

Influence of Electronic Procurement Processes on Procurement Performance of Uasin Gishu County Government, Kenya



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ABSTRACT: This study aimed to investigate the influence of electronic procurement processes (e-procurement) on procurement performance in Uasin Gishu County, Kenya. The growing importance of web-based procurement models and information communication technology (ICT) in enhancing supply chain value generation is the backdrop for this research. Although prior studies have indicated the advantages of e-procurement in terms of reduced processing time, cost savings, enhanced data accuracy, and increased efficiency, several gaps and limitations exist in the existing literature. This study addresses these gaps by providing a comprehensive exploration of the impact of various e-procurement dimensions on procurement performance, with a specific focus on a devolved government entity in Kenya. This examination evaluated the influence electronic on performance of Uasin Gishu County, Kenya. The study sought to establish the effect of electronic sourcing and ordering on procurement performance within the county government. The study drew on theoretical frameworks, including the Disruptive Innovation Theory and the Diffusion of Innovation Theory, to determine extent to which electronic procurement influence the performance of procurement unit. A concurrent parallel mixed design was employed to facilitate an in-depth analysis of the research variables. The target population comprises of supply chain officers, user department heads, and accounting officers in Uasin Gishu County Government, totaling 96 respondents. A census sampling method was employed due to the relatively small population size. Data was collected through questionnaires and analyzed quantitatively. The analysis included descriptive statistics such as frequency distributions, means, and standard deviations. The study findings were presented using tables and figures for clarity and easy interpretation. The study concluded that integrating electronic payment into Uasin Gishu County's e-procurement framework enhances efficiency by speeding up transactions and reducing manual effort and electronic sourcing strengthens supplier engagement, ensures clear communication of requirements, and enables effective performance tracking. The study recommended that adopting electronic invoicing accelerated payments, reduce errors, and improve accuracy. Additionally, investing in an integrated e-procurement system will facilitate seamless communication among departments involved in procurement.

KEY WORDS: Electronic Procurement Processes, Electronic Sourcing, Electronic Ordering & Performance

BACKGROUND TO THE STUDY

There are various nations, like Singapore, the UK, the US, Malaysia, Australia, and the EU, that are bothersome to present e-obtainment in all subdivision. In order to better represent the interests of a nation's businesses and citizens in the digital economy, these programs are essential components of larger e-Government initiatives. For instance, the sendoff of GeBIZ is a significant drive under Singapore's e-Government ground breaking strategy (Khalfan et al., 2022). Two classes of providers are upheld by GeBIZ: those related with far reaching venture asset arranging (ERP) frameworks that give e-Obtainment as a help, and those that focus principally on e-Acquirement administrations, which are simpler to get to.

Electronic procurement is the process wherein transactions involving the sale and purchase of goods, services, and consultancy services are conducted over the internet. This mode of procurement involves multiple stakeholders, including businesses, consumers, and government entities (Chen et al., 2021). The core of electronic procurement comprises integrated web-based database systems that facilitate various activities, such as negotiation, ordering, receipt, and payment. Its primary objective is to streamline operations, cut costs, save resources, and expedite processes. Although e-procurement has garnered attention, its full adoption within public organizations remains in its nascent stages (Iles, 2017). Sánchez-Rodriguez, Martínez-Lorente, and Hemsworth (2019) observe a limited historical precedent for public sectors embracing electronic procurement.

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According to Gasco and others. (2018), the center of e-obtainment is the photoelectric exchange of news during the whole of the obtainment and supply chain processes, either inside or outwardly. Created nations like the US, UK, Malaysia, and Australia have efficiently organized dossier novelty into their obtaining or receiving activities. In the US, change plays had a essential impact in attractive care of obtaining or receiving tasks, place annual earnings range in in the range of \$1.4 and \$1.6 heap. Supply chain processes, including order placement, delivery planning, and coordination between suppliers and users, have evolved significantly due to technological advancements (Truong, 2019). Lewis Faupel et al. (2016) in India emphasize the importance of timely and automated data collection, checking, and enhancement facilitated by information technology for informed decision-making. In the developing world, E-procurement measures are swiftly advancing, resulting in immediate benefits. For instance, in Korea, over 60% of the country's obtainment, equaling \$124 billion USD, is administered by way of E-procurement orders (Truong, 2019).

Masudin, Aprilia, Nugraha, and Restuputri (2021) studied the impact of e-procurement adoption on company performance: Evidence from the Indonesian Manufacturing Industry. This study was conducted to determine the performance impact of e-procurement adoption in Indonesian manufacturing companies. The results indicate that top management support has a significant effect on e-procurement implementation. Other results show that information quality has a significant effect on e-procurement implementation, while e-procurement implementation has a significant effect on company performance.

In Africa, the notoriety of E-acquisition processes has flooded because of the intrinsic difficulties experienced in open areas, like responsibility shortfalls, absence of straightforwardness, defilement, and pay off in obtainment exercises. Countries have implemented legal reforms and electronic procurement systems to address these issues. These systems make it easier to conduct a variety of online procurement activities. These frameworks include e-assessment, e-invoicing-promoting, e-accommodation, e-contracting, e-installment, and e-checking (Mafini, Dhurup and Madzimure, 2020). Mabhodha and Choga (2020) administered a survey on the belongings of facts and ideas technology (ICT) on obtainment movements inside city councils in Zimbabwe. Their verdicts revealed that merging ICT into the obtaining or receiving process has a positive influence on many working surfaces of murder apart from streamlining the obtaining or receiving process itself..

In Kenya, numerous organizations have embraced electronic procurement to enhance their supply chain operations. The 2015 Public Procurement and Assets Disposal Act (PPAD 2015) manages public obtainment in Kenya, delimiting it as the acquisition through miscellaneous resources, containing hire, rent, license, hire purchase, purchase, or contract. The management has applied the PPAD 2015 act to advance sustainability honestly obtainment, leading to meaningful benefits to a degree cost stockpiles, discounted management payments, enhanced supply chain processes, and improved cooperation with stakeholders complicated in the supply chain. Several investigators have surveyed E-obtainment exercise in Kenya, investigating challenges (Mutangili, 2019) and determinants doing allure request, accompanying a focus on the significance of top administration support (Matano, Musau & Nyaboga, 2020).

Mwangi and Arani (2021) studied the influence of e-procurement on the performance of state corporations in Kenya. It was found out that e-procurement has transformed all routine purchasing transactions within KERRA. However, it was established that e-procurement does not reduce the costs of acquiring materials and freeing up KERRA resources. It was also noted that e-procurement positively increases the performance of state corporations. Waitthaka looked at how e-acquisition methods affected how production networks worked. The reason for this study is to determine what electronic obtainment methods mean for inventory network execution. According to the report, an organization's procurement performance is critical to its success because it enables the business to compete for high-quality goods that give it an advantage in the market. The findings also demonstrated a significant connection between the operation of the Kenyan District Government's production network and e-obtainment.

Although aforementioned studies have demonstrated the value-added benefits of e-Procurement, there is a notable gap in research conducted at the local level, particularly within devolved government entities and specifically in Uasin Gishu County. The study inquires to fill this break by accumulation facts about the belongings and attainable benefits of the e-Procurement Act inside this singular scene.

Statement of the Problem

Implementing electronic procurement systems can significantly decrease the time spent on order processing, lower the expenses associated with managing orders and payments to suppliers, lessen transactional mistakes, and boost the accuracy and quality of data and information received (Bahaddad et al., 2018). Moreover, e-procurement has the capacity to cut material costs by 5 to 10 percent, elevate productivity by 30 to 50 percent, foster innovation, enhance document processing speed in real-time, and aid in risk management (Hogel et al., 2018). Electronic procurement holds promise for boosting efficiency, transparency, and cost efficiencies in the procurement functions of county governments. Nevertheless, numerous county governments in Kenya continue to utilize manual procurement systems, which are linked with significant inefficiencies, high operational costs, and vulnerabilities

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to fraudulent activities. Transitioning to e-procurement could enable county governments, such as Uasin Gishu, to modernize their procurement processes and achieve superior performance metrics.

As per Jayawardhena and Jayaratne's (2019) study, there are positive effects on practical adroitness from the article of clothing industry's e-acquisition and store network direct in Sri Lanka. Faheem and Siddiqui (2019) discovered a considerable relationship between supply chain performance and e-procurement practices. Madzimure, Mafini, and Dhurup (2020) investigated e-obtainment and supply chain efficiency in smaller bodies in South Africa, noticing a important relates. Waganda (2018) investigated the United Nations Agencies in Nairobi to investigate the link 'tween e-obtainment and accomplishment. Aseka (2019) attracted on integrating e-obtainment accompanying supply chain influence in Nairobi's drink manufacturing area. Oteki (2019) examined e-procurement methods and supply chain performance in Kenya's sugar processing industry.

The existent research tells break in circumstances, idea, and methods, accompanying few studies conducted in nations like Sri Lanka and South Africa and not in Kenya. Some studies directed on supply chain acting alternatively obtainment accomplishment, and so forth working record of what happened methods districting from the current study's approach. Against this scenery, this study aims to review the impact of e-obtainment on the conduct of Uasin Gishu County Government.

Purpose of the Study

The purpose of this study was to determine the influence of electronic procurement on procurement performance in Uasin Gishu County, Kenya.

Objectives of the Study

- i. To determine the influence of electronic sourcing on procurement performance at Uasin Gishu Government, Kenya
- ii. To establish the influence of electronic ordering on procurement performance at Uasin Gishu Government, Kenya.

Research Questions

The study was guided by the following research questions

- i. To what extent does electronic sourcing influence procurement performance at Uasin Gishu Government, Kenya?
- ii. How does electronic ordering influence procurement performance at Uasin Gishu Government, Kenya?

Significance of the Study

The study's findings can help the county government allocate resources more efficiently, ensuring that public funds are used judiciously. Electronic procurement can enhance transparency and accountability, reducing the risk of corruption and ensuring that procurement processes are fair and equitable.

The study's insights can inform the formulation of government policies related to electronic procurement, potentially leading to the development of guidelines and regulations for its implementation in Uasin Gishu County. Legislators may utilize the examination's results towards finding best practices and recommend their adoption in other counties and government agencies in Kenya.

LITERATURE REVIEW

Empirical Literature Review

Electronic Sourcing and Procurement Performance

Electronic sourcing utilizes internet-based platforms for gathering and evaluating supplier details to identify appropriate business collaborators. Such technologies centralize all bidding information onto a unified platform, enabling thorough assessment, filtering out unsuitable candidates, and granting contracts to winning participants (Campbell & Du Preez, 2017). The system integrates several linked components, including spaces for advertising bid opportunities, template libraries for contract drafting, tools for generating e-bidding documents, standard contract language repositories, workflow and data administration systems, award management frameworks, and submission platforms for bids.

E-sourcing is linked with cost efficiencies, realized through the appraisal and choice of projects from a broad spectrum of providers, alongside the execution of e-auction tactics, which lessen the necessity for extensive procurement teams (Langat, 2019). Automated bid assessments have expedited the contract allocation process by curtailing the duration needed. E-sourcing platforms have bolstered transparency and information dissemination between purchasers and suppliers, permitting suppliers to monitor tender openings, progress, and deadlines, thereby boosting adherence to regulatory standards.

Bharadwaj (2019) highlighted the significance of e-commerce in fostering business expansion, notably through electronic data interchange, emails, electronic notice boards, electronic money transfers, and other network-centric technologies, in a scholarly examination of supply chain management and e-commerce within the retail sector. These technologies simplify the exchange of

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business-related information and boost efficiency in aspects like stock management, payment safety, decreased transportation expenses, and interaction among business associates.

An assessment of the effect of e-obtainment on various ventures in various Indian monetary areas was done by Nanjundeswaraswamy and Nalini (2014). As indicated by their investigation, the utilization of e-obtainment innovations, for example, e-obtaining, has delivered various vital benefits, like diminished unapproved buys, upgraded data association, and closer coordination of the acquisition capability.

Panduranga (2016) explored the impact of e-procurement on transparency in the Indian government's procurement system. The Central Public Procurement Portal was introduced to streamline government procurement programs and improve transparency. The study demonstrated that the online platform enhanced transparency by enabling online registration, tender creation and publication, online submission, evaluation, and contract awarding. This resulted in increased public participation, reduced corruption, and improved transparency.

Mafini, Dhurup, and Madzimure (2020) looked at the relationship between supplier coordination, electronic procurement, and supply chain efficacy in South African small businesses. According to their findings, the use of electronic design and negotiating procedures significantly increased supplier coordination, which in turn boosted company performance. Nevertheless, they found that supplier relationships were not significantly impacted by e-sourcing, e-assessment, or e-information distribution.

In Ghana's Ashanti region, Hannah and Nani (2021) investigated the effects of electronic integration on the effectiveness of procurement within local governments. Their conclusions showed that the use of electronic procurement techniques reduced bureaucratic obstacles, political meddling, administrative paperwork, and transaction times. It also promoted more accountability, increased openness, and improved documentation all at the same time.. The study highlighted how e-procurement technologies could enhance both financial and non-financial goals.

Tuyisabe and Mulyungi (2018) investigated the adoption of e-sourcing in the telecommunication sector in Rwanda, with a focus on MTN Rwanda. Their study revealed that e-sourcing technologies, including enterprise resource planning tools and spend analysis, were implemented to manage supply chain operations in the industry. Akoth (2017) conducted a study to assess the effects of electronic procurement on the delivery of services within Kenyan county government entities. The research outcomes indicated that the adoption of e-sourcing, e-contracting, e-ordering, and e-information dissemination played a crucial role in enhancing service delivery by optimizing various stages of the procurement process. Their research highlighted the critical importance of employing technologies such as automated warehouse automation, pick-to-light navigation systems, vendor management inventory systems, and barcode technology in elevating supply chain performance. These technological implementations were noted for their contributions to boosting employee productivity, managing stock levels effectively, enhancing forecast precision, and streamlining transportation logistics.

Oteki et al. (2018) examined the influence of electronic order processing on the supply chain performance of sugar processing firms in Kenya. The study found a significant relationship between e-sourcing and procurement performance, leading to cost savings and improved procurement efficiency.

Kimutai and Ismael 2016 planned to form a friendship between key supply chain and e-sourcing executives at Kenya electricity generating company ltd the activity of determined e-obtaining was lay out to be a basic become involved further developing the company's inventory network portrayal Ochari and Kwasira 2016 concentrated on the connection between the influence of the obtainment function in Nakuru County management and e-sourcing while the voting demographic organization acknowledged the possibility of e-obtaining charm full activity held up a test hindering the accomplishment of every likely advantage.

Electronic Ordering and Procurement Performance

Gichuhi (2021) explored the impact of electronic ordering on procurement performance within the Geothermal Development Company (GDC) in Kenya. The study employed a descriptive research design, targeting employees from the procurement and logistics departments in the GDC Nakuru region. Out of a total of 170 employees, a multi-stage sampling technique was used to select 97 respondents. Data collection relied on questionnaires, and the findings were analyzed using both descriptive and inferential statistics, with results presented in tables accompanied by discussions. The study concluded that e-ordering had a significant positive effect on procurement performance in the geothermal sector. However, it is important to note that the scope of the study was limited to GDC in Kenya.

In a similar study, Sakwa and Ngeno (2018) examined the impact of electronic order processing on the performance of supply chains within sugar processing firms in Kenya. The study adopted a mixed-methods research design, focusing on 12 sugar processing companies with a total population of 7,584 employees. Stratified random sampling was applied to select 367 participants. Data was collected through self-administered questionnaires, interviews, and observations. The findings indicated a strong positive relationship between electronic order processing practices and supply chain performance. The study concluded

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that implementing electronic order processing enhances supply chain efficiency. However, this research was specific to the sugar processing industry in Kenya.

In a related study, Moronge and Munyao (2018) explored the impact of e-procurement practices on procurement performance in public universities in Kenya. Their research aimed to analyze how the adoption of electronic ordering, sourcing, and tendering influenced procurement outcomes within these institutions. The study utilized surveys and interviews to collect data from key stakeholders actively involved in the procurement process at the universities. The findings demonstrated a significant positive correlation, showing that the implementation of e-ordering, e-sourcing, and e-tendering practices improved overall procurement performance in these institutions. This research adds to the growing body of literature on the effectiveness of e-procurement by highlighting its critical role in enhancing efficiency and optimizing procurement operations in academic institutions. Based on these findings, the study recommends expanding similar research to other sectors to develop a broader understanding of how e-procurement practices impact procurement performance. Such insights would help inform more targeted strategies and policies aimed at improving procurement processes across various industries.

To deepen insights into e-procurement practices, Chepkwony (2017) carried out a detailed study exploring the impact of electronic ordering and electronic informing on supply chain efficiency. The research aimed to uncover how these e-procurement elements contribute to improving overall supply chain performance. Using a thorough methodology that encompassed data collection, analysis, and interpretation, the study revealed that both e-ordering and e-informing significantly enhance supply chain efficiency. Based on these findings, the study recommended that organizations prioritize and invest in these areas to achieve more effective procurement outcomes. This study highlights the intricate relationship between e-ordering, e-informing, and supply chain performance, adding valuable insights to the broader conversation around e-procurement strategies.

Theoretical Literature Review

The section covers different theories connected on research variables. These theories are constructed to enhance our understanding, prediction, and explanation of challenges within the defined critical boundaries. The study will be primarily informed by the Disruptive Innovation Theory, the Diffusion of Innovation Theory, and the Technology Acceptance Model Theory.

Disruptive Innovation Theory

Larson (2016) conducted an examination of a theory initially developed by the American scholar Christensen (1995). The Disruptive Innovation Theory (DIT) elucidates how new market entrants can disrupt well-established companies over time. It is characterized by smaller, resource-constrained companies challenging established businesses from the bottom and eventually rising to great success. DIT gained prominence with the emergence of companies like Uber and Amazon, which aimed to revolutionize their respective industries.

This theory is particularly relevant to the current study because it underscores the rigidity of organizational systems. Hence, embracing e-procurement approaches demands a strategic and practical approach to integrate new systems like e-sourcing while preserving the existing structure, resulting in cost savings, increased speed, and enhanced supplier relationships. DIT emphasizes that successful innovation requires proper preparation, including the right technology, staff training, and awareness campaigns among users. It's worth noting that disruptive innovation may only be effective in the short term, making it imperative to consider this limitation (Harelimana, 2018).

Diffusion of Innovation Theory

Lamorte (2019) explored the Diffusion of Innovation Theory (DIT), originally introduced by Rogers (1962), a communication theorist from the University of New Mexico. DIT aims to explain how an idea or invention spreads over time and affects a particular population or community structure.

This theory delves into the adoption of new concepts, behaviors, or products, illustrating that people may respond differently to new innovations compared to traditional practices. For adoption to occur, individuals must perceive the new behavior, idea, or product as advantageous. DIT has shed light on how e-ordering and e-invoicing have replaced manual systems in various organizations. The strength of this theory lies in its ability to elucidate how individuals engage with new technologies over time, outlining the stages of adoption by different segments of the population.

However, DIT also reveals that the rate of innovation adoption is influenced by factors such as urbanization, industrialization, development level, education, and cultural constraints, leading to varying adoption rates for different types of innovations (Halton, 2019). This theory emphasizes the role of innovation in promoting economic development and enhancing organizational performance through the acceptance of electronic systems like e-procurement (Corsi & Minin, 2013).

Conceptual Framework

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Independent Variable

E-procurement processes

Dependent Variable

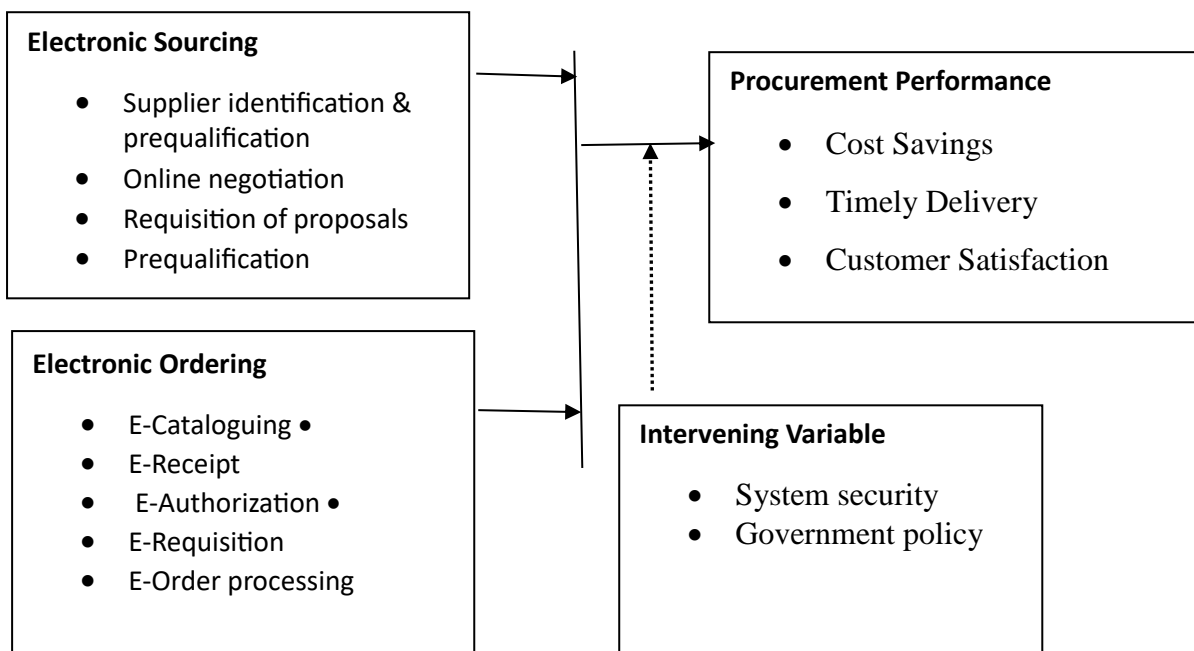


Figure 1: Conceptual Framework

Source: Researcher, (2024)

RESEARCH METHODOLOGY

Research Methodology

This study investigated the impact of e-acquisition on procurement execution through a quantitative investigation design, utilizing a survey instrument to gather direct data and really take a look at the goal section's reactions. Using concentrate on research as its framework, this assessment accumulates quantitative data through overviews. The expert joins quantitative and emotional investigation systems to insightfully reveal and assess the relationship or exchange between variables, characteristics, or parts.

Research Design

This study employed the convergent parallel mixed methods design due to its suitability for combining both qualitative and quantitative research approaches, fitting perfectly for this investigation (Fisher, 2017). The convergent parallel design is a method for collecting, analyzing, and "mixing" both quantitative and qualitative research methods within a single study to comprehend a research problem (Creswell, 2018). This approach will be preferred over others because certain research questions will necessitate a qualitative approach, while others will demand a quantitative method. The design will assist the researcher in gaining a deeper or more comprehensive understanding of the research problem by acquiring different yet complementary data from the respondents (Creswell & Plano, 2018).

The convergent parallel design collected and analyze two independent strands of quantitative and qualitative data simultaneously in a single phase (Creswell, 2018). This design will prioritize both qualitative and quantitative methods equally, keeping the data analysis separate, mixing the results during the overall interpretation, and attempting to find convergence, divergence, contradictions, or relationships between the two sources of data (Creswell & Plano, 2018). In this instance, the convergent parallel design will allow the researcher to adopt a cross-sectional survey research design for quantitative data and a phenomenological research design for qualitative data. The cross-sectional survey will be chosen because it excels in determining the prevalence of occurrences, situations, problems, attitudes, or issues as stated by Kumar (2014). Additionally, it will be beneficial in describing the characteristics of a large study population and sample, thereby enhancing the significance of the study's results; the design will also enable the researcher to utilize questionnaires for youth data collection (Kombo and Tromp 2018).

Data in cross-sectional surveys were collected at one point in time. The design leveraged standardized questions, with the reliability of the items determined, and the study's findings generalized (Creswell, 2018). Creswell (2018) noted that the phenomenological approach will enable an in-depth examination of relevant variables to describe the current situation using an interview guide.

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Target Population

As per Mohajan (2018), it signifies the complete group of individuals, events, or objects that share a common observable characteristic. It is the aggregate of everything conforming to specific criteria. Tracy (2020) highlighted the concept that a population encompasses groups of individuals who share a particular trait. In this research, the target population included supply chain officers, user departments, and accounting officers in Uasin Gishu County Government who are 96 in number. The distribution of the target population is as shown in Table 1.

Table 1: Distribution of Target Population

Departments	Population
Supply Chain Officers	54
User department heads	23
Accounting Officers	19
Total	96

Source: Uasin Gishu County Human Resource Records

Sampling Procedures and Sample Size

Following Pandey and Pandey (2021), the pool from which the review's example is determined is named the testing outline. The testing casing will include production network supervisors, departmental heads, and bookkeeping authorities inside the Uasin Gishu, from which 96 members were picked. In this research, census method was employed due to the relatively small population size, consisting of fewer than 200 members, which is too small to be sampled and it is conveniently accessible. As described by Ruggles, Fitch, Magnuson, and Schroeder (2019), census sampling involves the inclusion of the entire population and all its members in the study. This approach is particularly well-suited for the study, as it eliminates the need for generalizing findings, and the conclusions drawn are based on the perspectives of every element within the population.

According to Flick (2019), a model is a draft of individuals preferred for a review established particular section attributes. The knowledge gained from this convention maybe summed up for a best audience. In accordance with Kumar (2018), the sample magnitude portion endure closely pertain all populace. Because the study of human population is manageable, all 96 respondents were affiliated with the sample in consideration of likeness.

3.7 Data Collection Instrument

The research utilized primary data that were both quantitative and qualitative in nature. A questionnaire was utilized as the tool for gathering primary data. Iovino and Tsitsianis (2020) stated that a questionnaire is a compilation of questions or items used to collect primary data from respondents regarding their attitudes, experiences, or opinions. The questionnaire was employed because it offers an economical and efficient means of data collection, especially considering the sample size. A 5-Point Likert Scale, where 1 represents 'strongly agree,' 2 represents 'agree,' 3 'neutral,' 4 represents 'disagree,' and 5 'strongly disagree,' was used to collect data. According to Tanujaya et al. (2023), the Likert scale was developed by Rensis Likert to measure research respondents' attitudes. Douven (2017) alluded that the Likert scale is a measurement scale in a quantitative questionnaire where respondents are required to select only one option among the questions or statements. The use of Likert scale was deemed essential as it helps mitigate potential respondents' biases and ensures the study's validity and reliability (Rahman, 2017). Numerous studies have shown that the Likert scale is meaningful and straightforward to complete (Tanujaya, et al., 2023). Furthermore, a self-administered questionnaire approach will be adopted for this study since the objective does not necessitate direct observation of information. The questionnaire primarily contained closed-ended questions, with a few open-ended ones. Combining both open-ended and closed-ended questions which enhanced the quality of the research findings.

Data Analysis Procedures and Presentation

According to Stone-Romero and Rosopa (2020), file reasoning procedures limit the dossier's talent to tell arising patterns within it, that yet serves to weaken the goal of conferring the study goals. To address the quantitative dossier, the research combined two enumerations—one for description and the other for probability. Descriptive statistics refers to the analysis of data that aids in describing, showing, or summarizing data meaningfully, potentially revealing patterns within the data (Sürücü & Maslakçı, 2020). Descriptive statistics were utilized to offer fundamental information about variables in a dataset and to underscore potential relationships between variables (Saunders et al., 2019). Descriptive statistics were applied in the form of standard deviations, means, percentages, and frequencies. Descriptive statistics assist in describing and comprehending the characteristics of a specific dataset by providing succinct summaries about the sample and measures of the data (Marko & Erik, 2019).

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Inferential statistics facilitates a deep comprehension of population data by scrutinizing samples derived from it. It enables generalizations about the population through various analytical tests and tools (Marko & Erik, 2019). The study employed inferential statistics, including correlation analysis and linear regression. The study conducts a correlation analysis to assess the strength of the relationship among the variables. Correlation coefficients are utilized to gauge the robustness of a relationship between two variables and how a shift in independent variables impacts the dependent variable (Gupta & Kapoor, 2020). Additionally, the study utilizes linear regression to evaluate how independent variables influence the dependent variable. Linear regression aimed to ascertain the strength and direction of the relationship between the dependent variable and the independent variable (Iovino & Tsitsianis, 2020).

Qualitative data from the interview guide was manually categorized into themes and subthemes. Following this, the researcher grouped themes into coherent sub-themes. These sub-themes were then coded and analyzed into categories. Creswell (2017) observed that coherence in writing is crucial, meaning that ideas were interconnected and logically flow from one sentence to another. This aided in ensuring that the research flows smoothly from one paragraph to another, potentially leading to precise results. Ultimately, the researcher converged the themes, present the quotes, and interpret results from the two sources of data. The researcher will also aim to identify convergence, divergence, contradictions, and relationships between the two sources of data. Data triangulation was performed by comparing information from questionnaires and interviews.

Data Analysis, Presentation and Interpretation

Deceptive Analysis of E-sourcing

The first specific objective of the study was to determine the influence of e-sourcing on operational performance in the county. Respondents were asked to indicate their level of agreement with statements regarding e-sourcing and its impact on procurement processes. The results are presented in Table 4.1.

Table 2: Effects of E-Sourcing on Performance

Statements	Mean	Std. Dev
The county has effectively implemented e-sourcing practices to enhance procurement processes.	4.132	.962
The e-sourcing platforms provided by the county have improved transparency and fairness in procurement procedures.	3.962	.854
E-sourcing has streamlined the procurement activities of the county, resulting in cost savings and efficiency gains.	4.057	.745
The county has effectively utilized e-sourcing platforms to engage a wider pool of suppliers and promote competition.	4.151	.718
E-sourcing has increased the accountability and traceability of procurement activities carried out by the county.	4.151	.794
The county has successfully integrated e-sourcing technologies into their procurement workflow.	3.948	.971
E-sourcing has reduced the administrative burden associated with procurement processes for the county.	3.961	.923

Source: (Research Data, 2024)

The results indicate that respondents generally agreed with the statements regarding the county's implementation of e-sourcing practices. The statement that the county has effectively implemented e-sourcing practices to enhance procurement processes received a mean score of 4.132 (Std. Dev. 0.962). Respondents also agreed that the e-sourcing platforms provided by the county have improved transparency and fairness in procurement procedures, reflected by a mean of 3.962 (Std. Dev. 0.854). The statement that e-sourcing has streamlined the procurement activities of the county, resulting in cost savings and efficiency gains received a mean of 4.057 (Std. Dev 0.745). Additionally, respondents agreed that the county has effectively utilized e-sourcing platforms to engage a wider pool of suppliers and promote competition, with a mean of 4.151 (Std. Dev0.718).

The agreement is further supported by a mean of 4.151 (Std. Dev 0.794) for the statement that e-sourcing has increased the accountability and traceability of procurement activities carried out by the county. However, slightly lower agreement was observed for the statements that the county has successfully integrated e-sourcing technologies into their procurement workflow

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(mean = 3.948, Std. Dev 0.971) and e-sourcing has reduced the administrative burden associated with procurement processes for the county (mean = 3.961, Std. Dev 0.923).

The finding agrees with Kimutai and Ismael (2016) research on the role of strategic e-sourcing practices on supply chain performance in state corporations in Kenya. The study found that Organization cost reduction is important in customer service, return on investment and total cost while organization cost reduction is slightly important in impacting return on investment and speed of delivery. The finding also agrees with Kihanya, Wafula, Onditi and Munene (2019) research on the the role of strategic sourcing on organization’s performance. The findings of this study suggested that strategic sourcing enables the organization to achieve strategic advantage and at the same time act as a means in which a business condition or problem can be alleviated in a more efficient and effective manner.

Deceptive Analysis of Electronic Ordering

The respondent indicated their levels of agreement on the role of e-ordering on performance at Uasin Gishu County

Table 3: Effects of E-Ordering on Performance

Statements	Mean	Std. Dev
The county has adopted an online order management system (OMS)	4.170	.545
The county provides its vendors with 24/7 online access to inventory data.	4.057	.633
Online, personalized order forms are used by the county.	4.075	.781
The organization has created a web-based platform for the integration of warehouses.	4.151	.690
The county has well-managed online order information data.	4.075	.851

Source: (Research Data, 2024)

The results presented in the table 4.3 indicate that the respondents agreed on the statement that the county has adopted an online order management system (OMS), with a mean of 4.170 (Std. Dev. = 0.545). Furthermore, a significant majority agreed that the county provides its vendors with 24/7 online access to inventory data, as evidenced by a mean of 4.057 (Std. Dev. = 0.633). Most respondents also acknowledged that the county utilizes online, personalized order forms, reflected in a mean of 4.075 (Std. Dev. = 0.781). Additionally, the statement regarding the creation of a web-based platform for the integration of warehouses received strong support, with a mean of 4.151 (Std. Dev. = 0.690). Lastly, the county’s management of online order information data was also affirmed by respondents, yielding a mean of 4.075 (Std. Dev. = 0.851).

The finding is in line with Lagat (2016) research on the influence of e-ordering on supply chain performance in retail marketing outlets in Kenya. Multiple regression model findings showed that e-ordering and e-informing had a positive and significant effect on supply chain performance. The study concludes that e-ordering and e-informing which are elements of e-procurement dimensions increases supply chain performance. There is therefore need for firms to make use of e-ordering and e-informing in the procurement process. The finding is also in line with Gichuhi (2021) research on the influence of e-ordering on procurement performance in geothermal development company in Kenya. The study established that e-ordering had a positive significant relationship with procurement performance in the geothermal development companies.

Multiple Linear Regressions Analysis

The regression analysis method was used to examine the relationship between the predictors and the dependent variable. The goal of regression analysis is to understand how changes in the independent variables are associated with changes in the dependent variable and to predict the value of the dependent variable based on the values of the independent variables.

Table 4: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
1 (Constant)	3.070	0.912		3.366	0.002
E-ordering	0.234	0.058	0.233	4.034	0.000
E-sourcing	.392	0.131	0.444	2.999	0.004

a. Dependent Variable: Performance

Source: (Research Data, 2024)

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The regression coefficients indicate that when all other factors are held constant, the performance score for Uasin Gishu County is 3.07. E-payments have a positive and statistically significant impact on the county's performance ($\beta = 0.382$, $p = 0.003 < 0.05$). Specifically, a one-unit increase in e-payments results in a 0.0382-unit improvement in performance. These findings support previous research by Davila et al. (2020), which highlighted the benefits of integrating e-payments into e-procurement practices. According to their study, utilizing e-payments enhances productivity by lowering transaction costs and reducing direct procurement expenses. For instance, Uasin Gishu County successfully streamlined its financial transactions and optimized procurement costs by adopting e-payments, leading to increased productivity and overall performance.

E-ordering has significantly impacted the performance of Uasin Gishu County, showing a positive relationship between the two ($\beta = 0.234$, $p < 0.05$). An increase in e-ordering practices is associated with a 0.234 unit enhancement in the county's performance. This aligns with findings from Choudhury Hartzel (2011) and Croom (2020), who discuss the benefits of e-procurement, noting that it enables businesses to reduce costs and save time when acquiring goods and services. The results of this study support these claims, suggesting that implementing e-ordering methods enhances efficiency in procurement, minimizes manual tasks, and optimizes order management. Such improvements lead to savings in both time and costs associated with procurement, reinforcing the advantages of e-procurement strategies. Croom (2020) also emphasized that internet-based e-procurement solutions enhance procurement operations, a notion supported by this study's findings, which indicate the successful integration of e-procurement practices. By utilizing online platforms such as order management systems, personalized order forms, and web-integrated warehouses, e-ordering streamlines procurement, resulting in greater efficiency, reduced paperwork, and overall improved procurement effectiveness.

E-sourcing has also been shown to have a notable positive effect on the performance of Uasin Gishu County ($\beta = 0.392$, $p < 0.05$). A one-unit increase in e-sourcing is linked to a 0.392 unit improvement in performance. These findings are consistent with Lewis (2014), who identified e-sourcing as an effective mechanism for accelerating processes, cutting supply costs, and generating additional revenue. The current study's significant positive results regarding e-sourcing affirm this perspective. By embracing e-sourcing practices, the organization can enhance procurement processes, resulting in more efficient supplier selection and contract management. Furthermore, e-sourcing facilitates cost reductions on supplies through enhanced negotiation capabilities and better access to competitive pricing, thereby contributing to the county's financial performance.

CONCLUSIONS OF THE STUDY

The study concluded that Uasin Gishu County has effectively implemented e-sourcing practices, improving procurement efficiency and fairness. E-sourcing platforms have streamlined procurement activities, leading to significant cost savings, reduced administrative burdens, and increased operational efficiency. The platforms have also enabled broader supplier engagement and fostered healthy competition, ensuring transparency and accountability in procurement processes. Additionally, the use of these digital platforms has enhanced traceability and accountability, promoting effective oversight and monitoring of procurement activities.

The study concluded that e-ordering enables the county government of Uasin Gishu to automate its procurement processes, eliminating the need for manual paperwork and reducing the risk of errors. This not only saves time but also improves accuracy, ensuring that the right products are ordered and delivered on time. E-ordering facilitates better supplier management. By implementing an e-procurement system, county can easily compare prices, quality, and delivery terms from different suppliers, enabling them to choose the most suitable ones. This promotes healthy competition among suppliers, leading to better pricing and service levels.

RECOMMENDATIONS

The study recommended that the Uasin Gishu County should adopt cutting-edge technology and tools to optimize the sourcing process, strengthen supplier relationships, and boost overall efficiency. This may involve the use of e-auctions, supplier portals, and automated workflows to facilitate better communication and collaboration with suppliers. Emphasizing the development of a robust sourcing strategy, conducting in-depth market analysis, and utilizing data analytics will enable more informed decision.

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