# **Examining E-Government Procurement System Adoption by Procuring Entities in Zambia**

Chabilo Bubala<sup>1</sup> and Dr. Christine Lesa<sup>2</sup>

Graduate School of Business, University of Zambia, Lusaka, ZAMBIA

Graduate School of Business, University of Zambia, Lusaka, ZAMBIA

<sup>1</sup>Corresponding Author: chabilob@gmail.com

Received: 01-03-2024 Revised: 16-3-2024 Accepted: 01-04-2024

#### **ABSTRACT**

While various African countries, including Zambia, have embarked on the journey of implementing electronic procurement, the full potential of the E-Government Procurement System remains largely untapped, even after its introduction in July 2016. Most Procuring Entities continue to favor manual tendering methods, despite training efforts by the Zambia Public Procurement Authority (ZPPA). This study set out to examine the level of adoption of E-Government Procurement (E-GP) systems by Public Procuring Entities (PEs) in Zambia, identifying the factors affecting adoption of the system using the Technology Acceptance Model (TAM), managerial imperative and organizational imperative. The study also sought to identify how E-GP influence procurement performance. The study employed an exploratory and descriptive research design where 100 questionnaires were administered to purposively sampled Procuring Entities in Lusaka Province. The data collected was analyzed using tables, graphs and charts. The study revealed that E-GP adoption in Zambia remains low, with only 33.33% of PEs currently utilizing the system and the E-GP system in Zambia lacks essential E-procurement tools which hampers its full integration with other online platforms. The study further identified that lack of internal staff skills, technology challenges, resistance to change, and insufficient management support influence the use of the system. Further, the study revealed that E-GP enhances transparency, reduces corruption, and improves procurement efficiency. Therefore, the researcher recommends investing in developing **Database** Administrators, full integration of the system with other organization systems, ZPPA should completely stop giving deviations to PEs seeking deviation from the use of the system, employ effective Change Management and address technological challenges especially in rural areas.

*Keywords--* E-Government Procurement System, Procuring Entities, Technology Challenges, Resistance to Change, Technology Acceptance

#### I. INTRODUCTION

Adoption of e-government procurement systems by procuring entities has been a topic of interest in recent years. Electronic procurement has continued to gain ground in many organizations worldwide, both in government and private institutions, as a basis for competitive procurement and good practice. African countries have also started adopting electronic procurement, and Zambia is no exception. However, the adoption of e-government in Zambia faces several challenges and obstacles, such as lack of adequate ICT infrastructures, e-government practice which does not contextualize the existing reality, and lack of a proper change management system.

Several studies have been conducted to examine the factors affecting the successful adoption of electronic procurement in government institutions based on the Technology Acceptance Model (Kademaunga & Phiri, 2019). One study by Mohammed and Hakizimana (2019) identified the key factors that affect the adoption of egovernment in developing countries, particularly in Rwanda. The study found that strategy constraints, such as a lack of shared e-government goals and objectives, overambitious e-government milestones, lack of ownership, poor governance, and absence of a proper change management system, are some of the factors that affect the adoption of e-government in developing countries.

In another instance, a study by Kademaunga and Phiri (2019) conducted in Zambia, found that personnel in most government institutions are ready to embrace electronic procurement implementation reforms largely due to ease of use and usefulness of the electronic system. However, the study revealed that not much is being done by top management in respective institutions regarding the implementation of electronic procurement.

Furthermore, a systematic review of the adoption challenges in public e-procurement by Mohungoo et al (2020) found that challenges faced in public e-procurement implementation are not well understood despite past studies focusing on the phenomenon. In the case of

Zambia, lack of awareness, digital divide, culture, and citizen electronic literacy (e-literacy) levels are some of the factors affecting the adoption of e-government (Bwalya, 2011).

Despite the efforts to implement e-government procurement systems in Zambia, there are still gaps in knowledge regarding the successful implementation and current state of things of such systems. For instance, there is a need to investigate the current challenges and obstacles that hinder the adoption of e-government procurement systems in Zambia, particularly from the perspective of procuring entities. Additionally, there is a need to identify the critical success factors that can facilitate the successful adoption of e-government procurement systems in Zambia. Therefore, further research is needed to address these gaps and provide insights into the successful adoption of e-government procurement systems in Zambia.

#### II. LITERATURE REVIEW

Electronic procurement, commonly referred to as e-Procurement, encompasses the utilization of digital technologies and software to conduct various procurement activities within an organization. In their work, Kumar and Kumar (2019) define e-Procurement as the application of electronic methods to facilitate procurement operations. This entails employing electronic systems to issue tenders, receive bids, evaluate submissions, and manage a spectrum of procurement processes, including supplier management, sourcing, contract administration, and payment processing. The public sector, comprising government agencies and public organizations, has increasingly embraced this transformative technology to streamline their procurement procedures, bolster transparency, and instil efficiency (Neupane, et al., 2012).

A meticulous review of published literature has unveiled an array of benefits that arise from the adoption of e-procurement, which can be distilled as follows: reduced price (of goods and services), reduced administrative cost, reduced inventory cost, improved financial control and compliance, an increase in contract compliance, leveraging the procurement spend, increased involvement of staff, and lower processing costs, (McConnell, 2009).

Further, Rahim (2008) highlights a significant time-saving aspect of e-procurement. Traditional requisition processes entail the cumbersome transference of forms across multiple locations, causing delays at every handover point. In contrast, e-procurement systems expedite requisition processing by directly involving all concerned parties, circumventing these needless waits.

The Zambia Public Procurement Authority (ZPPA) a regulatory body established under the Public Procurement Act No. 8 of 2020 charged with the

responsibility of regulating public procurement in Zambia indicated that Electronic Government Procurement System is important to Procuring Entities, bidders, and suppliers as it.

- Centralized Storage of Bidding information and thus reduces paper usage and movement.
- Eliminates or reduces costs that bidders may incur as they visit Procuring Entities; Geographical boundaries are eliminated as anyone can participate anywhere in the world.
- Greater transparency through the automated publication of Tenders and Contract awards.
- Makes it easier to monitor compliance with procurement procedures.
- Reduces supplier-buyer interactions, hence creating transparency.
- Easy generation and sharing of management reports; and
- Simplifies the publication of information to Bidders, Suppliers, and the public as it enables a procuring entity to do E-tendering, E-notification, E-registration, E- evaluation, E-awarding, and E-contract Management.

Numerous studies have shed light on the sluggish adoption of e-Procurement in the public sector when compared to the private sector. In public organizations, the motivation behind the implementation of e-Procurement is primarily driven by the imperative need for transparency, corruption reduction, and heightened efficiency. However, this adoption process faces significant impediments rooted in institutional arrangements, procurement regulations, and resource constraints. Research reveals that the public sector often grapples with insufficient infrastructure, a shortage of skilled personnel, financial constraints, and a lack of political will, all of which hamper the successful implementation of e-Procurement initiatives.

In the case of Nkwe (2012), his study uncovered that the adoption rate of e-government services falls far short of expectations due to a lack of citizen awareness and participation. He further posited that factors influencing e-Government adoption can be categorized into individual and organizational facets. Citizens' individual beliefs play a pivotal role in the adoption of e-Government services. Drawing from Davis' technology acceptance model of 1989, it is established that individual beliefs such as perceived usefulness (PU) and perceived ease of use (PEOU) are dominant factors influencing the intention to adopt or use technology in a business-to-consumer (B2C) context. The study findings indicated a positive correlation between perceived ease of use and intention to use. This suggests that personnel within most government institutions were inclined to embrace electronic procurement reforms due to the system's user-friendliness and utility. However, it was evident that top management in these institutions had not made substantial strides toward the implementation of electronic procurement (Phiri, 2019).

While Mohungoo et al. (2020) categorized eprocurement implementation challenges into three categories: technological challenges (e-procurement acceptance and usage, disruptive innovation characteristic of e-procurement, use of digital signatures, security and privacy of technology and technical aspects of eprocurement), organizational challenges (stakeholders' behaviour, leaders' behaviour, shortcomings in leadership, lack of training and skilled personnel, resistance to change, organizational power and politics and the creation of public value underlying e-procurement), environmental/contextual challenges (regulatory framework for public procurement, Small-and-Medium-Size Enterprise issues, and context of the country).

#### III. THEORETICAL FRAMEWORK

#### Technology Acceptance (TAM) Theory

The Technology Acceptance Model (TAM), developed by Davis (1989), serves as a framework for examining the acceptance of new technology and understanding the factors that influence this process. It is designed to elucidate why users embrace and utilize technology. TAM revolves around two key perceptions: "Perceived Usefulness" (PU), which gauges the extent to which an individual believes that using a specific system will enhance their job performance, and "Perceived Ease of Use" (PEOU), which assesses the degree to which an individual believes that using a particular system will be straightforward (Davis, 1989). This theory will help the researcher understand how PE's officers perceive the system, if they are ready to embrace and use it.

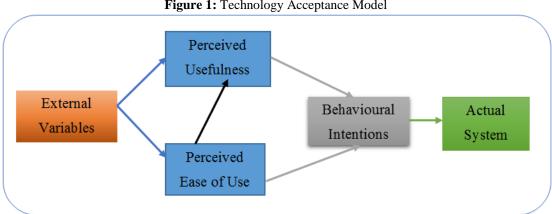


Figure 1: Technology Acceptance Model

#### Managerial Imperative

The managerial imperative seeks to elucidate the adoption of innovation based on managers' attributes related to innovativeness, their commitment to innovation, and their proficiency in information technology. If managers are unwilling to accept a new system or lack knowledge about its usage, implementing it alongside their subordinates can prove to be quite challenging (Tran & Huang, 2014). This theory will help the researcher know how PE's managers perceive the system and if they are unwilling to accept a new system or lack knowledge about its usage.

#### Organizational Imperative

The organizational imperative underscores that an organization's internal context plays a pivotal role in determining adoption. Factors such as specification, functional differentiation, formalization, centralization, readiness, risk-taking propensity, and innovativeness are considered significant influences on adoption. Failure by an organization to provide the necessary resources required

for system implementation can significantly impact its utilization (Tran & Huang, 2014). This theory will help the researcher know whether PE's have all the necessary tools and resources that will help in adopting the system like internet availability, computers and training activities.

#### **Institutional Theory**

Institutional Theory emphasizes the influence of the institutional environment on shaping an organization's structure and actions. This theory identifies three core pillars of institutions: regulatory, normative, and cultural cognitive. The regulatory pillar focuses on the use of rules, laws, and sanctions to ensure compliance. The normative pillar revolves around defining norms, values, and social responsibilities that should be adhered to (Scott, 2005). This theory will help the researcher know if there are any laid our rules deliberately implemented by PE's to ensure that the system is fully utilized.

e-ISSN: 2250-0758 | p-ISSN: 2394-6962 Volume-14, Issue-2 (April 2024)

https://doi.org/10.5281/zenodo.10930907

#### IV. RESEARCH METHODOLOGY

This study employs a qualitative approach to examine the level of electronic government procurement (e-GP) adoption by Procuring Entities in Zambia. The study is specific to the area of study, which is public Procurement Entities in Zambia with a target population of officers in public Procuring Entities and other relevant staff involved in procurement processes.

Primary and secondary data was used in this study and structured questionnaires were distributed to various public procurement staff, and they were used to collect the primary data. Secondary data on e-procurement were gathered from a variety of articles, books, reports, journals, and websites.

Due to the nature of the research, purposive sampling method was used to select staff members who have experience or knowledge of e-procurement adoption in the public sector. The data collected was analysed by themes in the questionnaire through tables and charts

#### V. DATA ANALYSIS AND FINDINGS

#### **Demographic**

Table 1 below presents the demographic characteristics, According to the results, it can be noted that 0% of the respondents were over 20 years of experience while 8.33% were between 16 to 20 years. 16.67% had between 11 to 15 years of procurement experience while 41.67% had 6 to 10 years of experience and 33.33% had 1 to 5 years' experience.

**Table 1:** Job Experience of Respondents

Years	Response	Percent of Total Survey Respondents		
1-5	20	33.33%		
6-10	25	41.67%		
11-15	10	16.67%		
16-20	5	8.33%		
Over 20 years	0	0%		
Total	60	100		

Further, the researcher sought to establish the position of officers who use the e-GP System. Table 2 below shows that 0% of the respondents held Top Management Positions in their respective Procuring entities. 16.67% of the respondents held Middle

Management Positions in their respective organizations and 83.33% were unionized employees. This means that most of the Procuring Entities top management do not usually interact with the system.

**Table 2:** Current Position of Respondents

= =							
Years	Response	Percent of Total Survey					
		Respondents					
Top Management	0	0%					
Middle Management	10	16.67%					
Unionized	50	83.33%					
Total	60	100					

## VI. LEVEL OF E-GP SYSTEM ADOPTION

According to the results shown in figure 2 below, only 33.33% of Procuring Entities are procuring using the

system, 66.67% intend to procure using the system in the next 1-2 years and 0% had no intention of using the system. Indicating a very small percentage of PEs currently using the system.

Volume-14, Issue-2 (April 2024) https://doi.org/10.5281/zenodo.10930907

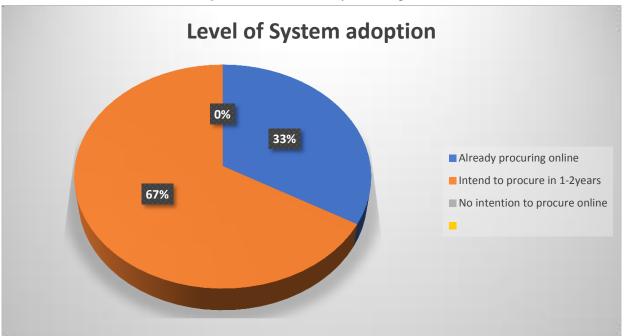


Figure 2: Level of E-GP System Adoption

Further, to access the level of Officers' familiarity with the system tools that are available in the system according to the results shown in table 3 below, respondents indicated that the publication of bidding documents, invitations to tender and notices, bid submission and opening, bid evaluation, request for

clarifications, notice of contract award and generation of evaluation reports are currently available on the system while contracting is partially available and order processing and invoice matching are not available on the system.

Table 3: E-Government Procurement system tools

System tool	Available on		Not Available on
	the system	available	the system
Publication of Bidding Documents, Invitations to	✓		
tender and Notices			
Bid Submission and opening	<b>√</b>		
Bid Evaluation	✓		
Request for clarifications	✓		
Notice of contract award	✓		
Generation of evaluation reports	✓		
Contracting		✓	
Order processing			<b>√</b>
Invoice matching			✓

### VII. FACTORS AFFECTING PROCURING ENTITIES' ADOPTION OF THE E-GOVERNMENT PROCUREMENT SYSTEM

#### Technology Theme

Technology relates issues have a big impact on full adoption of the system. As seen in Figure 3 below, it is discernible that technology challenges remained important consideration in adopting e-procurement. This assertion was drawn from the responses given by respondents. 50% of the respondents agreed that unreliable internet service/internet jams would be a major challenge. Similarly, over 33.33% of respondents equally agreed that a lack of ICT Skills or knowledge affects the adoption of e-procurement by most Procuring Entities and 16.67 indicated that there is a Lack of ICT Equipment in some entities.

Chart Title

50

50

40

33.33

30

20

16.67

10

TECHNOLOGY THEME

Lack of ICT Equipment's Unreliable energy supply

Unreliable internet services/internet jam Lack of ICT Skills/Knowledge

Figure 3: Technology Theme

#### Process Theme

Issues related to how flexible and fast the system is also affects the rate of system adoption. As illustrated in figure 4 below, respondents agreed at various levels that the introduction of e-procurement stands to suffer process-related difficulties., According to the data, 16.67% indicated that the high cost of introducing e-procurement

will be a major process-related problem since high expenditure would be required to reconfigure and automate all processes of the paper-based system to e-procurement and 16.67% also indicated that the system has issues of transparency and accountability while the majority of 66.67% indicated that the system takes time, unlike the manual way of conducting procurement.

https://doi.org/10.5281/zenodo.10930907

**Chart Title** 80 70 60 66.67 50 40 30 20 16.67 10 0 PROCESS THEME ■ Initial high cost of introducing the system ■ The process takes time ■ Issues of procurement transparency and accountability

Figure 4: Process Theme

#### People Theme

According to the "Perceived Ease of Use" (PEOU) theory, the degree to which an individual believes that using a particular system will be straightforward has an effect on how frequent that person will be willing to use the system because most people are resistance to change.

Figure 5 below illustrates that there is a problem with the introduction of E-procurement as most 66.67 of officers still want to stick to the manual way of buying items while 33.33% of respondents indicated that lack of training by ZPPA on how to use the system was one of the potential challenges.

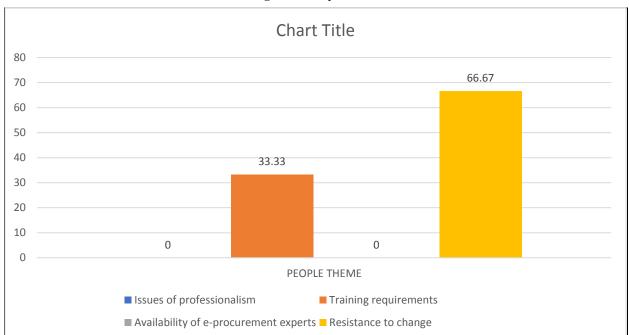


Figure 5: People theme

https://doi.org/10.5281/zenodo.10930907

#### Compliance Theme

The adoption and implementation of eprocurement will be legitimized by management support. Given the numerous benefits associated with eprocurement, it could as well lead to a loss of control if the management of procuring entities does not support its use. Figure 6 below indicates that 91.67% of respondents affirmed that there was a lack of management support in the use of the E-government procurement system while 8.33% indicated that the use of the system is affected by state or local government interference in the procurement process.

**Chart Title** 100 91.67 90 80 70 60 50 40 30 20 8.33 10 0 0 0 Compliance Theme ■ Lack of government support ■ Lack of regulatory framework ■ State or local government interference Lack of management support to use the system

Figure 6: Compliance theme

Apart from the factors listed above, other factors affecting adoption of the system were indicated by the respondents and these included;

- Lack of the system's ability to procure works.
- Too many cancelled tenders due to non-response by bidders.
- Failure of suppliers to submit on time due to system disruptions.
- Failure to merge that system with other systems like the NAVISION DYNAMIC by MOH.
- Lack of sensitization to bidders on the benefits and how to use the system.
- Unannounced system shut down.
- The process is more labor intensive unlike sending an enquiry via email.

### VIII. HOW E-GOVERNMENT PROCUREMENT SYSTEM INFLUENCES PROCUREMENT PERFORMANCE

#### E-Procurement has Enhanced Transparency Hence Reduction in Corruption-Related Costs

As indicated in Figure 7 below, 10% of the Respondents indicated that E-procurement has helped in the reduction of corruption to a small and medium extent while 30% indicated that the system has helped reduce corruption to a great extent and 50% indicated that corruption has reduced to a very great extent. No Respondent indicated a very small extent of corruption reduction.

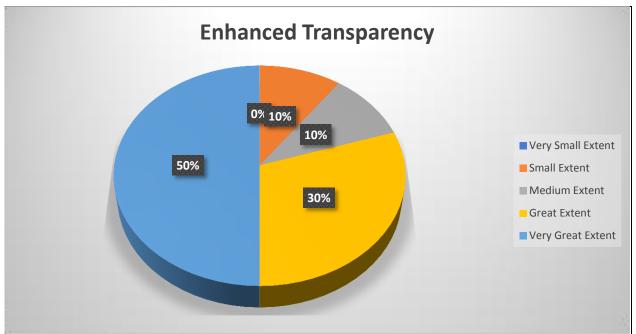


Figure 7: E-procurement has enhanced transparency hence reduction in corruption-related costs

### E-procurement has led to a Reduction in Wastage Costs e.g., the Use of Many Papers

As shown in Figure 8 below, it was established that 10% of the respondents indicated that E-procurement led to less paper being used in the tendering process to a small extent while 30% indicated that less paper was being

used in the tendering process to a medium extent while 40% indicated that wastage costs has reduced to a great extent and 40% indicated that wastage costs has reduced to a very great extent. No Respondent indicated a very small extent of wastage costs reduction.

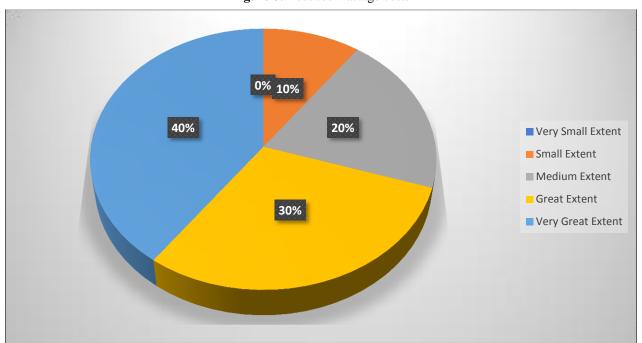


Figure 8: Reduced wastage costs

### E-procurement has Reduced Transport and Postage Costs

As shown in Figure 9 below, it was established that 10% of the respondents indicated that E-procurement has reduced transport and postage costs to a small extent while 20% indicated that the system has led to a reduction

in transport and postage costs to a medium extent while 30% indicated that transport and postage costs have reduced to a great extent and 40% indicated that transport and postage costs has reduced to a very great extent. No Respondent indicated a very small extent of transport and postage costs reduction.

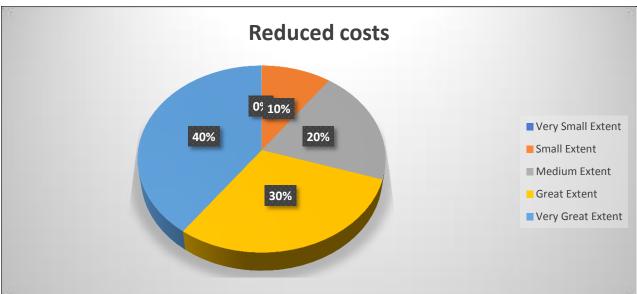


Figure 9: Reduced transport and postage costs

### E-Procurement Platforms Provide Cheaper Mechanisms for Interacting with Suppliers

From Figure 10, 30% of the Respondents indicated that E-procurement provides cheaper mechanisms of interacting with Suppliers to a medium extent while 30% indicated that E-procurement provides

cheaper mechanisms of interacting with Suppliers to a great extent and 40% indicated that E-procurement provides cheaper mechanisms of interacting with Suppliers to a very great extent. No Respondent indicated a very small and small extent of cheaper mechanisms of interacting with Suppliers.

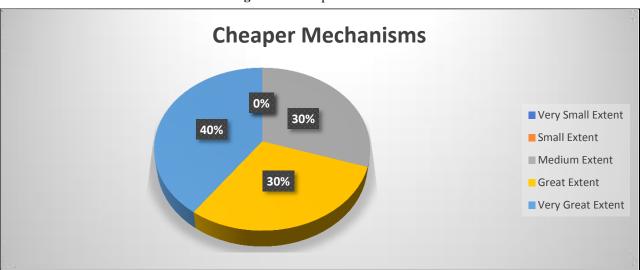


Figure 10: Cheaper mechanisms

https://doi.org/10.5281/zenodo.10930907

#### IX. DISCUSSION OF FINDINGS

The discussion of the results was arranged as per research objective.

### 1. Determine the Extent of Procuring Entities Adoption of E-Government Procurement System in Zambia

The research findings indicate that only 33.33% of Procuring Entities in Zambia are currently using the E-Government Procurement (E-GP) system, while 66.67% intend to use the system in the next 1-2 years. This suggests that the adoption of the E-GP system in Zambia is still low since its introduction. The study also found that of the Procuring Entities that have already adopted an E-Procurement initiative, 66.67% have experimented with the system but have not gone any further, meaning most of the procurements are still being done manually, while 33.33% have partially implemented the system in one division, which is the procurement department only.

The E-GP system in Zambia does not have all the E-procurement tools such as Purchase requisitions creation, contracting management, order processing, invoice matching, and payment, indicating that the system is not fully integrated with other online platforms like SAP, ERP, etc. The study also found that most types of procurements run through the system are procurements of goods and services, and less of works. The study also revealed that 8.33% of procurements advertised are simplified tenders, 66.67% are open tenders, while 16.67% are selective tenders, and no institution is currently conducting direct bidding method of procurement online.

Comparing these findings to other studies, a study by the World Bank's Procurement team in 2018 found that the Zambian government requested support to carry out an assessment of the public procurement system, which was subsequently carried out with extensive input and collaboration with Zambia Public Procurement Authority (ZPPA) and other government institutions (Ali, et al., 2020). The study found that by adopting an e-government system that is mandatory for everyone to use, the digital procurement system will enable the government to save significant time and resources, reduce corruption, improve transparency, open markets to international competition, and encourage the growth of local and small firms since procedures and information will be accessible to everyone. Another study by Kademaunga and Phiri (2019) found that not much was being done by top management in respective institutions regarding the implementation of electronic procurement.

In conclusion, the adoption of the E-GP system in Zambia is still low, and most of the procurements are still being done manually. The E-GP system in Zambia does not have all the E-procurement tools, and most types of procurements run through the system are procurements of goods and services, and less of works. The findings

suggest that there is a need for more efforts to be made to increase the adoption of the E-GP system in Zambia and to integrate it with other online platforms.

### 2. Identify Factors Affecting the Use of E-Government Procurement System by Procuring Entities

The factors affecting the use of E-Government Procurement System by Procuring Entities were identified in a study. The study found that the following factors affect the adoption of e-procurement:

- Lack of internal staff skills: Procuring entities need to have key skills such as Database Administration, Network Administration, Programming, etc. for after-sales support after the system is implemented. Most organizations that do not develop internal staff skills implement 'white elephants' of e-procurement despite investment of huge sums in the implementation.
- Technology challenges: Respondents indicated that technology challenges remained an important consideration in adopting e-procurement. 50% of the respondents agreed that unreliable internet service/internet jam would be a major challenge. Similarly, over 33.33% of respondents equally agreed that lack of ICT Skills or knowledge affects the adoption of e-procurement by most Procuring Entities and 16.67 indicated that there is Lack of ICT Equipment is the major challenge in some entities.
- Process-related difficulties: A major challenge with the current procurement system is it is entirely manual-based employing various and varied processes from notification to invoicing of suppliers which breeds bureaucracy and delay procurement. Most respondents agreed at various levels that the introduction of e-procurement stands to suffer process-related difficulties. According to the data, 16.67% indicated that the high cost of introducing e-procurement will be a major process-related problem since high expenditure would be required to reconfigure and automate all processes of the paper-based system to e-procurement and 16.67% also indicated that the system has issues of transparency and accountability while the majority of 66.67% indicated that the system takes time unlike the manual way of conducting procurement.
- Resistance to change/change management: Findings indicated that resistance to change/change management was highly rated as a source of potential challenge to the adoption of e-procurement. Overwhelming number of respondents, 66.67%, indicated that the potential adoption of e-procurement across public entities would inevitably lead to staff resistance,

- particularly, if it impacted on current roles and responsibilities.
- Lack of management support: The adoption and implementation of e-procurement will be legitimized by management support. Thus 91.67% of respondent affirmed that there was a lack of management support in the use of the E-government procurement system while 8.33% indicated that the use of the system is basically affected by state or local government interference in the procurement process.

Several studies have been conducted to identify the factors affecting the adoption of e-procurement. The current study's findings were compared to those of other studies. The studies consistently identified factors such as top management support, organizational factors, technological factors, and user acceptance as critical factors for e-procurement adoption. However, the studies also identified other factors such as politics, socioeconomic, and cultural factors, environmental factors, and power that influence the adoption of e-procurement.

In conclusion, the studies consistently identified top management support, organizational factors, technological factors, and user acceptance as critical factors for e-procurement adoption. However, the studies also identified other factors such as politics, socioeconomic, and cultural factors, environmental factors, and power that influence the adoption of e-procurement. Therefore, it is essential to consider these factors when implementing e-procurement systems.

### 3. How E-Government Procurement System Influences Procurement Performance

The study aimed at determining how E-Government Procurement System influences Procurement Performance. The study showed that the use of E-Government procurement system has helped reduce corruption in public procurement, reduced wastage costs, and led to reduced transport and postage costs. However, the system has not helped integrate different departments or branches, reducing requisition time and product delivery times to a very small degree.

The respondents assented to a little degree that E-Government Procurement system incited Just in Time (JIT) procurement in this way emergency procurement cannot be quickly handled the entities and the research also indicated that E-procurement platforms have not helped integrated different department or branches hence reducing requisition time and product delivery times to a very small degree as some of the requirements in the procurement process has to be done offline and only uploaded on the system.

These findings are consistent with the results of other studies. For instance, a study conducted by the World Bank (2007) found that the adoption of e-GP has the

capacity to increase the transparency and efficiency of government procurement, which is done in three ways: by making public transactions' information available for consultation and recorded for auditing, by rationalizing public spending, and by diffusing technology in the economy. In addition, a study conducted by the OECD (2019) found that a certification system in public procurement can provide regular and targeted training on relevant skills to the workforce, contributing to boosting efficiency and to strategic public procurement objectives.

#### X. CONCLUSION

The main aim of this study was is to examine the level of electronic government procurement (e-GP) adoption by Procuring Entities in Zambia. The conclusion hereby done according to the research objectives;

#### 1. To Determine the Extent of E-Government Procurement System Adoption in Public Procuring Entities in Zambia

The research findings indicate that in Zambia, only 33.33% of Procuring Entities (PEs) currently use the E-Government Procurement (E-GP) system. However, 66.67% of PEs intend to adopt the system within the next 1-2 years. The study also revealed that among the PEs that have initiated E-Procurement, 66.67% are at the experimentation stage, and only 33.33% have partially implemented the system within the procurement department. Notably, the E-GP system lacks key E-procurement tools and has a predominant focus on goods and services rather than works. Moreover, simplified tenders account for 8.33% of procurements advertised, open tenders for 66.67%, selective tenders for 16.67%, and no institution employs direct bidding online.

### 2. To Identify Factors Affecting the Use of E-Government Procurement System by Procuring Entities

The study identified various factors influencing the adoption of E-Government Procurement Systems. These include the lack of internal staff skills, technology challenges, process-related difficulties, resistance to change, and the lack of management support. Notably, 50% of respondents pointed to unreliable internet service as a challenge, while over 33.33% indicated a lack of ICT skills, and 16.67% identified inadequate ICT equipment as obstacles. Additionally, the study highlighted that the manual-based procurement process suffers from bureaucracy and delays. The majority (66.67%) of respondents expressed concerns about E-procurement taking more time than the manual process.

### 3. To Determine How E-Government Procurement System Influence Procurement Performance

The study showed that the use of E-Government procurement system has helped reduce corruption in public procurement, reduced wastage costs, and led to reduced

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