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# An Assessment of the Effect of E-Procurement on the Performance of Small and Medium Enterprises in Accra, Ghana

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***Abstract***

*This study investigated the effect of e-procurement practices on the performance of Small and Medium Enterprises (SMEs) in Accra, Ghana. Primary data were collected using a questionnaire administered to 246 SMEs. Regression analysis was employed to analyze data collected from SMEs using SPSS software. The result of the analysis showed that e-payment had the highest positive impact, followed by e-tendering, while e-sourcing had a negative impact. The Model's R-squared value of 0.449 indicated that approximately 44.9% of the variation in the performance of SMEs could be explained by e-procurement factors. These findings from the study highlight the importance of adopting efficient e-procurement strategies, especially in payment processes, to enhance SME performance in Accra, Ghana. The study concluded that E-Payment had a significantly positive impact on SME performance, emphasizing the benefits of adopting digital payment systems for improved financial management and customer experiences. However, the non-significant impact of E-Tendering and the negative influence of E-Sourcing on SME Performance highlight the need for deeper investigation into these areas to refine strategies for overall business growth. Businesses are encouraged to prioritize seamless electronic payment systems due to the highly significant positive impact of E Payment on SME Performance, while also reevaluating and refining sourcing strategies to mitigate the negative impact of E Sourcing. Continuous optimization of electronic tendering processes, alongside diversifying payment options and investing in employee training, can further enhance SME Performance and ensure the effective utilization of electronic systems*

***Keywords****:* E-payment, E-sourcing, E-tendering and SMEs Performance

## 1.0 Introduction

Small and medium-sized enterprises (SMEs) serve as essential foundations in contemporary market economies, particularly in developing nations. Studies have consistently indicated that SMEs constitute a significant proportion of the business community in most countries, accounting for approximately 90% of the business landscape in developing countries (Muriithi, 2019). They play crucial roles in fostering sustainable economic growth and generating employment opportunities. For instance,

SMEs represent over 92% of all businesses and contribute to more than 70% of the GDP (Peprah, Mensah, & Akosah, 2016). Small and Medium-sized Enterprises (SMEs) contribute to approximately 80 percent of Ghana's total employment. According to information from the Registrar General's Department (RGD) of Ghana, 92 percent of businesses are officially registered as MSMEs (Ghana Commercial Bank, 2023). In spite of these contributions and potentials, SMEs in Ghana face multifaceted challenges such as limited resources, operational inefficiencies, and difficulties in accessing markets. In the business realm, particularly for Small and Medium-sized Enterprises (SMEs), significant financial losses have been incurred due to theft or fraudulent actions prevalent in traditional financial transactions. SMEs, being particularly vulnerable to such acts, have faced setbacks as they often lack the resources to engage certified accounting professionals. This challenge adversely affects the overall performance of SMEs. One primary solution to this issue is the adoption of e-procurement systems such as e – payment that enables SMEs to receive payments directly, thus, minimizing mitigating the risk of revenue loss through fraudulent transactions (Akujor & Eyisi, 2020).

The integration of the internet with business processes has become a global trend over time. A key area that has experienced this shift is the procurement function, which is critical to an organization's operations and has significant implications for both survival and profitability. In many large economies, procurement has transitioned to electronic platforms. In today's competitive and dynamic industries, businesses recognize the necessity of keeping up with technological advancements and managing operational costs effectively to achieve their objectives. As a result, the adoption of e-procurement has grown. E-procurement allows companies to display their products and services online.

However, despite its increasing importance in the global business landscape, there is limited research specifically addressing its impact on SMEs in Ghana

The performance of firms is influenced by the efficiency and effectiveness of the procurement function (Kirui &Mukulu 2019). The Effect of E-Procurement on the Performance of Small and Medium Scale Enterprises (SMEs) in Ghana is a critical area of investigation due to the increasing adoption of digital technologies in business operations. The rapid development of the electronic market has an impact on suppliers and buyers to buy and sell products online (Listyawati et al., 2023). In the realm of business, especially among small and medium-sized enterprises (SMEs), financial losses due to theft or fraudulent transactions have been significant. SMEs, lacking the resources to hire certified accountants, are particularly vulnerable to such acts. Consequently, these incidents have hindered the progress of SMEs, impacting their overall performance (Akujor & Eyisi, 2020). While E-Procurement has the potential to enhance efficiency, reduce costs, and streamline procurement processes, its impact on SMEs in the Ghanaian context remains understudied. The problem arises from the limited understanding of how SMEs in Ghana integrate and leverage E-Procurement systems, the challenges they encounter during implementation, and the overall influence of these digital tools on their performance metrics.

Several studies (Apasrawirote & Yawised, 2021; Arthur & Locher, 2022; Gathima & Njoroge, 2018; Gordon & Elizabeth, 2023; Kabanda et al., 2019; Khaoya & Muchelule, 2019; Masudin et al., 2021; Muthoni Ndei & Mutuku, 2021; Sánchez-Rodríguez et al., 2020) have been carried out on the effect of E-procurement on organizational performance with little attention on small and medium scale enterprises. Although e-procurement methods are becoming more widely used worldwide, little is known about how these technologies especially affect the performance of small and medium-sized enterprises (SMEs) in Accra, Ghana. There is a dearth of empirical study on the complex obstacles and chances that small and medium-sized enterprises (SMEs) encounter when attempting to use e-procurement tools to improve their overall performance, cost-effectiveness, and operational efficiency in the particular socioeconomic environment of Accra. Closing this gap will help policymakers, corporate executives, and SME owners learn how to leverage the competitive advantage of SMEs in the area and optimize e-procurement procedures. This study therefore examined the effect of E- procurement on the performance of small and medium scale enterprise in Accra, Ghana.

## 2.0 Literature Review

### 2.1 SMEs Performance

Every business aims to achieve strong performance and generate significant returns. Firm performance refers to the actual results a company achieves in comparison to its predetermined goals. The performance of SMEs is closely linked to their operational standards. The capacity of SMEs to effectively manage their operations is vital for their performance and long-term sustainability (Desiyanti et al., 2022). The performance of small and medium-sized Enterprises (SMEs) depends on a blend of internal and external factors. Internally, management capabilities, human resources, and financial access are pivotal. Effective management, characterized by strategic planning and decision-making, is essential for navigating challenges and capitalizing on opportunities. Innovation, encompassing product, process, and business model innovation, is a key driver of SME performance, enabling businesses to stay relevant and competitive in a fast-paced environment (Schumpeter, 1934). There are two primary methods for measuring business performance: financial and non-financial (Sadiku-Dushi, Dana & Ramadani, 2019). Financial performance assesses how effectively a firm generates revenues using its acquired assets from its core business operations (Otoo, 2024; Anwar 2018). It serves as a comprehensive evaluation of a firm's financial well-being over a specific period and allows for comparisons among similar firms within the same industry or across different sectors. Accounting ratios, such as Return on Assets (ROA), Return on Investments (ROI), Return on Capital Employed (ROCE), and Return on Equity (ROE), are commonly used to gauge a firm's financial performance. For example, ROA measures a firm's profitability relative to its total assets, showcasing how efficiently the business utilizes its assets to generate profits (Suardana, Astawa, & Martini, 2018).

### 2.2 E-Procurement

Electronic procurement, often known as e-procurement, is a digital method used by companies and organizations to make online purchases of products, services, and labor

from suppliers or vendors. The procurement process, which includes activities like choosing a supplier, creating a purchase order, processing invoices, and making payments, is automated and streamlined. E-procurement platforms frequently incorporate with other business software, including supply chain management, accounting, and inventory control, to boost productivity, cut expenses, and increase transparency in procurement processes. E-Procurement is a modern procurement method that utilizes cutting-edge technology, the internet, and networking systems (Kariuki & Kimani, 2021). An effective e-procurement system should encompass all necessary components facilitating seamless interaction between buyers and sellers, covering every aspect of the supply chain, from procurement planning data to supplier assessment. It's imperative that both buyers and sellers can electronically access each other's information as needed, ensuring the smooth operation of e-procurement processes (Kariuki & Kimani, 2021).

The fusion of the internet with business practices has become commonplace globally. Among various organizational functions, procurement stands out as a crucial area where operations have increasingly transitioned to digital platforms in many organizations (Oyugi & Kamaara, 2023). Procurement stands as a vital operational aspect that directly impacts the performance of any organization, whether it operates in the public or private sector. This function entails the acquisition of goods, services, and works, covering essential activities like supplier selection, contract management, and negotiation. Successful procurement practices have the potential to bring forth various advantages, including cost savings, heightened quality and delivery standards, improved relationships with suppliers, and an increased capacity for innovation (Jama & Mohamud, 2024).

### 2.3 E-tendering

E-tendering is the process by which a business uses online tools to ask suppliers for details and prices and gets electronic answers in return. Undoubtedly, it is a positive development that the manual payment system—which involved making physical payments in cash, either now or in the future, depositing cash in the beneficiaries' bank accounts, issuing checks to be cashed or paid into the beneficiaries' accounts at bank counters, and endorsing bills of exchange in the creditors' favor—has given way to electronic payment platforms, which include automated teller machines, point of sale, the internet, and mobile payments (Ugwu et al., 2021). Electronic tendering utilizes an online collaboration platform for submitting bids, seeking information, and managing the distribution and receipt of tender-related data. Its primary objective is to enhance productivity throughout the tendering process. This enhancement is evident in various aspects, including reduced reliance on paper, cost savings in operations, and accelerated communication and cooperation. By minimizing paperwork, e-tendering reduces errors and streamlines the procurement process. Consequently, it represents a shift from manual paper-based methods to automated tender process for acquiring specialized goods, services, and consultancy work, typically characterized by high value and low volume (Hajir, 2021). Moreover, the two primary success factors in e-tendering, namely human and technological elements, are costly investments. The human factor is influenced by various variables such as human behavior, expertise, management support, business case, user adoption and training, project management, and supplier engagement. On the other

hand, the technology aspect, which hinges on activities and deployment technologies, is associated with factors like reliability, availability, efficiency, and interoperability (Gordon & Elizabeth, 2023)

## 2.4 E-sourcing

E-sourcing entails the procurement process where bids from various suppliers are obtained through a unified online platform. It encompasses internet-enabled applications and decision support tools facilitating interactions between buyers and suppliers, utilizing online negotiations, auctions, reverse auctions, and similar mechanisms. The advantages of e-sourcing encompass the streamlining of the sourcing process, reducing costs by maximizing supplier competition, and establishing a centralized repository for sourcing information (Chan and Chin, 2018). Unlike traditional constraints, e-sourcing eliminates geographical limitations, as the exchange of emails and information through the World Wide Web is swift and efficient. Through e-sourcing, organizations can diversify their potential suppliers without incurring additional expenses, as they are not restricted to physically visiting vendors (Munubi et al., 2017). The online interaction allows them to access necessary information at the click of a button from any part of the world, all within the convenience of their offices (Gordon & Elizabeth, 2023). This technology empowers businesses and their trading partners to oversee transactional documents, ensuring adherence to agreed-upon trading terms.

## 2.5 E-payment

A financial transaction that is completed electronically without the use of cash or cheques is referred to as an e-payment, or electronic payment. It entails transferring money from one party to another via electronic devices like computers, cellphones, or custom payment terminals. Bank transfers, digital wallets, smartphone apps, online payment gateways, and credit/debit card transactions are examples of e-payment techniques. These ways are common for many kinds of purchases, bill payments, and fund transfers in today's digital world because they provide convenience, speed, and security as compared to traditional cash-based transactions. Businesses also employ e-payments, which is another extensively used technology, to process payments electronically. By streamlining processes and speeding up procurement, this technology guarantees clients receive their goods on time and raises customer satisfaction levels all around. The utilization of E-payment as a method for fulfilling personal financial responsibilities is steadily rising (Pueblos & Jr, 2023).

Omoregbe et al. (2022) conducted a study focusing on the impact of electronic procurement practices on the sustainable competitive advantage of oil and gas firms in Nigeria's upstream sector, specifically in the Niger-Delta region. They examined the relationships between electronic tendering, electronic invoicing, electronic payment, and electronic auctioning in relation to sustainable competitive advantage. The study employed an ex-post facto and survey research design, targeting employees and management staff of procurement departments in selected upstream oil and gas companies. A total of 220 questionnaire responses were analyzed using the Ordinary Least Squares (OLS) technique in SPSS Version 22. The findings revealed that electronic

tendering, electronic invoicing, and electronic payment had a positive and significant relationship with sustainable competitive advantage in the upstream oil and gas industry. However, electronic auctioning, while not significantly influential, still showed a positive relationship with sustainable competitive advantage in this sector.

Hajir (2021) investigated the effects of e-tendering, e-sourcing, and e-payments on the operational performance of retail supermarkets in Nairobi City County, using the Technology Acceptance Model 2 and quantitative research methods. This study was conducted as a case study involving 94 registered retail supermarkets in Nairobi City County, Kenya. Data collection was done through administered questionnaires and interviews with procurement managers from these supermarkets. Quantitative analysis techniques such as descriptive analysis, Spearman rank correlation, and regression analysis were employed, and the findings were presented using tables and charts. The study achieved an 88% response rate, with e-tendering, e-sourcing, and e-payments showing a strong positive correlation with operational performance. Regression analysis further confirmed a significant positive impact of e-procurement practices on supermarket operational performance, accounting for 66.5% of the observed variations.

Masudin et al., (2021) studied the impact of adopting e-procurement on the performance of manufacturing companies in Indonesia. Their research focused on four variables: top management support, information quality, e-procurement implementation, and company performance. They conducted pilot tests on initial questionnaires to ensure respondents' understanding, followed by distributing final questionnaires for data collection. Statistical analysis using SPSS version 21 and Smart PLS v3.0 software was employed to analyze both pilot test and final questionnaire data and assess variable relationships. The study confirmed three hypotheses: top management support significantly influences e-procurement implementation, information quality significantly affects e-procurement implementation, and e-procurement implementation significantly impacts company performance. It's worth noting that this study was limited to manufacturing firms and focused on small and medium-scale enterprises' e-procurement effects.

Khaoya and Muchelule (2019) delved into the effects of E-procurement on Small and Medium Enterprises (SMEs) performance in Bungoma County. They used a descriptive research design and questionnaires to gather data from 324 respondents across five constituencies related to online customer service, organizational cultural barriers, environmental barriers, and technology integration in e-procurement. The study employed SPSS version 23 for quantitative and qualitative data analysis, focusing on correlation and regression analysis to understand the relationships between variables. The results indicated a positive impact of most electronic procurement indicators on SME performance in Bungoma County, with the four variables significantly influencing SME performance. This study sought to expand this understanding by investigating the impact of e-procurement (E-payment, E-tendering, E-invoicing) on the performance of small and medium-scale enterprises in Accra, Ghana.

Gordon and Elizabeth (2023) assessed the performance of the Food and Agriculture Authority in Kenya, focusing specifically on the relationship between e-tendering and the authority's performance. They used a cross-sectional descriptive census research

design, with the Agriculture and Food Authority as the unit of analysis and managerial employees as the unit of observation. The study targeted 160 employees across different management levels in the departments. Data collection involved both primary and secondary sources, with semi-structured questionnaires used for primary data collection after a pilot test to ensure validity and reliability. The study employed descriptive and inferential statistics using SPSS version 25, including correlation analysis to establish relationships between variables. The findings highlighted the significant impact of e-sourcing and e-tendering on the Food and Agriculture Authority's performance in Kenya.

Gathima and Njoroge (2018) conducted a study to understand the impact of e-tendering on the performance of the County Government of Nairobi. They used the innovation diffusion theory and transaction cost theory as guiding frameworks and employed descriptive and explanatory research designs. The target population comprised 750 respondents from finance, payment, and information technology departments, with a sample of 75 respondents selected through stratified random sampling. Data collection involved administering questionnaires to the sample, followed by sorting, coding, and analysis using SPSS version 21. Descriptive statistics summarized the data, while inferential statistics established associations between variables. The study's findings, presented in tables, showed a positive and significant relationship between e-tendering practices and the performance of the Nairobi City County Government. The study recommended that the county government focus on adopting and implementing e-tendering to improve its overall activities.

Ehiedu et al. (2023) explored the impact of the e-payment system (EPS) on the efficiency of banks in Nigeria, focusing on mobile payment, Automated Teller Machine (ATM), and Point of Sale (POS) systems. They collected data from the Central Bank of Nigeria (CBN) spanning from 2012 to 2016 and conducted linear regression analysis using SPSS. The significance level was set at 0.05. However, their analysis revealed a P-value of 0.333, indicating no significant effect of EPS on banking efficiency in Nigeria.

Akujor and Eyisi (2020) conducted a study to understand how electronic payment impacts the performance of Small and Medium-sized Enterprises (SMEs) in Nigeria. They collected data through questionnaires, analyzed using tables, percentages, and Pearson correlation with SPSS version 22.0. The research followed a survey design. Their findings suggest that electronic payment has a significantly negative effect on the accountability of SMEs in Nigeria. Additionally, they noted a statistically insignificant negative relationship regarding the impact of e-payment on the revenue generated by SMEs in the country.

Kwabena et al. ( 2019) investigated the influence of digital payment systems on the performance of Small and Medium-sized Enterprises (SMEs) in Ghana. They utilized a technology-organizational-environmental framework to analyze the impact. Data were collected between September 2019 and November 2019 via a closed-ended, self-administered questionnaire targeting executives and SME owners. The data analysis employed the partial least squares structural equation modeling approach. The study uncovered substantial effects of technology, organizational factors, environmental factors, and the adoption of digital payment systems on the performance of SMEs.

Alzoubi et al. (2022) investigated the correlation and impact of electronic payment methods on sales growth in the UAE banking industry, with a specific focus on the mediating role of online shopping. Using a quantitative approach and a correlational design, the study collected empirical data through a survey based on a 5-point Likert scale. A total of 217 valid questionnaires were distributed to participants, including top managers, middle managers, and technicians, via email. Statistical analyses demonstrated strong internal consistency among the study variables, with Cronbach's Alpha values ranging from .873 to .855. The findings highlighted a significant and direct relationship between online shopping and sales growth.

Nyamari et al. (2023) conducted a study to evaluate the impact of the electronic tender advertisement system on the operational performance of Small and Medium Enterprises (SMEs) in Kenya. They based their research on Schumpeter's entrepreneurship theory and used a descriptive research design. The study targeted a population of 2500 SMEs in Murang'a County, with a sample size of 189 determined using the Yamane sample formula. Questionnaires were administered using the drop and pick method, resulting in an 88% response rate. The collected data underwent cleaning and analysis using SPSS version 23, and multiple regression analysis was employed to test the hypotheses. The analysis revealed an R2 value of 0.671, indicating that 67.1% of SMEs' operational performance can be attributed to e-tender advertisement. The study concluded that there is a significant effect between e-tender advertisement and the operational performance of SMEs.

Ifechukwu et al., (2023) conducted a study investigating the impact of e-procurement on technological proficiency in Small and Medium Enterprises (SMEs) in Enugu state. Their specific objectives included assessing the influence of e-informing on production development and determining the effects of e-informing and e-tendering on the operation of products in SMEs. They employed a descriptive survey design, with questionnaires administered to a population of 323 selected owners and employees of the study organizations. 280 accurately filled questionnaires were returned and analyzed using the Likert Scale, with hypotheses tested using the Z-test. The results indicated that e-informing significantly and positively affected production development in SMEs ($Z = 7.052$, $p < 0.05$, $n = 280$). Furthermore, e-tendering had a significant positive effect on the operation of products in SMEs ($Z = 6.155$, $p < 0.05$, $n = 280$).

Makhamara (2022) investigated the impact of e-tendering on the performance of Small and Medium Enterprises (SMEs) in Nairobi City County, Kenya. The study framed its analysis within Schumpeter's Entrepreneurship Theory, Economic Theory of Entrepreneurship, and Drucker's Entrepreneurship Theory. Using a descriptive research design, the study targeted 3000 registered and licensed SMEs in Nairobi City County. The sample included 97 SME owners or managers selected through stratified random sampling. Data collection involved structured questionnaires, with a pilot study conducted to ensure reliability and validity. Additionally, secondary data from various sources supported the primary data. Quantitative data analysis utilized descriptive statistics such as percentages and frequencies through SPSS, with correlation and regression analyses to determine the impact of e-tendering on SME performance. The

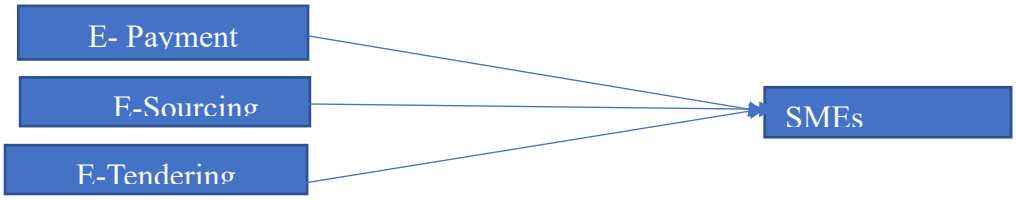
findings, presented via charts and frequency tables, indicated that e-tendering does not significantly influence SME performance in Nairobi, Kenya.

Ibrahim et al. (2023) examined the effects of e-procurement on both supply chain performance and supply chain innovation, alongside exploring the influence of supply chain innovation on supply chain performance. Their quantitative survey approach involved gathering research data through online questionnaires distributed on a 1 to 7 scale via social media. The study targeted 250 managers from manufacturing organizations in Indonesia, selected through simple random sampling. They utilized a causality model and employed Structural Equation Modeling (SEM) with SmartPLS software for analysis. The independent variables were e-procurement implementation and supply chain innovation, while the dependent variable was supply chain performance. The analytical stages included validity testing, reliability testing, and hypothesis testing. The findings indicated that e-procurement implementation had a positive and significant impact on supply chain performance and supply chain innovation. Moreover, supply chain innovation positively and significantly influenced supply chain performance. Notably, supply chain innovation was identified as a mediator in the relationship between e-procurement and supply chain performance.

## 2.6 Conceptual Framework

**Independent Variable** **Dependent Variable.**

(E- procurement Practices )




Source: Author's conception (2024)

## 2.7 Theoretical Basis

This study is grounded in the Diffusion of Innovation theory, as formulated by Everett Rogers, to elucidate the mechanisms governing how, why, and at what pace new ideas and technology disseminate (Rogers 2003). According to Rogers, diffusion refers to the process through which an innovation is communicated over time among participants in a social system. He identifies innovation, communication channels, time, and social system as the four essential components shaping the diffusion of innovations. Rogers posits that four primary elements influence the propagation of a new idea, and this process is intricately tied to human capital. This theory can be applied to understand the adoption of electronic payment as an innovative solution for effective accounting systems in Ghanaian SMEs.

### 3.1 Research Methodology

This research took in Accra, the capital city of Ghana, located on the Atlantic coast of West Africa. The city, a melting pot of cultures, reflects Ghana's ethnic diversity and is a hub for education, technology, and innovation. Accra's dynamic streets and welcoming atmosphere capture the essence of contemporary Africa, although the exact number of SMEs in the city remains unspecified.

The research utilized a descriptive survey design to investigate the impact of e-procurement on small and medium-scale enterprises in Accra, Ghana, focusing on frequency, relationships between variables, and current state descriptions. Descriptive methods were employed to determine characteristics, predictions, and relationships between variables. The study's population included SMEs operating within the Accra Metropolis of the Greater Accra Region.

Although it is estimated that about 80% of all firms in the Accra Metropolis are SMEs, the number of SMEs in the Accra Metropolis is unknown (Arthur, Owusu, & Arthur 2023). As a result, the formula to determine sample size proposed by Cochran (1977 was used to calculate the number of questionnaires to distribute. The formula is given as:

$$n_0 = \frac{Z^2 pq}{e^2}$$

Where: $n_0$ = Sample size; Z = Z-value = 1.96; p = estimated proportion of SMEs that has the attribute in question (estimated as 80% or 0.8); q = 1-p; e is the desired level of precision (5% 0r 0.05).

The sample size for this study was determined as 246 using the formula above. Employing a cluster sampling method, the Accra Metropolis was divided based on sub-metropolises, and simple random sampling was used to select SMEs from each group. Cluster sampling

is suitable for statistically homogeneous yet internally heterogeneous groupings within a population, aiding in representative sample selection from diverse subgroups.

The study employed random number generation to assign unique numbers to SMEs for selection in the sampling process. Clusters of sub-metros were formed within the Accra Metropolitan Districts, including Ablekuma South, Ashiedu Keteke, and Okaikoi South, from which a simple random sample of SMEs was selected.

### 4.0 Results and Discussion

This section presents the empirical results of the study and discusses the findings emanating therefrom.

## 4.1 Results

**Table 1 showing regression Analysis**

| **Coefficients[a]** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
| | | B | Std. Error | Beta | | | Tolerance | VIF |
| 1 | (Constant) | 1.822 | .235 | | 7.743 | .000 | | |
| | E Tendering | .078 | .040 | .106 | 1.945 | .053 | .846 | 1.182 |
| | E Sourcing | -.117 | .039 | -.159 | -2.960 | .003 | .870 | 1.149 |
| | E Payment | .620 | .049 | .654 | 12.603 | .000 | .930 | 1.075 |
| a. Dependent Variable: SME Performance | | | | | | | | |

**Table 2 showing ANOVA result**

| **ANOVA[a]** | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 18.295 | 3 | 6.098 | 59.736 | .000[b] |
| | Residual | 22.459 | 220 | .102 | | |
| | Total | 40.754 | 223 | | | |
| a. Dependent Variable: SME Performance | | | | | | |
| b. Predictors: (Constant), E Payment, E Sourcing, E Tendering | | | | | | |

**Table 3 Model Summary**

| Model Summary | | | | |
|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .670[a] | .449 | .441 | .31951 |
| a. Predictors: (Constant), E Payment, E Sourcing, E Tendering | | | | |

## 4.2 Discussion of Findings

The regression model table 1 as a whole is highly significant ($p < 0.005$), indicating that the combined effect of E Tendering, E Sourcing, and E Payment significantly explains the variance in SME Performance. E Tendering has a non-significant impact on SME Performance, with a coefficient of 0.078 and a p-value slightly above the typical significance level ($p = 0.053$). ). E Sourcing shows a negative impact on SME Performance, indicated by its negative coefficient of -0.117 and statistical significance ($p = 0.003$). E Payment has the most significant impact on SME Performance, with a positive coefficient of 0.620 and high statistical significance ($p < 0.005$.

Based on the finding of the study E tendering has no significant effect on SMEs performance in Accra Ghana; thus hypothesis one is accepted. The constant term is 1.822. E Tendering has a positive unstandardized coefficient (0.078), suggesting a positive impact on SME Performance. However, it is marginally significant ($p = 0.053$). The coefficient for E-Tendering is 0.078, with a standard error of 0.040 and a beta value of 0.106. The t-value is 1.945, and the corresponding p-value is 0.053 (slightly above the typical significance level of 0.05). The collinearity statistics show a tolerance of 0.846 and a VIF (Variance Inflation Factor) of 1.182, indicating low collinearity with other variables.

The results of the study lead to the rejection of hypothesis two. E Sourcing has a negative unstandardized coefficient (-0.117), indicating a negative impact on SME Performance, and it is statistically significant ($p = 0.003$). E Sourcing shows a negative impact on SME Performance, indicated by its negative coefficient of -0.117 and statistical significance ($p = 0.003$). The coefficient for E-Sourcing is -0.117, with a standard error of 0.039 and a beta value of -0.159. The t-value is -2.960, and the p-value is 0.003 (below the significance level of 0.05), indicating a statistically significant negative relationship with SME Performance. The collinearity statistics show a tolerance of 0.870 and a VIF of 1.149, suggesting low collinearity.

The findings of the study indicate that hypothesis three is not supported and is therefore rejected. E Payment has the most significant impact on SME Performance, with a positive coefficient of 0.620 and high statistical significance ($p < 0.005$. The model has low collinearity, indicating that the independent variables are not highly correlated. The finding of this study also corroborate the finding of Mutunga (2020) that showed E-

tendering did not have significant effect on the performance of small and medium scale enterprises.

However the study did not corroborated the finding of Ifechukwu et al., (2023) This study also corroborates the finding of Donga & Bello (2021) that e-payments has significance effect of SMEs performance. The finding of this study further collaborate the study of (Puspitawati & Gurning, 2019) that e-payment has significant effect on SMEs performance. The study also collaborates the finding of Mutunga (2020) that e-sourcing has significance effect on performance of SMEs

## 5.0 Conclusion and Recommendations

This section captures the conclusion derived from the findings of the study. It goes further to proffer some logical recommendations in keeping with the findings and the conclusion. Thereafter, suggestions are made for relevant further study.

### 5.1 Conclusion

In conclusion, the findings suggest that E Sourcing and E Payment are particularly important predictors of SME Performance in this model. The study underscores the significant positive impact of E-Payment on SME Performance. This indicates that embracing digital payment systems can lead to improved financial management, reduced transactional friction, and enhanced customer experiences. SMEs that adopt efficient E-Payment solutions are likely to experience increased revenue streams and operational efficiency, contributing to overall business growth. While E-Tendering's impact appears to be non-significant and E-Sourcing demonstrates a negative influence on SME Performance, the nuanced nature of these findings necessitates further investigation.

### 5.2 Recommendations

Given the highly significant positive impact of E Payment on SME performance, businesses should prioritize and invest in seamless electronic payment systems by adopting secure and efficient online solutions to enhance financial transactions. At the same time, acknowledging the negative impact of E Sourcing on SME performance, organizations

should reevaluate and refine their sourcing strategies, potentially through assessing supplier relationships, negotiating better terms, and exploring alternative sourcing approaches to mitigate adverse effects. Although the impact of E Tendering on SME performance is only marginally significant, organizations should still optimize their tendering processes by streamlining procedures and conducting regular assessments to ensure effectiveness. In addition to emphasizing E Payment, businesses should consider

diversifying payment options to cater to diverse customer preferences, which could further improve SME performance. Further investigation into the specific E Sourcing practices affecting SMEs can provide insights for targeted improvements, allowing businesses to identify and address root causes for more effective sourcing strategies. Lastly, since the success of electronic processes like E Tendering and E Payment is influenced by employee knowledge and adherence, investing in training programs and

awareness campaigns is crucial for the successful implementation and utilization of these systems.

### 5.3 Suggestions for Further Research

It is suggested to delve into detailed research on the particular factors in E-Sourcing that hinder SME performance. Additionally, examining the resilience and adaptability of SMEs amidst electronic process changes is advised. Researchers could also investigate how SMEs adjust their strategies and operations to capitalize on opportunities or tackle challenges posed by technological advancements.

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