

E-Tendering and Performance of Humanitarian United Nations Agencies and Non-Governmental Organizations in South Sudan

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Abstract

Purpose: Manual procurement processes are expensive in terms of human resource cost, purchasing cost, wastage due to errors of commission or omissions, cause of delays in delivery of goods, services, and works which accounts for 40% of losses due to inefficiencies, and attracts corruption in the system amongst others. The study aimed to assess the effect of e-tendering on performance of humanitarian United Nations agencies and non-governmental organizations in South Sudan.

Methodology: The study methodology adopted an explanatory research design of cross-sectional type for the population under study. There were over 235 National Non-governmental organizations, 150 International organizations in addition to over 15 United Nations agencies, bringing the total target population to 400 organizations. This study targeted 400 humanitarian organizations operating in South Sudan. Therefore, the sample size of 200 humanitarian organizations operating in South Sudan was selected using a stratified random sampling technique. Data was collected using structured questionnaires and analyzed using descriptive and inferential statistics.

Results: Reliability findings indicated that e-tendering had a Cronbach Alpha Coefficient of 0.873, and performance had 0.859. The study established that e-tendering had a positive and significant relationship with performance significant ($\beta=0.282$, $P=0.000$).

Conclusion: The study concluded that e-tendering has a positive and significant effect on performance of humanitarian United Nations agencies and non-governmental organizations. This study hence suggested that all NGOs and humanitarian agencies should ensure they adopt the use of e-tendering in their solicitation and sourcing processes in conducting procurement activities. The study cited advantages such saving time, wide coverage of markets and reaching more potential suppliers and finally save environment from printing more paper works attaining sustainable procurement practice.

Keywords: *E-Tendering, Performance of Humanitarian United Nation Agencies and Non-Governmental Organizations*

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1.0 Introduction

Globally, e-procurement evolution was taken on by the European Union (EU) as a political agenda during the burst of dot.com in early 2000. In Lisbon's submission in 2000, it was decided EU member governments took it seriously and paid special attention to eProcurement. The consensus was reached owing to advantages from the emergence of Information Communication Technology offering promising opportunities of achieving efficiency, transparency, and opening-up of public procurement, or fair competition (European Union, 2000). International organizations or institutions are major players in procurement of goods, works, and services and spend a lot of money on acquisitions. These organizations and institutions require a bureaucratic procedure to be followed due to public interest to reach a wider choice of suppliers, value for money, better quality, improved delivery, and reduced cost of procurement, thus, embracing Information Technology (IT) adoption in Procurement process. United Nations Children's Fund (2018) reported it spent USD 3.5 billion on supplies for 150 countries and regions out of its annual budget of USD 5.2 billion, globally. This accounts for 67% of the budget that year. In the same year, 2018, Danish Church Aid (DRC) spent 82% of its annual budget on procurement, that is, USD378.2 million of its USD460.4 million (DRC, 2018) both reported saving strides due to use of electronic procurement system.

Regionally, procurement as a core function in both public and private institutions, tremendously contributes to organizational efficiency and effectiveness (Masudin et al., 2021). This claim was applauded by the Kenyan Association of Manufacturers (2019) which revealed that manufacturing companies procure more than 50% of the production materials, it further added that procurement conducted without a proper procurement system result in losses of 30% due to loss of stock and delays. The study reiterated that 30% of the procurement inefficiencies amongst the manufacturing companies bring about high procurement costs, high operational costs, loss of customers frustrated by delays, and poor services and stock losses from inaccurate inventory management.

In South Sudan, a study done by Kordit, (2022) on implementation of technology in business, cited both administrative and technological infrastructural challenges such as high cost of speed bandwidth capacity or internet accessibility, high cost of acquisition of e-procurement systems, attitude of workers, and management to accept the technology. The research found that less attention from the public sector to support implementation.

Methodologically, a mixed approach will be used for this investigation, combining qualitative and quantitative techniques. The quantitative approach will comprise a survey, whilst the qualitative method will involve a review of the literature on E-Procurement studies that have already been done. Relevant literature reviews will be carried out to examine the evolution of procurement practices from traditional procurement methods to E-Procurement systems. It will explore the benefits and challenges associated with E-Procurement, such as increased efficiency, cost savings, and enhanced transparency. The data collected from the survey will be analyzed using statistical software. The analysis will include regression analysis to determine the relationship between E-Procurement implementation and organizational performance. The study adopted a descriptive research design through which respondents were drawn from the target group of 235 National Non-governmental organizations, 150 International organizations, and 15 United Nations Fund agencies (South Sudan NGO Forum, 2020). A stratified random sampling method will be used to ensure better representation and coverage of the target population under study. The researcher will administer questionnaires targeting procurement staff and professionals working with the target group.

In conclusion, the study provided insights into the impact of E-Procurement on organizational performance and the factors that influence its successful implementation. The findings of this study may be useful for organizations considering the adoption of E-Procurement systems and may contribute to the development of procurement practices in the digital era. By understanding the impact of E-Procurement on organizational performance, organizations can make informed decisions about the implementation of E-Procurement systems and realize the benefits associated with it.

According to Ali (2021), South Sudan is among the countries globally with a high level of Humanitarian Emergencies and this has led to the growing and increased numbers of Non-Governmental Organizations and United Nations agencies operating in dare conflict-affected areas of the country. NGOs and UN agencies in South Sudan work hand in hand under a forum that provides the coordination roles among the humanitarian agencies. The forum comprises local NGOs, INGOs, donor agencies, government, and other external stakeholders where synchronized approaches towards funding are availed.

NGOs in South Sudan like in other developing countries experience dilemmas when comes to funding. This is credited to the element that majority of the NGOs especially the national non-governmental organizations lack well-defined organization structures in terms of organizational charts, offices, assets and equipment, poor human resource development, and unsuitable organizational management policies in retaining experienced staff especially polarized and conflicts zones (Bunny, 2017). A press release by the United Nations daily briefing by the office of the spokesperson for secretary-general (February 5, 2016) cited that almost US\$ 1.5 billion has been provided to South Sudan in form of Humanitarian assistance since 2013 and disbursed through NGO partners. There were over 235 National Non-governmental organizations, 150 International organizations in addition to over 15 United Nations agencies, bringing the total target population to 400 organizations.

1.1 Problem Statement

The application of manual procurement processes to purchase goods, services, and works is a challenge in the humanitarian sector. It has resulted in delays, is expensive, inefficient, and attracts corruption in the system (Moleté, 2021). Humanitarian organizations strive to alleviate suffering through disaster relief operations and development aid programs and based on their mandate, these organizations have competencies to fundraise, procure, transport, and distribute products, and services.

Procurement of products, works and services is a critical activity of humanitarian organizations with about 65% of their budget (Moshtari et al., 2021). This is a considerable portion given, that international humanitarian assistance was over USD 22 billion in 2018 (GHA, 2019). Total United Nations procurement from least developed countries in 2021 reached \$4.5 billion. Of these countries, Yemen had the largest procurement volume in 2021 with \$721 million, followed by Ethiopia (\$403 million), Afghanistan (\$351 million), Sudan (\$341 million) and South Sudan (\$283 million), (UNOPS, 2021). According to Moleté (2021), 35% of the Humanitarian procurements were done manually, while 55% rate of delays were recorded, and another 45% of losses were incurred by the procurement entities. The manual system is long, cumbersome, and time-consuming with several deficiencies that contribute to huge losses of public resources in public and private sectors alike. Besides being regarded as a perpetrator of corruption, a manual system is costly both for buyers and sellers (Rifaïd & Rusnaedy, 2019).

In South Sudan, due to economic crises compounded by the conflict in the country, it is estimated that the country receives more than one billion USD in humanitarian donation aid

annually (Rehan & Omwenga, 2017); 60% of which is spent on procurement of goods, and services annually (South Sudan NGO Forum, 2020). Several studies have been conducted on use of technology in procurement in South Sudan, with one study by Rehan and Omwenga (2017), on the challenges facing adoption of e-procurement found that the use of e-procurement could save up to 40% of the procurement cost, but cited challenges such as lack of Technological infrastructures, lack of technological knowhow (skilled ICT personnel) amongst the staff of the studied group, and further stated cost related to the acquisition of Electronic Resource Planning (ERP) systems by the government ministry as expensive. This study aimed to assess effect of e-tendering and performance of humanitarian United Nations agencies and non-governmental organizations in South Sudan.

2.0 Literature Review

2.1 Theoretical Review

E-Procurement adoption theory was developed by Timbers (2000), who found that adoption of e-procurement is influenced and affected by four major motives or perspectives of theories by the procurement entity. Capability perspectives suggest the assumption that the adoption of e-procurement would offer better access to valid information about the product which could lead to an improved quality of information about e-procurement. The assumption places expectation of more efficient routines, and faster procurement processes in the institution implementing the technology. The second assumption is the interactivity perspective depicts how digital procurement rhythms with the patterns of power and control of the e-procurement process, departmental communications or interactions amongst the units involved in the e-procurement, and finally, the coordination of e-procurement tasks, people, and policies. The perspective also considers the possibility of a relationship between private sector, public sector, and suppliers involved in e-procurement process. The third side of the assumptions is the orientation of the decision-making processes related to the impact digital procurement has on the department's cognitive, effective, and evaluative considerations. For instance, we wonder whether the e-procurement system would address users' structure problems differently and whether the employees perceive that their discretion has been altered by the e-procurement. Last, value distribution perspective addresses whether the public institution achieves value shift owing to digital procurement implementation. These value achievements could be viewed from perspective of well-being of employees, in other words, do employees approve of the visibility or surveillance of their procurement behavior, or disapprove of it.

2.2 Empirical Review

Gichuhi and Waruguru (2020) focused on influence of e-tendering process on procurement performance in a geothermal development company in Nakuru, Kenya. A descriptive research design was adopted in this study. The target population of this study was the procurement and logistics department's staff in GDC Nakuru region which was 170 in total. Multi-stage sampling method was used where 97 respondents were selected as the study respondents. This study relied on primary data collected by use of questionnaires. The instrument was tested for validity and reliability and Cronbach's alpha was used to test the reliability of the instrument. The alpha values for all the variables were above 0.8 well above the recommended threshold of 0.7. Thus, the instruments were deemed reliable for data collection in the study. Data collected was analyzed using Statistical Package for Social Sciences (SPSS). Findings were presented in form of descriptive statistics and inferential statistics and presented in tables accompanied by relevant discussion. The study established that e-tendering had a positive significant relationship with procurement performance in geothermal development companies

and therefore concluded that it has a significant influence on procurement performance. Regression analysis indicated that e-tendering did not have a significant contribution to the variation in procurement performance in geothermal development companies. Hence, to enhance procurement performance, e-tendering is not a major consideration. The study adopted a descriptive research design while the current study used explanatory.

Al Yahya et al. (2018) focused on e-tendering readiness in construction: The posterior model. Based on a conceptual model called e-Tendering readiness model (e-TRM), this paper empirically examined the e-TRM's interactions and causal relationships between e-tendering constructs and e-tendering readiness. The paper uses the structural equation modeling technique to test the hypothesized positive inter-relationships. A questionnaire survey is conducted for respondents of construction organizations in Saudi Arabia to understand their current e-tendering readiness and importance of e-Tendering variables. Supported by empirical evidence, this paper recognized that three out of nine constructs have direct influences on e-tendering readiness. However, one of the constructs, which is for the first time hypothesized and tested has the most effect. The study however left out the aspect of performance.

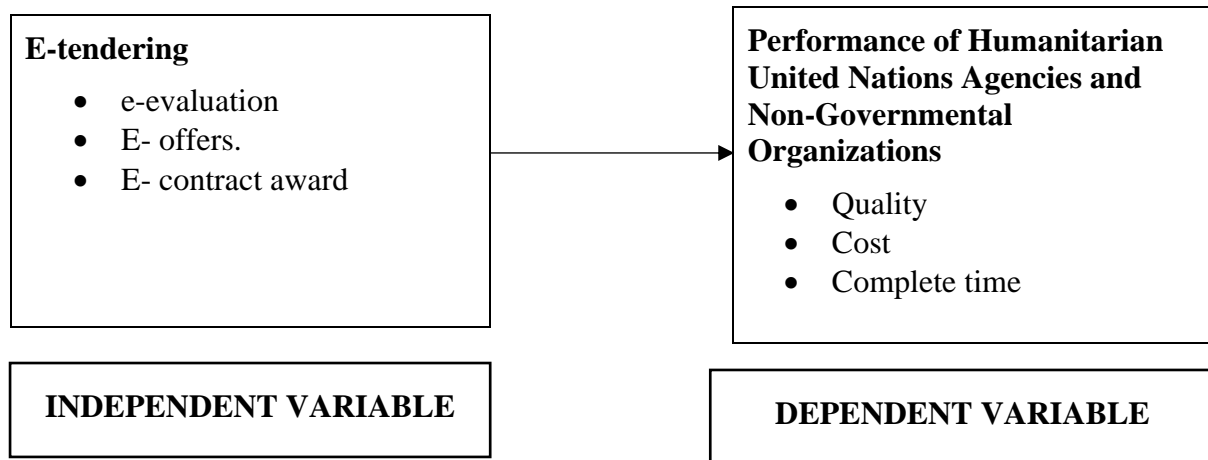
Gathima and Njoroge (2018) focused on effects of e-tendering on organization performance in public sector: a case of Nairobi city-county government. The study was guided by innovation diffusion theory and transaction cost theory. It utilized the descriptive research design and explanatory design. The presentation of findings was through tables. The correlation analysis results indicated that at 95% confidence interval, E-tendering practices had a positive and significant relationship with the performance of the Nairobi City County Government. The study however focused on only one aspect of e-procurement.

Wanjiku, Oteki, and Njogu (2023) focused on electronic tendering and organizational performance of parastatals in Nakuru County. The study population included five (5) selected state-owned organizations in Nakuru municipality. The regression analysis showed a 4.6% change in organizational performance was described by e-tendering. The study confirmed there was a statistical significance between e-tendering and organization performance, where e-tendering, as a supplier management tool, was able to account for a positive marginal significant increase in organizational performance. There was a moderate positive correlation between organizational performance and e-tendering.

2.3 Conceptual Framework

Conceptual framework graphically exhibits a relationship that exists between independent variable, dependent variable, and moderating variable (Ngulube et al., 2015). The independent variable was e tendering, while the dependent variable was performance of the humanitarian and United nation agencies.

Figure 1: Conceptual Framework



2.3.1 E-Tendering

Digital sourcing or electronic tendering is a process of sending and receiving bids using an online procurement platform. E-tendering makes a huge difference to the procurement process as it offers improved visibility, compliance, and decision-making across source-to-pay (S2P) operations (Kosmola, Reimann & Kaufmann, 2019). Procurement process is an integral part of procurement procedures and defines the end user satisfaction status. E-tendering enables organizations to outsource at large for quality, reliable, cost-effective products and achieve value for money from a reliable source or supplier. Singh and Beyonce (2011) defined e-tendering as use of Internet or online tools to support the sourcing process from identifying suppliers to handling their invoices. The process aids collaboration between the buyer and suppliers, and increases competitiveness by granting an equal and transparent opportunity to the potential suppliers in the market. Buyers e-tender by issuing Request for quotation (RFQ), Request for Proposal (RFP), Request for Expression of Interest (EOI), or invitation to tender (ITT). It could be restrictive to prequalified suppliers or Open tender nationally or internationally (UNICEF Supply Manual, 2022). E-tendering by using internet assist the buyers expand their market exploration and finding new potential suppliers further afield. It increases competition in the tender process, and high-quality products can be procured at an effective price, achieving value for money (vfm). More recently, organizations have ventured into electronic purchasing consortia (EPC) where organizations aggregate their needs definition to exploit economies of scale and scope without diseconomies of increased communication and transaction costs, achieving reduced purchasing costs of over five percent and an approximate seventy percent in the return on investment as an achievement of e-tendering procurement process (Gardenal, 2013).

Transparency has been recognized as a key factor and has a strong effect on buyer-seller relationships, and their respective reputation (Bienhaus et al., 2018). Relationship enhancement happens because of equal treatment, effective real-time communication, and availability of information. The study has illustrated e-tendering automates the processes, saves time, reduces cost of procurement, reduces procurement turn-around time, and allows concentration of personnel on strategic aspects of operations. However, there are some setbacks to operationalization of digital sourcing, such as acceptance by employees, managerial support, attitude of employees, and organizational culture (Bienhaus, 2018).

2.3.2 Performance of Humanitarian United Nations Agencies and Non-Governmental Organizations

According to Barney (2001), businesses are established to meet certain objectives and goals which in the end must satisfy the stakeholders' desires and wishes for which the association came into existence. The study further argues that the performance of companies is entirely centered around the deployment of assets that must be productive financially and accomplish shared goals. These goals must contend the owners and they get value and returns from their business. Singghania and Saini (2018) study supported the measure of business performance as financial and non-financial, as main measure. The study focused on financial measures for which mode computation of those financial health using ratios including Return on Assets (ROA), Returns on Investment (ROI), Return on Capital Employed (ROCE), and Return on Equity (ROE). ROA gives the profitability position of the company in terms of its total assets; it describes the firm efficiency in using well its assets and generating returns. It is usually in a percentage of dividing the annual earnings of the company by the total assets on accounts. On the other hand, ROI gives an evaluation and comparison of different investments' efficiency by dividing the returns by the investment cost. Thirdly, ROCE is a measure utilized by firms to show profitability and efficiency of the deployed capital investments of a firm, and expressed in ratio finally, the ROE is the measure that reveals the percentage of net income earned from the owner's capital (Das & Swain, 2018; Halwagi, 2017; Martini, Suardana & Astawa, 2018).

Firm performance can also be measured by non-financial measures such as delivery lead time, market shares, Supplier management, and an increase or reduction in a number of employees working with the firm (Gebreyesus & Bigsten, 2007). Das and Swain (2018) firms compete over time by expending resources with purpose of reducing their cost, often, the cost-reducing investments operate directly on costs. This is because cost reduction is a sale point for any firm, and this could mean developing a new product or new product at a very reduced cost of manufacturing to maximize sales, control their market share, and resulting to return on investment.

Liao and Shyu (2015) Lead time refers to the length of time between the time an order for items is placed and when it is made available on the shelf for use and satisfying customer demands. The lead time considers every stage of the procurement process from order preparation, order transit to the supplier, supplier lead time (which is the lapse between the time an order is received by the supplier and their shipment of the items), items transit time from the supplier, and preparation time for availability. In the quest to improve customer service levels, organizations and businesses have devised ways to control lead time. The reduction in lead time subsequently reduces investment in safety stock held to meet unanticipated demand during lead time and finally improves responsiveness to schedule changes by taking care of adversaries of forecasting errors. Ponte et al. (2018), however, organizations attempt to reduce lead time attract extract costs, and must commit to taking on board those extra costs to realize it. Such lead time reduction costs include administrative costs, which are incurred by committing to the order preparation, and mostly on workers working overtime or getting extra part-time workers. The second-tier transport costs which associated with the transit time of items from the suppliers, and transportation time constitutes the fundamental transportation cost. The third, and the final, is the supplier's speed-up costs which are associated with expediting the order processing and paying the margin. In conclusion, on the delivery lead time, delivery of goods and services on time indicates good performance by the firm, and the opposite is true. Late and slow delivery of services and goods depicts the poor performance of the firm in question (Ittner & Larcker, 2012).

3.0 Methodology

The study adopted an explanatory research design, it was the most relevant design since it is concerned with finding out the relationship that exists between the independent and dependent variables by collecting quantifiable data (Akhtar, 2016). According to South Sudan NGOs Forum (2020), there were over 235 National Non-governmental organizations, and 150 International organizations in addition to over 15 United Nations agencies, bringing the total target population to 400 organizations. This study targeted the 400 humanitarian organizations operating in South Sudan. The study targeted Procurement Managers, Procurement Officers, Contract Specialists, and Program Officers. A stratified random sampling method was used to select 200 respondents. A structured questionnaire was used to collect data. Data was analyzed using descriptive statistics and regression analysis.

4.0 Results and Discussion

4.1 Reliability Results

The Cronbach Alpha was calculated in a bid to measure the reliability of the questionnaire. This was done by subjecting the questionnaire to 20 respondents.

Table 1: Reliability Results

Variable, N=20	No of Items	$\alpha \geq 0.7$	Comment
e-tendering	5	0.873	Reliable
Performance	10	0.859	Reliable

Table 1 shows that e-tendering had a Cronbach Alpha Coefficient of 0.873 and a performance had 0.859. All the variables had Cronbach Alpha Coefficients greater than 0.7 and this denoted that the questionnaire was reliable.

4.2 Descriptive Statistics

4.2.1 Descriptive Analysis of E-tendering

The study objective was to assess the effect of e-tendering on performance of humanitarian United Nations agencies and non-governmental organizations in South Sudan. Table 4.5 presents the results of the descriptive analysis of the variable e-tendering. In the interpretation of the data the responses for agree and strongly agree are combined to mean affirmed and the responses for strongly disagree and disagree are combined to mean disagreed. A mean that is above 3 means the majority agreed while a mean less than 3 means the majority of the respondents disagreed with the particular statement(s).

Table 2: E-tendering and performance of United Nations agencies and non-governmental organizations in South Sudan

E-tendering, N=149	Mean	SD
Our Agency has a secure e-tendering platform	4.34	0.93
Our entity solicits supplier offers through an e-tendering platform	4.06	0.90
Our organization has software for e-tendering	3.3	0.88
Evaluation in the organization is done electronically	3.62	0.80
E-contract awards have been implemented in the organization through the e-procurement	4.05	1.10
Overall mean	3.87	0.92

According to the results in Table 2, the respondents who were the majority affirmed that the agency has a secure e-tendering platform. This was supported by a mean of 4.34 and a standard deviation of 0.93. The results also showed that the majority of the respondents agreed that their entity solicits supplier offers through e-tendering platform (mean=4.06, SD=0.90). The results further confirmed that most of the respondents agreed with the statement that our organization has software for e-tendering and the statement attained a mean of 3.3 and a standard deviation of 0.88. Further, most respondents agreed that evaluation in the organization is done electronically, and the mean was 3.62 and the standard deviation was 0.80. Finally, it was revealed that majority of respondents agreed that e-contract awards have been implemented in the organization through the e-procurement. This was supported by a mean of 4.05 and a standard deviation of 1.10.

The overall mean attained for all the statements was 3.87. This implied that the majority of the respondents affirmed that the organization had adopted the use of e-tendering. The low standard deviation (standard deviation of 0.92) suggested a high level of agreement among respondents on statements relating to e-tendering. The finding concurs with Gathima and Njoroge (2018) whose results indicated that e-tendering practices had a positive and significant association with the performance.

According to the respondents, their organization also conducted pretender conferences on electronic platforms, issued pretender documents through the e-platform, and delivered the tender documents through electronic media. The tenders were also submitted via electronic platforms and were also opened on the same media. The committee also made decisions on tender issuance through electronic media platforms.

4.2.2 Descriptive Analysis of Performance of Humanitarian United Nations Agencies and Non-Governmental Organizations

The dependent variable in the study was performance. Table 3 presents the results of the descriptive analysis of the variable performance. In the interpretation of the data the responses for agree and strongly agree are combined to mean affirmed and the responses for strongly disagree and disagree are combined to mean disagreed. A mean that is above 3 means the majority agreed while a mean less than 3 means the majority of the respondents disagreed with the particular statement(s).

Table 3: Performance of Humanitarian United Nations Agencies and Non-Governmental Organizations

Performance, N=149	Mean	SD
e-procurement reduces purchasing costs (e.g., no printing on papers for RFQ, bids, contracts, etc.)	3.86	1.10
e-procurement improves efficiency and time taken to complete procurement process	4.01	1.14
e-procurement standardizes purchasing process across the organization	3.84	1.02
e-procurement reduces administrative costs with better effectiveness	3.95	0.95
e-procurement improves effectiveness of Supply Chain processes (including approval workflow)	4.02	0.75
e-procurement reduces discretion & increases transparency	3.97	0.74
e-procurement provides real-time status of procurement requests for all parties.	4.05	1.07
e-procurement leads to a reduction in errors of order transmission	4.04	0.90
e-procurement reduces procurement corruption	3.96	1.02
e-procurement facilitates organization trust by stakeholders (e.g., beneficiaries, donors)	3.83	1.14
Overall mean	3.95	0.98

According to the results in Table 3, respondents who were the majority affirmed that e-procurement reduces purchasing costs (e.g., no printing on papers for RFQ, bids, contracts, etc.). This was also supported by a mean of 3.86 and a standard deviation of 1.10. The results also showed that the majority of the respondents agreed that e-procurement improves efficiency and time taken to complete procurement process. The mean for the statement was 4.01 and the standard deviation was 1.14. The results further confirmed that majority of the respondents agreed with the statement that e-procurement standardizes purchasing process across the organization and the statement attained a mean of 3.84 and a standard deviation of 1.02. Further, the majority of the respondents agreed that e-procurement reduces administrative costs with better effectiveness the mean was 3.95 and the standard deviation was 0.95. Furthermore, the results revealed that majority of respondents affirmed that e-procurement improves effectiveness of supply chain processes. This was supported by a mean of 4.02 and a standard deviation of 0.75.

Additionally, the results showed that the majority of the respondents agreed that e-procurement reduces discretion & increases transparency. The mean for the statement was 3.97 and the standard deviation was 0.74. The results further confirmed that majority of the respondents agreed with the statement that e-procurement provides real-time status of procurement requests for all parties and the statement attained a mean of 4.05 and a standard deviation of 1.07. Further, the majority of the respondents agreed that e-procurement leads to a reduction in errors of order transmission the mean was 4.04 and the standard deviation was 0.90. Similarly, findings revealed that majority of respondents affirmed that e-procurement reduces procurement corruption with a mean of 3.96 and a standard deviation of 1.02 that supported the findings. Finally, it was revealed that majority of the respondents agreed that e-procurement

facilitates organization trust among stakeholders. This was supported by a mean of 3.83 and a standard deviation of 1.14.

The overall mean attained for all the statements was 3.95. This implied that the majority of the respondents affirmed that the organization was performing well. The low standard deviation (standard deviation of 0.98) indicated a high level of agreement among respondents on statements measuring organization performance. According to Pacifique (2022), best performance is achieved when quality standards are met, there is cost-effectiveness, and timely completion.

According to the respondents, e-procurement also makes the procurement process efficient and saves on costs, it leads to increased transparency and accountability. It also enhances visibility and leads to greater control over the procurement process. E-procurement according to the respondents also allows easy vendor management, reduces rogue spending, and allows rock-solid audit trails.

4.3 Regression Analysis

Regression analysis was used to determine the effect of e-tendering on performance of humanitarian United Nations agencies and non-governmental organizations.

Table 4: Regression of Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.224	0.194		6.31	0.000
	E-tendering	0.282	0.054	0.371	5.205	0.000

a Dependent Variable: Performance

The regression coefficient results showed that the beta coefficient for the relationship between e-tendering and performance of humanitarian United Nations agencies and non-governmental organizations was positive and statistically significant ($\beta=0.282$, $P=0.000$). The implication here was that there is a positive and significant relationship between e-tendering and performance of humanitarian United Nations agencies and non-governmental organizations. One-unit increase in e-tendering will therefore lead to 0.282 increase in performance of humanitarian United Nations agencies and non-governmental organizations. This concurred with Gichuhi and Waruguru (2020) who established that e-tendering had a positive significant relationship with procurement performance. This was also in line with Wanjiku, Oteki, and Njogu (2023) who confirmed that there was a statistical significance between e-tendering and organization performance, where e-tendering, as a supplier management tool, was able to account for a positive marginal significant increase in organizational performance.

5.0 Conclusion

The study findings indicated that e-tendering has a positive and significant relationship with performance of humanitarian United Nations agencies and non-governmental organizations. The study hence concluded that e-tendering has a positive and significant effect on performance of humanitarian United Nations agencies and non-governmental organizations. The study concluded that companies NGOs that evaluate tenders, use the e-platform for offering tenders, and award the tenders through the e-system platform can achieve high performance in terms of improved quality, joint product design, and better supplier management.

6.0 Recommendations

The study concluded e-tendering has a positive effect on performance of humanitarian United Nations agencies and non-governmental organizations. This study hence suggested that all NGOs and humanitarian agencies should ensure they adopt the use of e-tendering in their solicitation and sourcing processes in conducting procurement activities. The study cited advantages such saving time, wide coverage of markets and reaching more potential suppliers and finally save environment from printing more paper works attaining sustainable procurement practice.

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