Examining the Influence of E-Payment System on LGAs' Public Procurement Performance: A Case of Kasulu District Council, Kigoma Tanzania

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Examining the Influence of E-Payment System on LGAs' Public Procurement Performance: A Case of Kasulu District Council, Kigoma Tanzania

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Abstract

Purpose: The study was conducted to examine the influence of e-Payment system on the performance of public procurement of Kasulu District.

Methodology: The study employed a positivism philosophy and implemented a cross-sectional research design to answer research objectives. Data were collected from employees of Kasulu district council and suppliers that located in Kasulu district, Data were collected from 395 responded to questionnaires. Simple random sampling technique used to select sample. Data were analyzed using Statistical Package for Social Science (SPSS) Version 27; where Bivariate Regression analysis, descriptive analysis were conducted to answer the research objectives.

Findings: The study revealed that the e-Payment System significantly and positively impacts public procurement performance. An increase in the execution of e-Payment System elements leads to improvements in various procurement aspects, including timely allocation of resources, increased value for money, better service quality, reduced user complaints, and improved communication.

Unique Contribution to Theory, Practice and Policy: The study concluded by highlighting the importance of investing in and leveraging e-Payment Systems to optimize public procurement outcomes. The study recommended that the government prioritize and facilitate an enhanced technological environment to improve the effectiveness of public procurement within Local Government Authorities (LGAs).

Keywords: *Public Procurement, e-Procurement, Public Procurement Performance*

INTRODUCTION

E-procurement is a valuable tool adopted by many countries to enhance procurement efficiency. It simplifies tasks like creating procurement plans and bidding documents, reduces costs, and improves visibility. Studies in developed countries, such as the UK, show time savings of 5% to 20% due to streamlined procedures (Maagi & Mwakalobo, 2023). E-procurement also enhances transparency, risk management, bidder participation, and ensures timely public procurement. Governments worldwide allocate significant financial resources for infrastructure projects and essential services to enhance citizens' welfare (Knight, et al., 2012). Public procurement, covering these government-initiated expenditures, remains vital yet vulnerable to malpractices globally (Chan & Owusu, 2017; Knight, et al., 2012). Studies indicate that corruption and irregular practices in awarding contracts are prevalent within public procurement processes (Maagi & Mwakalobo, 2023; Nawi, et al., 2017).

Globally, public procurement represents a substantial amount, about 15 to 20% of the world's GDP, with up to 25% of these funds lost due to malpractices (Thio-ac, et al., 2019). In developing nations, this loss due to corruption can reach as high as 45%, highlighting the urgent need for improved transparency and accountability within the procurement process (Thio-ac, et al., 2019).

The Sub-African Countries has experience challenges of corruption and other malpractices in relation to public procurement, for instance; several government officers in South Africa have been investigated for loss of estimated 14.8 billion Rand that was related to COVID-19 expenditure (Chelin, 2021). Also, there are several irregular public procurements that was performed in Uganda that led to loss of more than 22 billion Ugandan shillings. And it was further described that 15% of the contract offered in the Uganda is influenced by the bribery, this affects the performance of the country procurement (Komakech, 2020).

Similar to the global scenario, Tanzania is also confronted with challenges pertaining to the inadequate performance of public procurement due to the prevalence of illicit activities. Numerous instances have arisen where Local Government Authorities have faced allegations of favoritism in tender allocation and the selection of unqualified bidders to serve personal interests of public officials. For example, a scandal involving two officials from the Mpanda Water Supply and Sanitation Authority in the Katavi region, along with a Town Planning officer from Tanganyika District, led to their suspension for their involvement in illicit practices and the violation of public procurement procedures (Mhagama, 2022). This misconduct involved inflating the cost of services. Additionally, the Medical Storage Department also found itself embroiled in a scandal related to the inflation of equipment procurement costs, which constitutes an infringement on ethical public procurement practices (The Citizen Reporter, 2022).

Many countries have transformed from traditional paper-based procurement systems to internet-based processes. The internet and web technologies in procurement have supported and improved the procurement processes. This is because the e-procurement has reduced costs and managed inventories efficiently (Mchopa, 2020). In Africa, Rwanda was the first country to implement the establishment of the e-government procurement system as the solution to solve challenges that were encountered in the procurement system such as corruption, lack of transparency and lack of efficiency (World Bank, 2018). The e- GP improved the procurement services and minimized

collusion between bidders. Rwanda passed the new procurement law in 2007 which was the result of establishment of Rwanda Public Procurement Authority. Rwandese officers used to travel to the countries that had developed the e-procurement systems such as the Republic of Korea to learn from them. In 2013, Rwanda in collaboration with the World Bank conducted a feasibility study on the implementation of the e-GP system which resulted to the development of the Rwandese E-Procurement System known as UMUCYO (World Bank, 2018).

In June 2018, the Tanzanian government implemented the E-procurement system in accordance with Regulation 342 of the GN 446 of the Public Procurement Act (PPRA, 2023). TANePS was specifically introduced to enhance transparency, effectiveness, and efficiency, and it cover all categories of goods and services including consultancy and non-consultancy services (Mchopa, 2020). Its application extends to various recognized procurement entities in Tanzania, such as ministries, departments, agencies, parastatal organizations, administrative bodies, Local Government Authorities, suppliers, and contractors (Nawi, et al., 2017; Danga, Kapwani, & Justus, 2021). The primary goals of introducing e-Procurement in Local Government Authorities (LGAs) were to enhance public procurement performance by facilitating tender evaluation, contractor and supplier catalogue management, and improving contract awarding efficiency (Danga, Kapwani, & Justus, 2021). Regulatory bodies like the PPRA oversee the implementation and usage of e-Procurement to increase efficiency and prevent malpractices in LGAs' procurement processes (Danga, Kapwani, & Justus, 2021).

In Tanzania, despite studies highlighting the benefits of e-procurement, its actual impact on public procurement performance remains not well understood. Reports from PPRA (2023) show about 32% of public entities faced delays in project completion and contractor payments. Also, CAG (2018) found that around 74% of health facility projects were delayed due to payment issues (CAG Reports, 2016-2019). The study of Maagi and Mwakalobo (2023) suggests e-procurement can enhance operational efficiency through easier product selection. However, more research is needed to understand how e-procurement affects public procurement performance in Tanzania.

Problem Statement

Challenges in the effective management of public finances during procurement processes have been linked to the underperformance of public institutions. In addressing the inefficiencies in Local Government Authorities' (LGAs) procurement processes, the government has implemented a range of measures focused on accountability, fairness, and transparency. These strategies encompass the enactment of the 2013 Public Procurement Regulations (PPRA 2013) and the 2011 Public Procurement Act (PPA 11). Additionally, the adoption of the E-procurement system stands as a key initiative to oversee and regulate public procurement within LGAs (Matto, 2017; Gombeye, 2020). This E-procurement system was introduced to uphold critical principles and standards of public procurement, including integrity, competitiveness, accountability, transparency, and efficiency for Procuring Entities (PEs) such as LGAs (Danga, Kapwani, & Justus, 2021). In 2018, the Tanzanian National E-Procurement System (TANePS) became mandatory for all public procurement entities, displacing traditional procurement methods.

Despite the government's efforts to encourage the use of the E-Procurement system within LGAs, there exists noncompliance as indicated in the 2020 Controller and Auditor General (CAG) report.

This report notes that only a minor fraction, around 5.8%, of procurement awards in LGAs were conducted through the E-Procurement system, with the majority of procurement processes still reliant on traditional paper-based methods (PPRA, 2022). The limited utilization of E-Procurement has raised concerns about alleged corrupt practices in procurement, significantly impacting the performance of public procurement carried out by LGAs in Tanzania. Among LGAs experiencing procurement malpractices, Kasulu district stands out due to a perceived lack of institutional capacity in terms of both human resources and technological tools, which poses a threat to its accountability (Mwaseba, 2023). The absence of these technological tools creates opportunities for unethical behavior among local and political leaders.

Numerous scholars have displayed considerable interest in procurement issues, especially the performance of public procurement and the factors impeding it. For example, Ivambi (2016) highlighted factors like a lack of Information and Communication Technology (ICT) awareness and insufficient training as obstacles affecting the efficiency and effectiveness of procurement processes in public entities. Amani (2015) assessed the implementation of E-procurement in the private sector, while Siwandeti, et al. (2021) focused on the influencing factors related to the utilization of technology-based systems in the procurement process, emphasizing the significance of transparency within E-procurement.

Nevertheless, even though e-procurement components, particularly e-payment, play a pivotal role in enhancing public procurement performance, there is a noticeable gap in the existing literature. Most studies have primarily focused on addressing the factors that drive or impede the adoption of e-procurement systems (Danga, et al., 2021; Gombeye, 2020; Yekosofati, 2019), without focusing specifically into the role played by e-payment in the performance of public procurement. Therefore, the primary objective of this study is to bridge this knowledge gap by examining the influence of the E-Payment System on the performance of public procurement in Kasulu District.

LITERATURE REVIEW

Unified Theory of Acceptance and Uses of Technology

Unified Theory of Acceptance Use of Technology was formulated by Venkatesh et al., (2003). The UTAUT suggests that behavior intention determines actual use of technology, where; perceived likelihood of adopting technology depends on four key issues including, performance expectancy, efforts expectancy, social influence and facilitating condition. The UTAUT explained up to 70 percent of the variance has a desire to use technology, surpassing the previous model. These include demographic factors that have been ignored in other models like age and gender, this is basically used in pharmaceutical supply chain by considering what technology to use so that to introduce medical needs to the people based on age and gender. The UTAUT helps managers to assess the probability of success for new technologies based on pharmaceutical supply chain management as well as understanding the forces which makes to accept those technology. UTAUT has four predictors of behavior intention or usage like performance expectancy, effort expectancy, social influence as well as facilitating conditions.
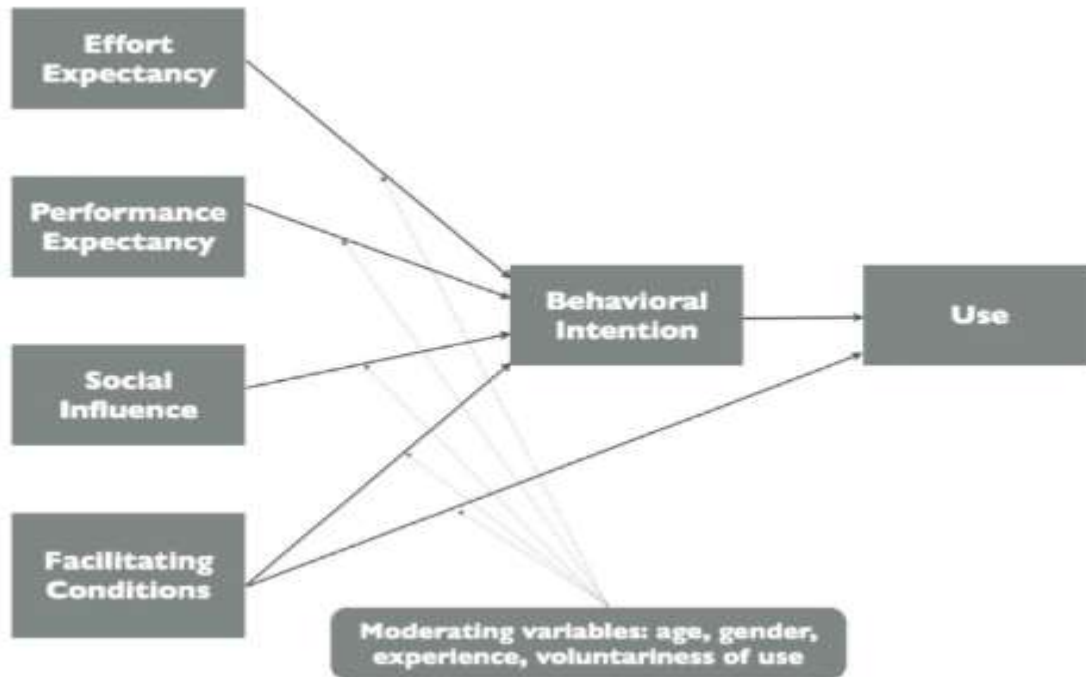
Figure 1: Unified Theory of Acceptance Use of Technology Model

Sources: (Venkatesh, Morris, Davis, & Davis, 2003; Garone, Pynoo, Tondeur, & Cocquyt, 2019)

In this study, the adoption of UTAUT model should now played as a yardstick for the technology adoptability studies based on local government authority (LGAs) because it holds user perceptions (the institute) in a more comprehensive and pragmatic way than previous ones. The implication of the theory is that whenever the government unit plans to formulate a system that need to be accepted by the users, it requires to concentrate on the viewed functions of the system by the users before rolling out the same. In addition, the government must focus on the job-fit and the relative advantage of the system to users as well as the expected outcome. This theory outlines the demands to concentrate on these factors before formulating any system to the counties or in the county. According to (Sarisar, 2015), this implies further that there is a need to have a partnership among the national government, county government and all the stakeholders and the views of the users need to be considered and inputted in the final product.

Despite of criticism from study of Dwivedi, et al (2017) that indicated that UTAUT only indicate the efficiency usage of UTAUT only explored based on the individual rather the institution. However, the criticism was invalidated by the study Shatta (2020) that indicated the successive of e-procurement adaptation to the public entities using performance expectancy variable which is one of the key determinants of UTAUT. Therefore, the study adopted the theory to explain the performance of procurement efficiency in Kasulu district by focus on determine direct influence and driving factors and usages of the TANePS to promote public procurement efficiency in local government authority.

Empirical Review

Jackson (2019) assessed the implementation of e-procurement in government entities using the MWAUWASA as case study. The study adopted qualitative research approach and selected sample of 13 respondents for data collection, primary and secondary data were collected using interview guide and observation and qualitative data analysis were used. The study found that the management of MWAUWASA has been providing required supports to employees in implementation of e-procurement, various training program are made through workshop and seminars for increase skills of employee for implementation of e-procurement. Also, it was revealed that there are electronic tools that support adaptation of e-procurement. Further, it was revealed that implementation of e-procurement at MWAUWASA are encouraging; however, the adaptation has been failed several times mainly due to cost and ICT infrastructure.

Issa (2020) conducted the study to assess the factors affecting the adaptation of e-procurement in TANESCO. The descriptive research design was adopted to collect data from sample size of 80 respondents whereby only 75 respondents received questionnaire for data collection, the data was analyzed using descriptive analysis. The results show that organization factors, technological factors, and performance factors both has significant positive relationship with the adaptation of e-procurement.

Harelimana (2018) conducted a study on the impact of E-Procurement on the Performance of Public Institutions in Rwanda. The study aimed at assessing the impact of electronic procurement in Rwandese institutions. This study was carried out by collecting both primary and secondary data through questionnaire, documentary reviews, analysis of reports and documentary reviews. The findings revealed that e-bidding systems have been offering effective communication infrastructures with lower transaction costs. From the study, it was observed that E-procurement system, reduced transaction expenses for MUCOFIN from 24.4 million in 2015 to 18.6 million in 2016. The study concluded that there is a positive relationship between the e-procurement system called 'UMUCYO' and the performance of the MINECOFIN.

Croom and Brandon-Jones (2017)made a study on the Impact of e-Procurement: Experiences from implementation in the UK public sector. The study presented the evaluation of the e-procurement implementation and operations from 18 months of study of e-Procurement within 9 UK public sectors. From the analysis of the data collected, the study suggests that there are benefits of the e-procurement model. It was also contended that important variables for the success of adopting e-procurement is to address attributes of internal quality services of e-procurement services. This is a topic that offers the scope for the future research (Crooms & Brandon-Jones, 2017).

Yekosofati (2019) conducted a study on the effects of e-procurement performance of public entities in Uganda, using the case of National Information Technology Authority Uganda, Lugogo, and Kampala District. The study employed cross section research, descriptive research and survey whereby, the population of 150 and sample size of 109 were used. Descriptive statistics were used in this study with inclusion of frequencies, mean as well as regression analysis of variables. The study concluded that the National Information Technology Authority Uganda is using the e-procurement system to achieve benefits such as cost reduction and efficiency.

Knowledge Gap

Various authors exposed their interest on the procurement issues, particularly in public procurement performances or hindrance factors. For instance, Ivambi (2016) show that various factors such as lack of Information and Communication Technology (ICT) awareness, lack of regular training as the factors that affect the efficiency and performance of procurement process in public entities. Amani (2015), assessed implementation of E-procurement in private sectors, where Siwandeti, et al (2021) focused on influencing factors to usage of technological-based system in procurement process such as transparency with e-procurement.

With less previous studies that showed linkages of e-procurement with performance of public procuring entities (Danga, et al., 2021; Gombeye, 2020; Yekosofati, 2019), (, yet, none of the empirical studies has focused on e-payment systems in public procurement performance of Kasulu District. However, the district was remarked as lacking technological tools that gives manipulation loopholes among unfaithful local and political leaders (Mwaseba, 2023). Therefore, this study bridges this knowledge gap by examining the influence of the E-Payment System on the performance of public procurement in Kasulu District.

METHODOLOGY

The study conducted Kasulu District Council (KDC) as among local government authorities in Tanzania. Kasulu District Council. Selected because despite of undertaking various procurement activities of significant amount over the years to facilitate delivery of public services to the population of the district, the district was remarked as lacking technological tools that gives loopholes among unfaithful local and political leaders (Mwaseba, 2023). This study followed the positivist research paradigm, which employs quantitative research methods to draw conclusions based on data collection and interpretation, rather than relying solely on observation. The study employed a cross-sectional research design, which allows for the collection of data at a single point in time from selected study areas and a representative subset of respondents. The cross-sectional design offers several advantages, including the ability to collect data on different variables relevant to the research problem and to determine their correlations.

The targeted population of the study was drawn from all employees of Kasulu district council and suppliers that located in Kasulu district, the population include procurement officers, ICT personnel, tender board, planning officer, Accountants, and suppliers. The study used the sample size of 395 that selected from the targeted population, that distributed from each target population that included LGAs Staff and Suppliers. The sample size was selected through simple randomly sampling techniques from probability sampling,

The study collected raw quantitative data from field through questionnaire, cleaned, coded, edited, summarized, and organized in relation to corresponding variables to research questions using Statistical Package for Social Science (SPSS) Version 27. The study used descriptive statistics and the study used Bivariate Regression Analysis (BRA) using the Chi-Square test (X^2) testto determine the relationship between e-Payment system, public procurement perfomance in Kasulu District Council.

FINDINGS AND DISCUSSION

The study aimed to gather data from 395 participants, consisting of 43 local government authority (LGA) staff and 344 suppliers. Remarkably, 98% of the intended sample was obtained, with 88% of the targeted staff successfully surveyed and 99% of the planned supplier sample also achieved. This high response rate indicates a strong sample response ratio, validating the progression to subsequent stages of analysis. Refer to Table 1 for detailed figures.

Table 1: Response Rate of the Respondents

	Proposed sample size	Actual sample size	Responded %	Non response %
Staff	43	49	88	12
Supplier	344	346	99	1
Entirely	395	387	98	2

Demographic Characteristics of the Respondents

The demographic characteristics of the respondents were deemed essential for this study, particularly focusing on age, gender, and education level. Understanding these demographic factors is crucial in comprehending the nature of the respondents in relation to their involvement in public procurement within LGAs. Analyzing these characteristics aids in assessing the proportional representation of each attribute, which could potentially influence the research outcomes. To address this need, the study presents data on the gender, age, and education level of the respondents.

Age Distribution of the Respondents

As depicted in Table 2, the frequency distribution illustrates the age distribution among the respondents. The predominant age group among participants was in the range of 36-40, constituting 41.6% of the total respondents, followed by the 41-50 age group at 25.6%. Those within the 25-30 age bracket represented 23.3% of the respondents, while individuals aged 50 and above accounted for 8.5%. A small proportion, amounting to 1%, fell below the age of 24. This distribution signifies that a substantial portion of the study sample comprises individuals over 25 years old, which represents the working age for most individuals in Tanzania.

Table 2: Age Group of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	below 24	4	1.0	1.0	1.0
	25-30	90	23.3	23.3	24.3
	36-40	161	41.6	41.6	65.9
	41-50	99	25.6	25.6	91.5
	50 and above	33	8.5	8.5	100.0
	Total	**387**	**100.0**	**100.0**	

Sex of the Respondents

The gender distribution of respondents, as presented in Table 3, reveals that out of the total respondents, 172 individuals (44.4%) are male, while 215 individuals (55.6%) are female. This distribution in the study's sample showcases a relatively balanced representation of genders, albeit with a slightly higher percentage of female respondents. This balanced representation serves to mitigate potential skewing of findings due to gender-related factors, ensuring a more comprehensive and equitable assessment of the research outcomes.

Table 3: Sex of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	172	44.4	44.4	44.4
	Female	215	55.6	55.6	100.0
	Total	**387**	**100.0**	**100.0**	

Education Level of the respondents

As indicated in Table 4, the distribution of respondents based on their education levels illustrates that the largest proportion of participants (48.1%) held a secondary/TVET education level. This was followed by individuals with a primary education level, accounting for 23.3% of the respondents. Those with an undergraduate level of education comprised 12.7% of the sample, while 12.1% had informal education backgrounds. A smaller proportion, accounting for 3.9%, possessed a postgraduate level of education.

Table 4: Education Level of the Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Informal education	47	12.1	12.1	12.1
Primary education	90	23.3	23.3	35.4
Secondary/TVET education	186	48.1	48.1	83.5
Undergraduate	49	12.7	12.7	96.1
Postgraduate	15	3.9	3.9	100.0
Total	**387**	**100.0**	**100.0**	

Validity and Reliability

Data Reliability

Data reliability described as methods of assessing the ability of collected data to have consistency in answering research questions in multiple occasion of measurement and analysis, for instance, if the instrument is tested in constant condition in different times, it give same results to show its consistency and reliability (Heale & Twycross, 2015). The data reliability is measured using Cronbach Alpha that determine the internal consistency of data, with the suggestion that the value of Cronbach Alpha should be above 0.7 to show accepted level of reliability.

Table 5 Indicates that, the Cronbach's Alpha under standardized items was 91.8% which indicate very high satisfactory level of internal consistency for study's variables; this indicate that the questionnaire variables are measuring the construct consistently.

Table 5: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.923	.918	27

Data Validity

Data validity show the ability of data collected to cover the areas of investigation by measure the intended topic, for instance, the collected data are relevant to the research question and what presented by the results (Heale & Twycross, 2015). This study conducted data validity test using Kaiser-Meyer-Olkin (KMO) to measure data adequacy in covering the research problem.

Table 6 Shows that, KMO=77.4% which is above recommended threshold of 50% meaning that, data collected is suitable for factor analysis. Furthermore, the sample size was adequate for analyzing the relationship between variables. moreover, Bartlett's Test of Sphericity with a significant p-value (0.000) indicates that the correlation between variables is positive and are suitable for further analysis.

Table 6; Data Validity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.774
Bartlett's Test of Sphericity	Approx. Chi-Square	635.474
	Df	6
	Sig.	.000

a. Based on correlations

Bivariate Regression Results

The BRA was implemented to measure the causes and effect relations between dependent variable which is public procurement performance and independent variable that adaptation of e-payment system. Table 7 shows the BRA's results obtained.

Table 7: Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	555.855[a]	272	.000
Likelihood Ratio	333.985	272	.006
Linear-by-Linear Association	78.039	1	.000
N of Valid Cases	387		

The results in Table 7 shows that, e-Payment System has Chi-Square test (X^2) coefficient of 555.855 with its P-value of 0.000. implies that, public procurement performance is significantly influenced by e-Payment System positively. Therefore, an increase in execution of e-Payment

System (automated payment gateways; payment notification; account payable process (supplier invoice within agreed payment terms); reporting and access of payment information for future improvement) will increase in public procurement performance in terms of timely allocation of goods and resources; increasing value of money; quality of delivered services; decrease level of user complaints; and improve communicative results.

Descriptive Statistics Results

In order to triangulate the results from bivariate regression analysis, the study employed descriptive statistics to measure the influence of each independent variable's proxy measure. The higher the mean (ranging from 1 to 5) the higher the specific influence to public procurement performance.

Table 7: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Automated payment gateways	387	1.00	5.00	4.0026	.99610
Payment notification	387	1.00	5.00	4.0078	.97505
Account payable process (supplier invoice within agreed payment terms)	387	1.00	5.00	4.0853	.94154
Reporting and access of information for future improvement	387	1.00	5.00	4.0620	.99547
Valid N (listwise)	387				

Table 8 indicates that, accountable payment process (supplier invoices within agreed payment terms) with Mean value = 4.0853 in e-Payment System absolutely higher influence to public procurement performance in LGAs. Followed by, payment notifications, reporting and access of information for future implementation, and automated payment gateway. However, all their mean value ranged between 5.00 and 4.00 indicating that, at Kasulu District Council highly executed e-Payment System in its public procurement.

This result is supported by Harelimana (2018) which revealed that e-bidding systems have been offering effective communication infrastructures with lower transaction costs; reduced transaction expenses for MUCOFIN from 24.4 million in 2015 to 18.6 million in 2016; it was further concluded that there is a positive relationship between the e-procurement system called 'UMUCYO' and the performance of the MINECOFIN. Jackson, (2019)found that implementation of e-procurement at MWAUWASA are encouraging; however, the adaptation has been failed several times mainly due to cost and ICT infrastructure. Yekosofati (2019) found that the National Information Technology Authority Uganda is using the e-procurement system to achieve benefits such as cost reduction and efficiency. While, Kurnia and Rahim (2017) have shown that the primary source for the adoption of e-procurement is driven by efficiency through the reduction of costs of transactions and the elimination of practicing maverick purchasing

CONCLUSION AND RECOMMENDATIONS

Conclusion

The conclusion drawn from the results is that the e-Payment System has a significant and positive influence on public procurement performance. Implementing and improving e-Payment System elements can lead to enhancements in various aspects of procurement, including timely allocation of goods, increased value for money, improved service quality, decreased user complaints, and better communication outcomes. This conclusion is supported by previous studies and aligns with the broader global perspective that emphasizes cost reduction and efficiency as key drivers for the adoption of e-procurement systems. However, challenges and failures in implementation, such as those related to cost and ICT infrastructure, should also be considered in the adoption of e-procurement systems.

Implication of the Study to the Policy Makers

The government is responsible in providing public service to the community at higher quality, desired cost and delivered on projected time. The study findings provide insights of how public procurement can be performed well in terms of timely allocation of goods and resources; increasing value of money; quality of delivered services; decrease level of user complaints; and improve communicative results. The study provides practical sights for improving public procurement processes and enhancing performance by executing e-Procurement especially in LGAs that can be taken into action for improving the implementation of the TANePS system. Also, through highlighting the factors that hindering effective adaptation of TANePS, government can develop relevant measurement to address setbacks.

Further, the study results imply different LGAs and PEs by providing awareness on the influence of integrating technology in procurement process in improving performance compared to traditional paper-based procurement process, which enhance their effectiveness on using TANePS in all procurement stages. The study serves as a guide for policymakers, helping them to design and implement effective policies and programs to implement e-Procurement. Further, the study offers awareness of the real case situation and provide thoughtful insight to district council actors on how to undertake procurement activities of significant amount and facilitates delivery of public services.

Recommendations

Based on the findings and subsequent conclusions drawn in this study, it is recommended that the government prioritize and facilitate an enhanced technological environment to improve the effectiveness of public procurement within Local Government Authorities (LGAs). The study identified that the implementation of efficient technology significantly influences the successful performance of public procurement operations in LGAs. This influence is evident in various aspects such as ensuring the timely allocation of goods and resources, increasing the value of financial investments, enhancing service quality, reducing user complaints, and improving communication outcomes.

To address these findings, it is crucial for the government to support and promote an environment conducive to technological advancements. This support should particularly focus on bolstering e-

Procurement through investments in innovative approaches to e-Tendering, e-Ordering, and e-Payment technologies within LGAs. Such advancements would significantly contribute to the enhancement of procurement processes and overall efficiency in service delivery.

REFERENCES

Amani, J. (2015). *Critical Assessment on Effects of E-Procurement in Enhancing Project Perfomance Among Private Sector Organiations in Tanzania; A case of Applied Technology Co.Ltd Dar es Salaam.* Dar es Salaam: The Open University of Tanzania.

CAG Reports. (2016-2019). *Annual General Report on the audit of LGAs for the financial years (2016-2019.* Dar es Salaam: NAO.

Chan, A., & Owusu, E. (2017). Corrupion Form in the Construction Industry: Literature Review. *Journal of Construction Engineerinf and Management.* , 143(8), 04017057.

Chelin, R. (2021, October 11). *South Africa's Mixed Messages on Procurement Corruption*. Retrieved from Institute for Security Study (ISS): https://issafrica.org/iss-today/south-africas-mixed-messages-on-procurement-corruption

Crooms, S., & Brandon-Jones, A. (2017). *Impact of e-Procurement: Experiences from Implementation in the UK Public Sector.* San Diego: University of San Diego.

Danga, M., Kapwani, J., & Justus, S. (2021). Factors Affecting the Effectiveness of e-Procurement in Selected Local Government Authorities in Tanzania. *International Journal of Acasemic Management Science Research, Volume 5, Issue 9*, 175-182.

Dwivedi, Y. K., Rana, N., Jeyaraj, A., Clement, M., & Williams, M. (2017). Re-examining the Unified Theory of Acceptance and Use of Technology (UTAUT): towards a revised theoretical model. *Information Systems Frontiers, 21(3)*, 1-16.

Garone, A., Pynoo, B., Tondeur, J., & Cocquyt, C. (2019). Clustering University Teachining Staff Through UTAUT: Implications for the Acceptance of a New Learning Management System. *British Journal of Educational Technology, 50(3)*, 1-20.

Gombeye, J. (2020). *Determinant Factors for Procurement Performance in Local Government Authorities: A Case of Geita Town Council.* Arusha, Tanzania: Institute of Accounting Arusha.

Harelimana, B. (2018). *The Impact of E-Procurement on the Performance of Public* . New York: Global Journals.

Heale, R., & Twycross, A. (2015). Validity and Reliability in Quantitative Studies. *Evidence-Based Nursing, Volume 18, Issue 3*, 1-13. Retrieved from http://www.ebn.bmj.com

Issa, K. S. (2020). *Factors Affecting the Adoptation of Electronic Procurement amng public Procuring entities in Tanzania. A Case of TANESCO.* Dar es Salaam: Colleges of Business Education.

Ivambi, S. (2016). *Challenges Affecting Procurement Process in Public Organizations in Tanzania: The Case Study of Parastatal Pensions Fund-Head Quarters-Dar es Salaam.* Dar es Salaam: The Open Univeristy of Tanzania.

Jackson, N. (2019). *Implementation of E-Procurement in Government Authority in TAnzani: A Case of Mwanza Urban Water Supply and Sanitation Authority (MWAUWASA).* Morogoro: Mzumbe Univeristy.

Kingsford-Owusu, E., & Chan, A. (2022). Evolution of Electronic Procurement: Contemporary Review of Adoption and Implementation Strategies. *Buildings, Volume 12, Issues 2*, 198.

Knight, L., Harland, C., Telgen, J., Thai, K., Callender, G., & McKen, K. (2012). *Public Procurement: International Cases and Commentary.* New York, USA: Routledge.

Komakech, R. A. (2020). Corruption in Public Procurement in Uganda: What to Do? *2nd International Conferences on Governance and Service Delivery in Developing Economies* (pp. 754-770). Kampala, Uganda: Uganda Management Institute (UMI).

Kurnia, S., & Rahim, M. (2017). *ELECTRONIC PROCUREMENT SYSTEM SUCCESS IN AUSTRALIA.* Valencia: EMCIS.

Maagi, B., & Mwakalobo, A. (2023). Practitioners' Perception of the Effect of E-Procurement Practices on Time Saving in Public Procurement in Tanzania. *Open Access Library Journal*, Vol.10 No.5: pp 1-18.

Matto, M. (2017). Analysis of Factors Contributing to Poor Performance of Procurement Function in Local Government Authorities: Empirical Evidence from Audit Reports. *European Journal of Logistics, Purchasing and Supply Chain Management, Volume 5 No.3*, 41-52.

Mchopa, A. (2020). *THE ADOPTION OF E-PROCUREMENT IN TANZANIA PUBLIC PROCUREMENT: PROGRESS,CHALLENGES AND THE WAY FORWARD.* Moshi: Moshi Co-operative University.

Mhagama, H. (2022, December 13). *PM Suspends Two Officials for Misconduct*. Retrieved from Daily News: https://dailynews.co.tz/pm-suspends-two-officials-for-misconduct/

Mwaseba, N. K. (2023). *The nexus of accountability on prevalence of malpractices in public procurement in the Local Government Authority (LGAs) case of Kasulu District, Kigoma.* Dodoma: Procurement and Supplies Professional and Technicians Board (PSPTB).

Nawi, M., Derama, n, R., Bamgbade, J., Zulhumadi, F., & Riazi, S. (2017). E-Procurement in Malaysian Construction Industry: Benefits and Challenges in Implementation. *International Journal of Supply Chain Management*, Vol. 6: pp 209-213.

Owusu, E., Chan, A., & Wang, T. (2021). Tackling Corruption in Urban Infrastructire Procurement: Dynamic Evaluation of the Critical Construction and the Anti-Corruption Measure. *Cities 2021, 119*, 103379.

PPRA. (2022). *Reminder to all Procuring Entities to use TANePS for Procurements to be Carried out in the Finacial Year 2022/2023.* Dodoma, Tanzania: PPRA.

PPRA. (2023, March 09). *Tanzania National e-Procurement System*. Retrieved from TANEPS: https://www.taneps.go.tz/epps/home.do

Public Procurement Regulatory Authority (PPRA). (2023). *Procurement Audit - PPRA Annual Performance Evaluation Report.* Dar es Salaam: PPRA.

Sarisar, P. (2015). Factors affecting the adoption of e-government in county government: A case of Narok county. *erepository*.

Shatta, D. N. (2020). *Critical Success Factors for Adoptation of TANePS in the public Sector in Tanzania.* Dar es Salaam: The Open Universty of Tanzania.

Siwandeti, M., Sanga, C., & Panga, F. (2021). Technological Factors Influencing Vendor's Participation in Public Electronic Procurement System in Ilala, Tanzania. *East African Journal of Social and Aplied Science, Volume 3, No.1*, 91-102.

The Citizen Reporter. (2022, May 10). *Prime Minister Direct MSD Officials Probe*. Retrieved from The Citizen: https://www.thecitizen.co.tz/tanzania/news/national/prime-minister-directs-msd-officials-probe-3810622

Thio-ac, A., Domingo, E., Reyes, R., Arago, N., Jorda, R., & Velasco, J. (2019). Development of a Secure and Private Electronic Procurement System Based on Blockchain Implementation. *International Journal of Advanced Trends in Computer Science and Engineering, Volume 8, No.5*, 2626-2631.

Venkatesh, V., Morris, M., Davis, G., & Davis, F. (2003). User Acceptance of Information: Toward a Unified View. *MIS Quarterly*, 425-478.

World Bank. (2018, September 5). *How Rwanda became the first African country with an electronic procurement system*. Retrieved from World Bank: https://www.worldbank.org/en/news/feature/2018/09/05/how-rwanda-became-the-first-african-country-with-an-electronic-procurement-system

Yekosofati, K. (2019). *Effect of E-Procurement and Procurement Performance of Public Entities in Uganda; The Case Study of National Information Technology Authority Uganda, Logogo District.* Kampala, Uganda: Kampala International University .