains require more integrated system support and staff skill requirements that, as discussed in Section 4.4 above, are still emerging at KCCA.

In general, the Section C results indicate that e-procurement is delivering cost efficiency gains at KCCA, such as the reduction of direct cost drivers such as paper, printing and labour. But more

sophisticated efficiency benefits, including procurement cycle time and transparency, seem to be more dependent on the extent of e-procurement implementation.

4.5.1 Correlation Analysis: Cost Efficiency and Organisational Efficiency

A Pearson's correlation coefficient was calculated to determine the association between cost efficiency (X2, composite of C1 - C9) and organisational efficiency (Y, item C10). These findings are summarised in Table 4.5.1.

Table 4.5.1: Correlation Analysis; Cost Efficiency and Organisational Efficiency

		Org_Efficiency	Cost_Eff	N
Org_Efficiency	Pearson Correlation	1	0.024	54
	Sig. (2-tailed)	.	0.862	
	N	54	54	
Cost_Eff	Pearson Correlation	0.024	1	54
	Sig. (2-tailed)	0.862	.	
	N	54	54	

Source: Primary Data (2026)

The Pearson's correlation coefficient between cost efficiency and organisational efficiency is $r = 0.024$ and the two-tailed p-value is $p = 0.862$, as presented in Table 4.5.1. This correlation is not significant ($p > 0.05$) and the very small r value suggests there is almost no linear relationship between the two variables at the composite score level. The seemingly paradoxical finding that the means for individual cost efficiency items were positive may be explained by the fact that organisational efficiency was assessed as a global item (C10) which may reflect a broader, more nuanced view of efficiency, rather than specific cost-related efficiency improvements reflected in items C1-C9. Thus, the composite of items, C1-C9, may not totally align with respondents' perception of efficiency. This finding may be supported by the findings of Ainin, Naqshbandi and Dezdar (2015) who point out that the impact of individual cost savings in procurement on organisational performance relies on system integration, which is not currently the case with partial systems.

4.6 Challenges Affecting the Effective Implementation of E-Procurement at KCCA

The third aim was to explore the challenges of effective e-procurement adoption at the Kampala Capital City Authority. Ten items (D1-D10) on the five-point Likert scale were used to measure challenges. The results are summarised in Table 4.6.

Table 4.6: Descriptive Results for E-Procurement Implementation Challenges (Section D)

No.	Statement	SA	A	N	D	SD	Agree F(%)	Disagree F(%)	Mean	SD
1	Poor internet connectivity affects e-procurement use	20	30	4	0	0	50(92.6%)	0(0%)	4.3	0.603
2	Inadequate ICT infrastructure affects implementation	24	21	9	0	0	45(83.3%)	0(0%)	4.28	0.738
3	Staff resistance affects e-procurement adoption	21	26	7	0	0	47(87%)	0(0%)	4.26	0.678
4	Inadequate training limits effective use	21	22	11	0	0	43(79.6%)	0(0%)	4.19	0.754
5	System downtime affects procurement operations	24	20	10	0	0	44(81.5%)	0(0%)	4.26	0.757
6	E-procurement systems are difficult to use	22	21	11	0	0	43(79.6%)	0(0%)	4.2	0.762
7	Maintenance costs are high	24	16	14	0	0	40(74.1%)	0(0%)	4.19	0.826
8	Top management support is inadequate	20	28	6	0	0	48(88.9%)	0(0%)	4.26	0.65
9	Poor departmental coordination affects implementation	25	21	8	0	0	46(85.2%)	0(0%)	4.31	0.722
10	Security concerns affect e-procurement usage	28	23	3	0	0	51(94.4%)	0(0%)	4.46	0.605

Source: Primary Data (2026)

The high levels of consensus on the ten challenge items in Table 4.6 are striking, with the overall mean of 4.27 (SD = 0.240) well into the strong agreement range (4.20 - 5.00). There were no instances of disagreement with any of the ten challenge items and very low levels of neutrality in all of the items. This is one of the key empirical results of the study, and it implies that the challenges of e-procurement implementation are not isolated to some employees but are pervasive and experienced across all four departments in KCCA.

The highest agreement was for security concerns impacting on e-procurement use (D10: Mean = 4.46; SD = 0.605; 94.4% agreement), suggesting security and integrity concerns about e-procurement data are widespread. This is followed by poor departmental coordination (D9: Mean = 4.31; SD = 0.722, 85.2% agreement) and poor internet connectivity (D1: Mean = 4.30; SD = 0.603, 92.6% agreement). These results echo the e-readiness model of Mutula and Brakel (2006) which recognises ICT infrastructure and interoperability as the essential foundation for digital systems. The lack of these at KCCA, as reported here, sets the stage for the sporadic adoption at KCCA reported in Section 4.4.

Inadequate ICT infrastructure (D2: Mean = 4.28; SD = 0.738, 83.3% agreement), top management support being inadequate (D8: Mean = 4.26; SD = 0.650, 88.9% agreement), staff resistance (D3: Mean = 4.26; SD = 0.678, 87.0% agreement), and system downtime (D5: Mean = 4.26; SD = 0.757, 81.5% agreement) were also very strongly endorsed. The high mean for lack of adequate management support is significant as Vaidya et al. (2006) list management commitment as one of the key factors in successful e-procurement implementation. If this is lacking, the use of systems is likely to be discretionary and not institutionalized.

Insufficient training in effective use (D4: Mean = 4.19, SD = 0.754, 79.6% agreement), the high cost of maintaining the systems (D7: Mean = 4.19, SD = 0.826, 74.1% agreement), the difficulty of using the systems (D6: Mean = 4.20, SD = 0.762, 79.6% agreement), and the lack of departmental co-ordination (D9: Mean = 4.31, 85.2% agreement) complete a set of complex institutional, technical and behavioural factors that together limit the efficiency impact of e-procurement. Overall, the responses in Section D offer robust empirical confirmation of the theoretical expectations from Davis (1989), Mutula and Brakel (2006) and Vaidya et al. (2006) about the factors that constrain e-procurement adoption in the public sector of developing countries.

4.6.1 Correlation Analysis: Implementation Challenges and Organisational Efficiency

A Pearson's correlation coefficient (r) was calculated to determine the correlation between implementation challenges (X3) and organisational efficiency (Y). This is shown in Table 4.6.1.

Table 4.6.1: Correlation Analysis — Implementation Challenges and Organisational Efficiency

		Org_Efficiency	Impl_Chall	N
Org_Efficiency	Pearson Correlation	1	0.056	54
	Sig. (2-tailed)	.	0.688	
	N	54	54	
Impl_Chall	Pearson Correlation	0.056	1	54
	Sig. (2-tailed)	0.688	.	
	N	54	54	

Source: Primary Data (2026)

As shown in Table 4.6.1, the study found a Pearson correlation of $r = 0.056$, $p = 0.688$ between implementation challenges and organisational efficiency. This is not statistically significant ($p > 0.05$). The low (near zero) positive r is surprising, it would be expected that an increase in challenges would lead to a decrease in efficiency. This may be due to the lack of variance in the challenge score: all participants agreed with all of the challenge items (no disagreement was recorded); hence there is little variance in X_3 to be correlated with Y . When a variable you are correlating with is highly restricted as in this case Pearson's correlation coefficient will tend to be zero even when there is a true relationship between the variables. This is a common problem known as range restriction (Field, 2018) in survey data where there is considerable response bias towards one end of the scale.

4.7 Summary of Findings

The research findings show that adoption of e-procurement in KCCA is moderate and mixed with an average adoption of 3.49. While staff familiarity and management support are relatively high, the most pressing challenges are in terms of full integration (Mean = 2.35) and sufficient training (Mean = 2.96), meaning that KCCA continues to have a hybrid procurement system where manual processes are still in place. Overall, the respondents were positive about cost efficiency (overall mean = 3.84), with the most significant improvements seen in lowering administrative costs, printing and filing costs, and strengthening budget and record management. Timeliness improvement was least endorsed as an efficiency gain, implying that speed is a less important concern than cost reduction. The implementation challenges were endorsed with overwhelming agreement in all the ten items (overall mean = 4.27), with security, poor internet connectivity, lack of coordination among different departments and lack of support from top management identified as the most significant challenges.

Overall, 72.2% of respondents agreed e-procurement has enhanced organisational efficiency at KCCA. The Pearson correlation analyses, however, did not reveal any statistically significant association between any of the three independent variables and organisational efficiency, which is in line with a situation of partial adoption in which the full conditions for e-procurement to generate efficiency gains adequate infrastructure, staff skills and institutional support are not in place (Vaidya et al., 2006; Karuhanga and Ahimbisibwe, 2021). The data thus supports the view that e-procurement is delivering modest efficiency gains at KCCA, and that to deliver its full value potential it would need to be accompanied by investments in integration, training and institutional support.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter discusses the findings, conclusions and recommendations based on the research on the effect of e-procurement on organisational efficiency in Kampala Capital City Authority (KCCA). The empirical findings in Chapter Four are analysed, and conclusions and recommendations are made for policy, practice and future research.

5.1 Discussions

5.1.1 E-Procurement Adoption and Organisational Efficiency

The first aim of the study was to assess the level of e-procurement adoption at the Kampala Capital City Authority. The results show that adoption is at moderate and inconsistent levels (average of 3.49 for the eight items measuring adoption). The mean for awareness of e-procurement systems in use was the highest with a value of 3.93, suggesting that the knowledge of the availability of digital procurement systems is fairly good among the four departments. There was also support from management for the use of e-procurement (Mean = 3.74) and the use of e-procurement systems in procurement activities (Mean = 3.78), which indicates that there is institutional backing for e-procurement. Further, 72.2% of the respondents indicated in Section E that the use of e-procurement has resulted in improved efficiency in the organisation at KCCA, supporting that the KCCA is well disposed to the adoption of e-procurement.

At the same time, the study reveals significant gaps in the level of e-procurement adoption. The mean of 2.35 for the statement that e-procurement has been fully integrated at KCCA represents the most negative response (57.4% disagreeing) of all the statements. Training of staff to use e-procurement systems was also insufficient, showing a mean of 2.96 with 38.9% disagreeing that staff were well trained. These results indicate that while KCCA has achieved some degree of success in adopting digital procurement in some of its business processes, full integration has not been realised, and the human resources needed to ensure full adoption has not been built. This finding is in line with that of Muhia and Afande (2015) who observed that many public institutions in Uganda use a combination of procurement systems where digital procurement tools are in place but manual procurement processes continue to exist, which means that full efficiency gains from digital procurement are not realised.

The results that adoption is good but not full also align with the Technology Acceptance Model (TAM) put forward by Davis (1989), which suggests that when staff perceive digital systems to be useful and easy to use, they are more likely to adopt them. At KCCA, the relatively high scores for familiarity and support from management indicate that perceptions of usefulness are well recognised. However, the low scores for complete integration and training sufficiency suggest the ease-of-use perception and institutional arrangements that enable it are still evolving. The Pearson correlation between e-procurement adoption and organisational efficiency ($r = 0.201$, $p = 0.146$)

was positive but not significant, implying that the insufficient level of adoption has limited its positive impact on organisational efficiency. This finding is in line with Katana (2011), who observed that while organisations are generally aware of the benefits of electronic procurement, adoption is often constrained by a lack of training, lack of digital readiness and institutional inertia due to the persistence of long-standing manual practice. The research therefore concludes that the positive effect of e-procurement on organisational efficiency is significant but not yet statistically significant at KCCA due to the partial nature of adoption in the integration of e-procurement into the procurement process.

5.1.2 E-Procurement and Cost Efficiency

The second aim of the study was to measure the impact of e-procurement on the cost efficiency of Kampala Capital City Authority. The results were generally positive with the overall mean score for cost efficiency items (C1-C9) being 3.84, which is in the agreement range. The highest cost efficiency benefit was shown in the reduction of administrative costs (Mean = 3.98), reduction of printing and filing costs (Mean = 3.94), improvements in budget control (Mean = 3.89) and improvements in the record accuracy (Mean = 3.89). The evidence from KCCA lends support to the argument put forward by Bruno et al. (2005) that e-procurement helps lower transaction costs in two ways: firstly, by automating the routine procurement procedures and so reducing the cost of labour and materials required for each procurement cycle and secondly, through direct electronic communication between procuring organisations and suppliers, which removes the intermediate paper-based processes involved in requisition, approval and ordering. The KCCA experience is in line with these cost reduction mechanisms, especially in the case of direct cost reduction associated with document management.

The fact e-procurement makes it easier to compare suppliers' prices (Mean = 3.80) and enhances procurement transparency (Mean = 3.74) also supports the findings of Harelimana (2018) which demonstrate that electronic procurement enhances the framework for competitive bidding by allowing more structured bid evaluation and improving procurement oversight. This is especially important for a government entity like KCCA for which procurement accountability to oversight agencies is mandated. Likewise, Ali (2025) shows that e-procurement improves resource efficiency in the planning stage through real-time tracking of the spending commitments against budgeted allocations something the KCCA survey reflected in the relatively strong agreement with the budget control item.

Interestingly, the lowest cost efficiency rating was achieved for reducing delays in processing procurement (Mean = 3.65), suggesting that while cost savings in terms of administrative expenses are being achieved, the time taken to process procurement has not improved to the same extent. This is consistent with Budthapa et al. (2024) who warn that the speed and cycle time improvement of e-procurement is one of the more difficult to achieve outcomes, requiring greater integration and employee skills than cost reduction. In the absence of full integration and training (as described in Section 4.4), it is not surprising that cost efficiency improvement in speed is lagging. The

Pearson correlation between cost efficiency and organisational efficiency was $r = 0.024$, $p = 0.862$ not statistically significant. This finding may be explained by the fact that organisational efficiency was measured by a single global item (C10) that reflects a broad overall evaluation of procurement performance, while cost efficiency was a composite of nine specific perceptions of cost-related factors. These may not be exactly the same constructs and the lack of statistical significance does not express and deny the reality of the cost benefits found in the descriptive analysis. The findings of the study are that e-procurement is significantly saving costs at KCCA in terms of direct costs but that efficiency gains depend on full integration which is yet to be realised.

5.1.3 Implementation Challenges and Organisational Efficiency

The third aim of the study was to explore challenges of implementing e-procurement at KCCA. Here the results were quite dramatic. The overall mean for the implementation challenges was 4.27 and this is well into the strong agreement category and importantly there were no disagreements with any of the ten statements of challenges. This overwhelming agreement among all four departments is indicative that implementation challenges are not just localised (to specific departments) or department-specific but rather endemic, systemic and pervasive across the entire authority.

The highest rated challenge was security concerns impacting on e-procurement use (Mean = 4.46, 94.4% agreement), suggesting that concerns relating to the security of the system and data are effectively universal amongst KCCA staff. This result reinforces the view put forward by Mutula and Brakel (2006) that e-readiness is dependent upon secure and interoperable ICT systems as a necessary underpinning of digital systems. When these systems are not perceived as secure and reliable, user trust in the system will be eroded and system adoption is unsustainable. The second and third rated factors are poor departmental coordination (Mean = 4.31, 85.2% agreement) and poor internet connectivity (Mean = 4.30, 92.6% agreement), suggesting that both organisation and infrastructure aspects of e-readiness need to be prioritised at KCCA.

The high ratings of poor ICT infrastructure (Mean = 4.28), staff unwillingness to use the system (Mean = 4.26), system downtime (Mean = 4.26) and poor top management support (Mean = 4.26) presents a nexus of technical, human and organisational challenges. The high score for inadequate top management support is especially noteworthy given that Agaba and Shipman (2018) note top management support is one of the most consistent predictors of whether public procurement reforms go beyond policy initiatives to have an operational impact. Perceptions of inadequate management support are associated with discretionary system use, rather than institutionalisation. Speaking of resistance, staff resistance mean is rated at 4.26 with 87.0% agreement which is theoretically expected by Davis (1989) whose Technology Acceptance Model identifies perceptions of complexity and interference with the status quo as a source of resistance even when systems are mandated.

Lack of training to support use (Mean = 4.19; 79.6% agree) agrees with findings by Muhia and Afande (2015) who note that training gaps are one of the most recurrently cited constraints to e-

procurement systems implementation in Ugandan public entities. That systems are perceived as complex (Mean = 4.20) and high to maintain (Mean = 4.19) further adds to this complexity. Overall, the challenges of implementing e-procurement at KCCA present a complex array of constraints across infrastructure, human resource, governance and security issues as Chegugu (2018) have also shown in relation to Kenyan public hospitals. The Pearson correlation r between implementation challenges and organisational efficiency was $r = 0.056$, $p = 0.688$ not statistically significant. The near-zero and surprisingly positive coefficient is best explained as a range restriction phenomenon, as described by Field (2018), when all respondents score highly/identically on a scale as was the case here with universal agreement on each of the challenge items, there is no variability in the independent variable to contribute to a correlation with the dependent variable. The conclusion is that while the statistical relationship cannot be proved under these measurement circumstances, the descriptive findings are clear: implementation challenges are pervasive and significant at KCCA, and must be overcome for full efficiency gains from e-procurement to be achieved.

5.2 Conclusions

The study results allow the following conclusions to be drawn:

KCCA has only adopted e-procurement at moderate levels. The level of awareness and support from management is high, but the extent of system integration (Mean = 2.35) and training (Mean = 2.96) is low, suggesting that KCCA still has a semi-e-procurement system. While a majority of respondents (72.2%) agree that e-procurement has enhanced organisation efficiency, the positive relationship between adoption of e-procurement and efficiency ($r = 0.201$) was weak and statistically insignificant, because of limited adoption. It is therefore important for KCCA to transition from nominal to fully integrated procurement to fully realise efficiency gains.

E-procurement at KCCA is positively impacting cost efficiency through improved procurement administration costs, printing and filing costs and budget and record management. These are tangible benefits, reflecting the impact of automation in managing procurement documents. But the lowest cost efficiency gain was in the procurement cycle time reduction (Mean = 3.65), which suggests that time benefits which depend on greater integration and skills of the people working with the system have yet to be realised fully. The weak ($r = 0.024$) non-significant correlation between cost and overall organisational efficiency also suggests the need for more in-depth implementation before cost-efficiency gains flow through to overall organisational efficiency gains.

KCCA's problems are ubiquitous, multifaceted and systemic. Lack of security, poor internet connection, poor inter-departmental collaboration, lack of ICT infrastructure, staff resistance, system downtime and lack of training constitute a wide range of challenges limiting the authority's e-procurement efficiency gain. The fact that all ten items on implementation challenges were rated highly and that no one disagreed (overall mean = 4.27) indicates that these challenges are not

localised but systemic and demand concerted action and large-scale intervention. Until these challenges are addressed, the benefits of e-procurement in efficiency gain will not be fully realised.

5.3 Recommendations for Policy and Practice

This section presents recommendations to KCCA management, policymakers and practitioners in response to the findings of the study.

KCCA management should create a plan for full integration of e-procurement that should prioritise moving from partial to fully electronic procurement processes in all departments. That only 11.1% of survey participants agreed that e-procurement is fully integrated should ring alarm bells. This means that the entire procurement cycle including requisition and tendering, payment and contracts will be conducted electronically and parallel processes eliminated. This will involve system governance and responsibility in each department.

The Authority needs to invest significantly in ICT infrastructure and internet connectivity in all relevant procurement departments. Considering that 92.6% of respondents support weak internet connectivity and 83.3% support weak ICT infrastructure, these are not minor issues, but rather core operational challenges. Good connectivity and hardware platforms are necessary for the seamless access to the system required for e-procurement, and their lack underpins the partial adoption reported here. This is consistent with the e-readiness priorities identified Mutula and Brakel (2006).

A regular and sustained staff training and capacity building initiative on e-procurement systems should be formalised at KCCA. Given that 38.9% of the respondents disagreed with the statement that training is sufficient and that respondents scored a mean of 4.20 for the system's difficulty, user skills need to be enhanced. It should not be an ad-hoc instance but a scheduled and periodic activity to include inductees, system upgrades and new system features. This human capital investment helps to mitigate the change resistance and enhances the quality of digital procurement transactions, in line with the training requirements identified by Budthapa et al. (2024).

The cybersecurity measures that govern e-procurement should be enhanced and clearly communicated to users of e-procurement systems. Security was the most widely supported challenge (Mean = 4.46, 94.4% agreement), and this concern, unless addressed, will continue to inhibit trust in digital procurement systems despite the success of other elements of implementation. KCCA should consult with its ICT Department to ensure strong authentication, encryption and access controls are in place, and that these are effectively communicated to procurement staff.

Interdepartmental procurement coordination mechanisms should be established. Lack of departmental coordination was the second most highly endorsed problem (Mean = 4.31, 85.2% agreement). E-procurement is a multifunctional system that involves procurement, finance, ICT and administration. It requires information sharing, shared accountabilities and procedures among

these business functions. KCCA needs to establish inter-departmental procurement coordination committees (or protocols) to ensure communication and co-ordination across sectors.

Government policy and procurement oversight bodies such as the Public Procurement and Disposal of Public Assets Authority (PPDA) should enhance their oversight and accountability of e-procurement adoption in public institutions. The KCCA case study shows that policy adoption does not necessarily translate into implementation. Therefore, oversight institutions should prescribe performance indicators for e-procurement implementation, and require public institutions to regularly report against them. This is in line with the reform agenda of Agaba and Shipman (2018), who note that continuous accountability is key to successful digitisation of procurement in Uganda.

5.4 Recommendations for Further Research

This study focused on three aspects of e-procurement adoption, cost efficiency and implementation challenges at one public institution, the Kampala Capital City Authority. The study's results and limitations propose a number of avenues for further research.

Future research could extend this study to a larger sample of public institutions in Uganda including other urban authorities, ministries of central government and state enterprises to determine whether the findings of moderate e-procurement adoption and severe implementation challenges at KCCA are typical of public institutions generally. Across institutional comparisons would enable a better understanding of what makes some e-procurement initiatives more successful than others.

A mixed-methods study that employs the quantitative survey data collection approach taken in this study alongside more qualitative methods such as in-depth interviews and focus group discussions would enhance the understanding of the behavioural, cultural and institutional reasons for staff resistance, management apathy and the retention of hybrid procurement methods. This information could more specifically examine the processes by which the issues identified in Section D of this study function and interact.

Additional research could explore other aspects of organisational efficiency that have not been covered in this study, such as procurement cycle time, supplier relationship management outcomes, and procurement decision quality and defensibility. These aspects may be more responsive to e-procurement implementation than the overall organisational efficiency perception capture in this study, and could be included in future research to uncover stronger and more statistically significant associations.

Given the almost universal support for security concerns illustrated in this study, further research into cybersecurity governance of e-procurement in public sector procurement in Uganda would be beneficial. Insight into how organisations perceive, communicate and manage cybersecurity risks could be used to design more secure procurement systems.

Finally, longitudinal studies examining changes in e-procurement adoption and a measure of efficiency over time at KCCA, particularly after any system upgrades, training or reform to governance arrangements would be able to provide more rigorous causal evidence on the effects of particular improvement initiatives than the cross-sectional approach taken in this study. This would be of great benefit to policy and institutional decision-making.

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APPENDIX

QUESTIONNAIRE:

Dear Respondent,

My name is **Winfred Nambozo** a final year student of a Bachelors in Procurement and logistics Management at Uganda Christian University. I am conducting a study entitled: “THE IMPACT OF E-PROCUREMENT ON ORGANIZATIONAL EFFICIENCY: A CASE STUDY OF KAMPALA CAPITAL CITY AUTHORITY (KCCA)”. This questionnaire is intended to collect data strictly for academic purposes. The information you provide will be treated with utmost confidentiality and will only be used for this research.

Please tick (✓) in the appropriate box or fill in the spaces provided.

Response Scale

Use the scale below for Sections B–D:

Scale Meaning

- 5 Strongly Agree (SA)
- 4 Agree (A)
- 3 Neutral (N)
- 2 Disagree (D)
- 1 Strongly Disagree (SD)

SECTION A: BACKGROUND INFORMATION

(Please tick where appropriate)

1. Gender

Male ☐

Female ☐

2. Age Bracket

20–29 years ☐

30–39 years ☐

40–49 years []

50 years and above []

3. Highest Level of Education

Certificate []

Diploma []

Bachelor's Degree []

Postgraduate Degree []

4. Department

Procurement []

Finance []

ICT []

Administration []

5. Position/Designation

6. How long have you worked at KCCA?

Below 1 year []

1–3 years []

4–6 years []

7 years and above []

7. Are you involved in procurement-related activities?

Yes []

No []

SECTION B: EXTENT OF E-PROCUREMENT ADOPTION

Objective One: To examine the extent to which e-procurement is adopted at Kampala Capital City Authority.

No	Statement	SA	A	N	D	SD
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1	KCCA uses e-procurement systems in procurement activities	☐	☐	☐	☐	☐
2	Staff are familiar with available e-procurement systems	☐	☐	☐	☐	☐
3	Most procurement activities are conducted electronically	☐	☐	☐	☐	☐
4	Tendering processes are handled electronically	☐	☐	☐	☐	☐
5	Purchase orders and approvals are processed electronically	☐	☐	☐	☐	☐
6	E-procurement has been fully integrated at KCCA	☐	☐	☐	☐	☐
7	Management supports use of e-procurement systems	☐	☐	☐	☐	☐
8	Staff receive adequate training on e-procurement systems	☐	☐	☐	☐	☐

SECTION C: E-PROCUREMENT AND COST EFFICIENCY

Objective Two: To assess the effect of e-procurement on cost efficiency at Kampala Capital City Authority.

No	Statement	SA	A	N	D	SD
1	E-procurement has reduced paperwork	☐	☐	☐	☐	☐
2	E-procurement has reduced administrative costs	☐	☐	☐	☐	☐
3	E-procurement has reduced transaction costs	☐	☐	☐	☐	☐
4	E-procurement has lowered printing and filing costs	☐	☐	☐	☐	☐
5	E-procurement has improved budget control	☐	☐	☐	☐	☐
6	E-procurement has improved supplier price comparison	☐	☐	☐	☐	☐
7	E-procurement has reduced delays in procurement processing	☐	☐	☐	☐	☐
8	E-procurement has improved record accuracy	☐	☐	☐	☐	☐
9	E-procurement has improved transparency	☐	☐	☐	☐	☐
10	E-procurement has improved organizational efficiency	☐	☐	☐	☐	☐

SECTION D: CHALLENGES AFFECTING IMPLEMENTATION OF E-PROCUREMENT

Objective Three: To investigate challenges affecting effective implementation of e-procurement at KCCA.

No	Statement	SA	A	N	D	SD
1	Poor internet connectivity affects e-procurement use	☐	☐	☐	☐	☐
2	Inadequate ICT infrastructure affects implementation	☐	☐	☐	☐	☐
3	Staff resistance affects e-procurement adoption	☐	☐	☐	☐	☐
4	Inadequate training limits effective use	☐	☐	☐	☐	☐
5	System downtime affects procurement operations	☐	☐	☐	☐	☐
6	E-procurement systems are difficult to use	☐	☐	☐	☐	☐
7	Maintenance costs are high	☐	☐	☐	☐	☐
8	Top management support is inadequate	☐	☐	☐	☐	☐
9	Poor departmental coordination affects implementation	☐	☐	☐	☐	☐
10	Security concerns affect e-procurement usage	☐	☐	☐	☐	☐

SECTION E: GENERAL COMMENTS

1. In your opinion, has e-procurement improved organizational efficiency at KCCA?

Yes ☐

No ☐

Not Sure ☐

2. What major challenges affect e-procurement implementation at KCCA?

3. What recommendations would you suggest for improving e-procurement at KCCA?

THANK YOU FOR YOUR PARTICIPATION.