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The Influence of E-Procurement on the Effectiveness of Micro-scale and Medium-sized Businesses in South Africa

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Abstract

Aim: The goal of this survey was to look into how e-procurement affected the performance of small and medium-sized businesses in Cape Town, South Africa.

Methods: The descriptive research approach was used. 3000 small and medium-sized businesses operating in Cape Town, South Africa, were the target population. 97 owners or managers of Small and Medium Sized Businesses made up the sample size. Owners and managers of Small and Medium Sized Businesses made up the observational unit. Using a stratified random selection approach, 97 respondents were chosen from the target demographic.

Results: According to the study, e-tendering had no appreciable impact on the performance of small and medium enterprises in Cape Town, South Africa. However, the performance of small and medium enterprises in Cape Town is significantly impacted by e-sourcing. E-invoicing also has a big influence on Cape Town's small and medium enterprises' performance. Additionally, e-payment has a big impact on Cape Town, South Africa's Small and Medium Enterprises' performance.

Conclusion: E-tendering has a marginally beneficial impact on Cape Town SMEs' performance. However, the majority of SMEs do not have an online system for managing supplier contracts that simplifies the tendering procedure.

Recommendations: Small and medium-sized businesses should adopt and use e-tendering to streamline the procurement process and reduce associated expenses. Additionally, small and medium-sized businesses should switch to electronic invoicing to save money on the costs of printing, storing, and shipping paper invoices. The report also suggests that all small and medium-sized businesses implement e-payment to boost productivity by increasing payment efficiency and lowering mistakes associated with cash transactions. Additionally, small and medium-sized businesses should use e-sourcing since it expands their access to a wide range of suppliers and speeds up the contract award process.

Keywords: *SMEs, enterprises, Cape Town, E-tendering, E-Sourcing, E-Payment.*

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1.0 INTRODUCTION

Integration of the Internet with business has long been a widespread occurrence around the world. However, one of the most important organizational tasks that has increasingly moved to an electronic platform in a number of sizable economic organizations is procurement, which is also significantly likely to damage the organization's survival or even profitability. Businesses and corporate sectors have realized the need to stay informed about new technological developments and manage minimizing operational costs while meeting the objectives and goals of an organizational, which has led to an increase in the adoption of e-procurement in today's competitive and highly dynamic sectors (Subramanian, Qualls & Shaw, 2006). Overall, it is anticipated that the introduction of e-procurement would increase both the productivity and efficiency of organizational business activities.

E-procurement has also been widely embraced by SMEs in Asia. For instance, SMEs in India are implementing a variety of e-procurement tactics to improve their procurement activities after realizing the enormous benefits of the practice. Gopinath et al. (2016) claim that SMEs in India are increasingly embracing e-procurement systems to improve customer satisfaction, increase delivery, increase flexibility in their procurement processes, and effectively manage their inventory. According to Gopinath et al. (2016), using e-procurement solutions has not only helped organizations establish and maintain competitive positions, but it has also increased transparency and done away with unethical procurement practices. Similarly, in Malaysia, the SMEs have greatly adopted e-procurement in order to streamline their procurement operations. Tiwari et al, (2019), claim that a large number of SMEs use the e-ordering, e-sourcing, e-tendering, and e-invoicing to enhance their procurement operations. The technologies have enabled the businesses to communicate effectively with customers and suppliers, to check for the prices of goods, to check the availability of goods and services, and to exchange purchase information with the internal as well as external parties.

E-procurement has shown to be one of the best instruments utilized by SMEs in Africa to promote good governance and enhance procurement procedures. Despite the fact that some technologies are being adopted at a slower rate in Africa than they are in Asia and Europe, it is important to note that SMEs in Africa are working to improve their business processes overall by utilizing the available technology. According to Aduwo et al. (2016), for instance, SMEs in Nigeria have somewhat incorporated e-procurement in order to optimize its benefits when buying products and services, managing inventories, and enhancing communication between the companies and their suppliers and customers. This has aided in improving the effectiveness of theIn South Africa, Sithole (2017) observed that the SMEs in South Africa are increasingly utilizing e-procurement technologies to enhance their operations. The common strategies adopted included e-notification, e-contract management partial e-tendering, e-contract awarding and e-invoicing. These technologies have largely revolutionized the procurement operations and to boost the performance of the businesses.

To improve the ordering and sourcing procedures, SMEs in South Africa are progressively embracing and employing e-procurement technology. The need to provide timelier delivery of high-quality goods and services is what spurred the adoption of the techniques. Due to delayed goods deliveries, a considerable number of these businesses have struggled to satisfy client requests. Lack of efficient and effective procurement procedures causes a delayed delivery of

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products, which in turn affects a steady supply of items to clients. Customer unhappiness and subpar business performance result from this. Because of this, SMEs use a variety of e-procurement technologies, including e-tendering to streamline the tendering process, e-sourcing to find the best suppliers, and e-invoicing and e-payment to streamline payments.

SMEs are essential to South Africa's socioeconomic development. Despite their significance, they encounter several difficulties that have a negative influence on their performance and led to some of them shutting down. The pace at which SMES in South Africa are failing is frightening, according to the South Africa National Bureau of Statistics (2017), which jeopardizes their anticipated contribution to the realization of the vision 2030. Furthermore, a big number of SMEs are registered in the nation, but only a tiny percentage of them continue to exist after their establishment for ten years, according to KNBS (2017). This is consistent with research undertaken by Sitienei (2018), which found that many SMEs in South Africa fail to reach their first birthday. While the SMEs contribute greatly to the economic prosperity of the nation, little research has been conducted to determine the challenges the businesses undergo. A review of past empirical literature brings forth various contextual, empirical, methodological gap which create the need for more research. Chegugu and Yusuf (2017) performed a research study on outcome of e-procurement activities on performance of public hospitals in, South Africa. Findings noted that the hospitals have benefited a lot from e-procurement technologies. The e-tendering help the hospitals to achieve increased competitiveness in the tendering bids. Generally, the study established that e-tendering is crucial to the businesses in the medical field. Empirical and methodological gaps arise since the focus was on e-tendering only and contextual gaps arise as this study was not done in Cape Town. The objective of this study is to investigate the impact of e-procurement on the performance of SMEs in Cape Town was the main goal of this study.

2.0 LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Schumpeter’s Entrepreneurship Theory

Schumpeter created the hypothesis (1991). The theory was founded on the notion that innovation and creativity are crucial components in each entrepreneur's industry. Although Schumpeter (1991) contends that entrepreneurship expertise may significantly contribute to a firm's success, the entrepreneur must be inventive in order to amass a sizable profit in a fiercely competitive and dynamic market. Schumpeter selects an example of a capitalist closed economy that is in static equilibrium for his entrepreneurship theory. He maintained that businesspeople constantly disrupt this state of equilibrium by bringing in a new invention, which aids in raising the economy to a new stage of growth. In this case, innovation could occur in different ways such as innovation of recent products, methods of production, innovation in management processes, among other innovations. The entrepreneurship theory is suitable to this study because it accentuates function of e-procurement on performance of the SMEs. In relation to Schumpeter’s Entrepreneurship Theory, the SMEs adopt e-procurement as an innovation to enable them performs above rivals. The SMES in Cape Town have employed several e-procurement technologies in order to increase operational efficiency. In this study therefore, Schumpeter’s Entrepreneurship Theory offered a guide in the understanding of these technologies on the procurement processes and the overall performance.

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2.1.2 Economic Theory of Entrepreneurship

Papanek (1962) established the Economic Theory of Entrepreneurship, which Harris later developed (1970). According to the notion, the primary element that encourages entrepreneurship is economic motivation. The financial rewards spur entrepreneurs to engage in a variety of entrepreneurial endeavors and to take steps to improve their entrepreneurial skills. The growth and enhancement of entrepreneurial abilities are significantly influenced by the entrepreneurs' inner drive and their targeted financial advantages. The owners of SMEs are motivated to look for ways to increase operational efficiency and capabilities because they want to provide better outcomes. Having identified gaps in the procurement functions, the SMEs now adopt modern specialized e-procurement technologies in pursuit of efficient and effective procurement. The Economic Theory of Entrepreneurship is relevant and applicable in the study of the e-procurement embracing by SMEs within Cape Town. As a remedy to numerous procurement challenges the businesses have been facing, they largely adopt and integrate technology in their procurement operations. The e-procurement strategies adopted are expected to enhance the sourcing and ordering processes and to improve the performance. In this study, the economic theory of entrepreneurship assisted in understanding the influence of e-procurement on the procurement efficiency and on the business performance.

2.1.3 Drucker Entrepreneurship Theory

Drucker established the Drucker Entrepreneurship Theory (1985). According to Drucker's idea, an entrepreneur is a special type of change agent. Drucker (2014) claims that an entrepreneur constantly monitors for changes, responds to those changes, and takes use of such changes as opportunities. Entrepreneurs, in Drucker's opinion, should constantly be prepared to take advantage of any new chances for innovation and should be extremely diligent and creative. Small and medium-sized businesses operate in a very dynamic commercial environment. As a result, business owners should be creative and look for solutions to help them perform better, which will increase the value of e-procurement. Drucker Entrepreneurship theory was helpful in explaining the innovative strategies that SMEs in Cape Town currently adopt in order to increase their operational efficiency. The ordering and sourcing process have always been a key challenge to SMEs, which leads to delayed supply of goods and customer dissatisfaction. E-procurement has therefore emerged as a solution to this problem and SMEs are highly using different e-procurement technologies to enhance their procurement process.

2.2 Empirical Review

Gunawardhana and Karunasena (2012) conducted research on the role of e-procurement in the Sri Lankan ministry of water and drainage. The study found a beneficial relationship between e-tendering and successful procurement. The study came to the conclusion that e-tendering enhances information flow and communication between the departments participating in the tender procedures, as well as the coordination of procurement activities. The e-tendering contained an alert system that would constantly remind users of important tasks and duties completed by various teams, reducing human error and directing papers to the appropriate and pertinent parties. Empirical gaps exist since the study was not focused on influence of e-tendering, e-payment and e-invoicing and did not focus on SMES. Contextual gap also exist as the study was not done in South Africa. Empirical gaps arise as the study was not focused on influence of e-sourcing, e-

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payment, and e-invoicing. Focus of the study was also on SMEs. Contextual gaps also exist as the study was not conducted in South Africa.

Locally, Chegugu and Yusuf (2017) looked on how the performance of public hospitals in Cape Town was affected by e-procurement activities. A sample of 367 junior hospital staff members who participated in this study provided the data for it. The investigation revealed that hospitals have reaped significant benefits from e-procurement systems, according to the report. The hospitals benefit from enhanced tendering offer competition thanks to e-tendering. Overall, this study demonstrated how important e-tendering is to enterprises in the medical industry. While the study considerably contributed to our understanding of how e-procurement affects performance. Due to the investigation's lack of attention to the effects of e-sourcing, e-payment, and e-invoicing, there are also gaps in the empirical data. Focus of the study was also not on SMEs. Contextual gaps also arise as the survey was not done in Cape Town.

Hernandez-Ortega (2011) claims that an e-invoice enables a firm to compile transactional information and transfer it through a network. The e-invoices give the company the ability to keep track of customer and order information across the supply chain and improve origin and receipt verification, non-repudiation, confidentiality, and privacy. A research on the effects of electronic procurement on the performance and procurement procedures of different sectors in the USA was conducted by Mora Monge et al. (2010). The study found that using e-procurement has significantly enhanced the businesses' ordering and sourcing procedures. Businesses were able to save expenses associated with procurement operations and limit and stop mistakes in the sourcing and purchasing processes thanks to e-souring technology. Contextual gaps emerge on the need to undertake another study focusing on the impact of e-tendering, e-payment, and e-invoicing on performance. There is also need to conduct a study focusing the SMEs sector. There was also a contextual gap as the study was not conducted in South Africa and hence the need for another study in South Africa. According to Songip et al. (2013), e-payment enables businesses to carry out financial transactions in a quick, efficient and secure way. By speeding up payments, e-payment speed ups the procurement and ensures timely delivery of goods. This ultimately increases customer satisfaction through constant and timely supply of goods.

3.0 METHODOLOGY

This investigation used a descriptive research approach. The proprietors of all registered and licensed SMEs in Cape Town were the study's target group. It chose SMEs to take part in the study using a stratified random selection technique. Furthermore, standardized questionnaires were used to collect primary data. The quantitative analysis approach was used to further evaluate the data.

4.0 DATA ANALYSIS, FINDINGS AND DISCUSSION

4.1 Demographic Characteristics

In this study, the sample size was 97 owners or managers of registered and licensed SMEs within Cape Town. During the data collection process 97 questionnaires were dispersed, out of which 86 were completely filled and given back to the researcher. Thus, response rate in this research study of was 88.66%. Respondents in this study were requested to specify their gender. From these findings, 65.1% of the participants were male whereas 34.9% of the respondents were female. It means that utmost of SMEs' owners and managers in Cape Town were male. 25.6 % of the participants specified that respondents had secondary education being their highest education

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level, 23.3% pointed out that they were undergraduates, 18.6 % specified that they had technical certificates, the same percentage (18.6 %) indicated that they had primary education while 14.0 % specified that they had post graduate degrees. This implied that most of the SMEs' owners and managers in Cape Town had secondary certificates. From the findings, 44.2% of the participants revealed they had been in business for less than 5 years, 32.6 % specified they had worked in their businesses for a period of between 5 and 10 years, while 23.3% specified that they had been in business for more than 10 years. This means that most of SME owners had operated their businesses for less than 5 years. 39.5 % of the participants had employees ranging between 10 and 20, 32.6% had between 10 and 20 employees, 16.3% had between 21 and 30 employees, 9.3% had below 10 employees while 2.3% had more than 50 employees. It means that most of the SMEs within Cape Town had between 10 and 20 employees.

4.2 Descriptive Analysis for SME's

4.2.1 Use of e-procurement Practices

The respondents during the study were asked to specify their level of agreement on different statements relating to use of e-procurement practices. A Likert scale of 5-point in this study was utilized where by 1 signified no-extent, 2 signified small-extent, 3 signified moderate-extent, 4 signified large-extent, 5 signified very large extent. Findings were as depicted in table 1.

Table 1: E-Procurement practices

Statement	1	2	3	4	5	Mean	Std. Dev.
E-tendering	10.5	20.9	44.2	17.4	7.0	2.895	.041
E-invoicing	5.8	9.3	27.9	12.8	44.2	3.888	0.026
E-sourcing	5.8	23.3	10.5	14.0	46.5	3.935	0.068
E-payment	9.3	11.6	16.3	18.6	44.2	3.767	0.369

From the results, the participants indicated with a mean of 3.935 (std. dv =0.068) that their businesses were using e-sourcing to a large extent. Further, the participants revealed with a mean of 3.888 (std. dv = 0.026) that their businesses were using e-invoicing to a large extent. With a mean of 3.767 (std. dv =0.369) participants revealed that their businesses were using e-payment to a large extent. As indicated with a mean of 2.895 (std. dv= 0. 041), the respondents revealed that they moderately used e-tendering. These findings agree with Eei, Husain, and Mustaffa (2012) findings that e-invoicing, e-payment and e-sourcing are the most used e-procurement practices among small and medium enterprises**.**

4.2.2 E-Tendering

4.2.2.1 Influence of E-Tendering on Performance

The participants were requested to specify their level of agreement on different statements relating to e-tendering and various performance metrics. A Likert scale of 5-point was used whereby 1 symbolized no extent, 2 symbolized small extent 3 symbolized moderate, 4 symbolized large extent and 5 symbolized very large extent. The results were shown in table 2.

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Table 2: E-Tendering and performance

	1	2	3	4	5	Mean	Std. Dev.
E-tendering has increased the profitability of the business	11.6	11.6	33.7	19.8	23.3	3.314	1.277
E-tendering has increased customer satisfaction	9.3	0.0	38.4	36.0	16.3	3.500	1.071
E-tendering has increased the market share of the business	9.3	23.3	25.6	18.6	23.3	3.233	1.299

As indicated by a mean of 3.500 (std. dv = 1.071), respondents had a large extent that e-tendering has increased customer satisfaction in the business. Gunawardhana et al. (2012) found a positive association between e-tendering and business performance measures including customer satisfaction. The participants were neutral on the statement indicating that e-tendering has increased the profitability of a firm, as indicated by a mean of 3.314 (std. dv = 1.277). Further, the participants were neutral on the statement indicating that e-tendering has increased the market share of the business. This is indicated with a mean of 3.233(std. dv = 1.299).

4.2.2.2 E-Tendering and Business Performance

The participants were also requested to specify the extent of their agreement with various statements relating to e-tendering and business performance. The findings were shown in table 3.

Table 3: E-Tendering and business performance

	1	2	3	4	5	Mean	Std. Dev.
The business has an online supplier contract management system that facilitates tendering processes	9.3	14.0	7.0	15.1	54.7	2.219	1.424
E-tendering increases the accessibility and enhances the procurement process	7.0	12.8	20.9	18.6	40.7	3.333	1.305
E-tendering increases the competitiveness of the procurement process	9.3	11.6	14.0	48.8	16.3	3.512	1.176
E-tendering improves transparency and openness in the tendering process	9.3	60.5	7.0	14.0	9.3	2.535	1.134
E-tendering enables the business to conduct online screening and selections of suppliers	14.0	19.8	45.3	11.6	9.3	2.826	1.108

The participants agreed with a mean of 3.512 (std. dv = 1.176) that e-tendering increases the competitiveness of the procurement process. As indicated by a mean of 3.333(std. dv = 1.305),

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respondents also were neutral on statement indicating that e-tendering increases accessibility and enhances the procurement process. With a mean of 2.826 (std.dv = 1.108), the participants were neutral on statement indicating that e-tendering enables the business to conduct online screening and selections of suppliers. In addition, with a mean of 2.535 (std. dv = 1.134), the respondents were neutral on the statement indicating that e-tendering improves transparency and openness in the tendering process. Eadie et al. (2007) indicated that e-tendering helps to enhance and increase the communication between different parties that are involved in procurement process, which in turn should improve transparency and openness. The participants disagreed with the statement indicating that their business has an online supplier contract management system that facilitates tendering processes. This is indicated by a mean of 2.219 (std. dv = 1.424).

4.2.3 E-Sourcing

4.2.3.1 Influence of E-Sourcing on Performance

Participants were requested to specify their level of agreement with different statements on the influence of e-sourcing on the different performance metrics in their businesses. Results were indicated in table 4.

Table 4: E-Sourcing and performance

	1	2	3	4	5	Mean	Std. Dev.
E-sourcing has improved the performance of the business	11.6	12.8	12.8	16.3	46.5	3.733	1.451
E-sourcing has increased customer satisfaction	11.6	9.3	61.6	9.3	8.1	2.930	0.99
E-sourcing has increased the market share of the business	9.3	18.6	14.0	50.0	8.1	3.291	1.147

As indicated by a mean of 3.733 (std. dv =1.451), respondents had a large extent agreed that e-sourcing has improved performance of business. These study findings concur with Oteki et al, (2018) findings that adoption of e-sourcing enables businesses to generate savings from their supply chains, to increase the visibility of crucial business information and to reduce the time required to accomplish procurement tasks. The participants were neutral on the statement indicating that e-sourcing has increased the market share of their businesses, as indicated by a mean of 3.291 (std. dv = 1.147). Further, as indicated by a mean of 2.930 (std. dv = 0.992), participants were moderate on the statement indicating that E-sourcing has increased customer satisfaction.

4.2.3.2 E-Sourcing and Business Performance

The respondents were further requested to specify the extent of their agreement with various statements on e-sourcing and business performance. The results were indicated in table 5.

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Table 5: E-Sourcing and business performance

	1	2	3	4	5	Mean	Std. Dev.
E-sourcing has offered cost efficient means of sourcing goods	9.3	11.6	12.8	12.8	53.5	3.895	1.406
E-sourcing has helped reduce delays in the sourcing process and has helped to increase the processing speed.	4,7	11.6	9.3	55.8	18.6	3.721	1.048
E-sourcing helped my business to get value for money	7.0	9.3	65.1	9.3	9.3	3.047	0.919

The respondents agreed that e-sourcing has offered cost efficient means of sourcing goods. This is indicated with a mean of 3.895 (std. dv = 1.406). The results agree with Mora- Monge et al (2010) findings that e-souring technologies enabled the businesses to reduce the costs incurred in the procurement operations, and to curb and minimize errors in the sourcing and ordering processes. Further, the respondents agreed that e-sourcing has helped to reduce delays in the sourcing process and has helped to increase the processing speed. This is indicated with a mean of 3.721 (std. dv = 1.048).

4.2.4 E-Invoicing

4.2.4.1 Influence of E-Invoicing on Performance

The respondents further were asked to specify their level of agreement with different statements on the influence of e-invoicing on the different performance metrics in their businesses. The findings were shown in table 6.

Table 6: Influence of E-Invoicing on performance

	1	2	3	4	5	Mean	Std. Dev.
E-invoicing has increased the profitability of the business	7.0	9.3	7.0	51.2	25.6	3.791	1.139
E-invoicing has increased customer satisfaction	5.8	4.7	57.0	16.3	16.3	3.326	0.999
E-invoicing has increased the market share of the business	18.6	54.7	16.3	3.5	7.0	2.256	1.031

From the results, participants agreed by a mean of 3.791 (std. dv = 1.139) that e-invoicing has increased the profitability of the business. As indicated with a mean of 3.326 (std. dv = 0.999), respondents were moderate on statement that e-invoicing has increased customer satisfaction. These findings differ with Waganda (2018) findings that e-invoicing has significant effect on customer satisfaction. The participants disagreed on the statement that e-invoicing has increased market share of the businesses. This is indicated with a mean of 2.256 (std. dv = 1.031).

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4.2.4.2 E-Invoicing and Business Performance

The respondents were asked to specify the extent of their agreement with various statements on e-sourcing and business performance. The results were shown in table 7.

Table 7: E-invoicing and business performance

	1	2	3	4	5	Mean	Std. Dev.
E-invoicing has highly enhanced data security at my business	9.3	11.6	9.3	11.6	58.1	3.977	1.414
E-invoicing has reduced delays and highly promoted timelines invoicing	7.0	9.3	11.6	58.1	14.0	3.628	1.063
The E-invoicing has helped to prevent invoice errors and to enhance accuracy	9.3	4.7	25.6	51.2	9.3	3.465	1.048

As indicated with a mean of 3.977 (std. dv = 1.414), participants agreed e-invoicing has highly enhanced data security at their business. Further, the respondents agreed that the e-invoicing has reduced delays and highly promoted timeliness in invoicing settlements by the suppliers as indicated with a mean of 3.628 (std. dv = 1.063). However, respondents were moderate on the statement that the e-invoicing has reduced delays and highly promoted timeliness in invoicing settlements by the suppliers. This is indicated with a mean of 3.465 (std. dv =1.048). The results agree with Waganda (2018) argument that use of e-invoices has enables supply chain organizations to reduce costs, to simplify the invoicing processes, to reduce the payment time, and to increase data security.

4.3 Inferential Statistical Analysis

4.3.1 Correlation Analysis

During the study Pearson correlation analysis was utilized to examine relationship between study independent variables (e-sourcing, e-tendering, e-invoicing and e-payment) and dependent variable (performance of SMEs in Cape Town).

Table 8: Correlation coefficients

		Performance of SMEs	E-tendering	E-sourcing	E-invoicing	E-payment
Performance of SMEs	Person Correlation	1				
	Sig. (2-ailed)					
E- tendering	Person Correlation	.368	1			
	Sig. (2-ailed)	.034				
E-sourcing	Person Correlation	.760	.183	1		
	Sig. (2-ailed)	.002	.093			

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E-invoicing	Person Correlation	.991	.098	0.24	1	
	Sig. (2-ailed)	.000	.108	.187		
E-payment	Person Correlation	.839	.183	.098	.059	1
	Sig. (2-ailed)	.003	.093	.108	.123	

As shown in Table 8, e-tendering has a weak positive but significant correlation with SMEs performance in Cape Town Region (r= 0.368, p value =0.034). This correlation was significant because p value (0.000) was below 0.05 which is the significant level. These results are contrary to Chegugu and Yusuf (2017) findings that e-tendering helps institutions to achieve increased competitiveness in the tendering bids, which in turn improves performance

4.3.2 Regression Analysis

Multivariate regression analysis was adopted to evaluate the weight of correlation between dependent (SMEs performance in City Region of Cape Town, South Africa) and independent variables in this study (e-tendering, e-sourcing, e-invoicing and e-payment). The multivariate regression model used was: $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$ whereby; Y = dependent variable (the performance of SMEs in Cape Town, South Africa), β_0 = Constant Term; β_1-β_4 = regression coefficients; X_1= e-tendering; X_2= e-sourcing; X_3= e-invoicing, X_4= e-payment and ε = error term.

Table 9: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.925[a]	0.857	0.849	1.12413

The R-squared was utilized to explain the difference in dependent variable (the SMEs performance in Cape Town, South Africa) that could be illustrated by independent variables in this study (e-tendering, e-sourcing, e-invoicing and e-payment). The R squared was 0.857 and this meant that 85.7% of dependent variable (the SMEs performance in Cape Town, South Africa) could be clarified in this study by independent variables (e-tendering, e-sourcing, e-invoicing and e-payment).

Table 10: Analysis of the variance

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	16.352	4	4.088	52.410	0.000
Residual	6.358	81	0.78		
Total	**22.71**	**85**			

The ANOVA was adopted to evaluate if the model used was good fit for the data. As shown in Table 10, F-calculated was 52.410 which was more than the F-critical (2.484) and the p value (0.000) was below significant level which is (0.05). Therefore, model was a good fit for the data and therefore could be utilized in explaining influence of independent variables (e-tendering, e-sourcing, e-invoicing and e-payment) on dependent variable (the SMEs performance within Cape Town, South Africa).

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Table 11: Regression coefficients

	Unstandardized coefficient		Standardized coefficient		
	B	**Std. Error**	**Beta**	**t**	**Sig.**
Constant	2.981	1.036		2.877	0.168
E- Tendering	0.098	0.083	0.093	1.181	0.065
E-Sourcing	0.376	0.099	0.354	3.798	0.009
E-Invoicing	0.531	0.115	0.529	4.617	0.000
E-Payment	0.448	0.109	0.426	4.110	0.000

Regression equation used was as follows, $Y = 2.981 + 0.098X_1 + 0.376X_2 + 0.531X_3 + 0.448X_4$. The findings revealed that e-tendering has positive but insignificant influence on SMEs performance in South Africa ($\beta 1 = 0.098$, p value= 0.065). The relationship was insignificant since (0.05) which is the significant level was below the p value (0.065). This means that E-Tendering has no any significant impact in performance of SMEs in South Africa. The findings obtained differ with those of Chegugu and Yusuf (2017) who realized that e-tendering has a positive and significant influence on organization performance. In addition, these findings are contrary to Gunawardhana and Karunasena (2012) findings that there is a positive association between e-tendering and also performance of procurement.

The findings found that E-Payment has positive as well as significant impact on SMEs performance within South Africa. ($\beta_4 = 0.448$, p value= 0.000). Since p value (0.000) was below 0.05 which is the significant level, the relationship was significant. This means that E-Payment leads to rise in performance of SMEs in South Africa. These findings are in line with the results of Chegugu and Yusuf, (2017) that e-payment has a positive influence on organization performance. In addition, these findings agree with Khaoya and Muchelule (2019) findings that e-payment platforms enable the enterprises to make timely payment for goods to their suppliers to bolster the relationship between the businesses and their suppliers.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusion

This research concludes that e-tendering has positive but insignificant effect on SMEs performance in Cape Town. However, most SMEs lack an online supplier contract management system that facilitates tendering processes. It was established that e-tendering increases customer satisfaction, moderately increases the market share and profitability of businesses. E-invoicing has positive as well as significant influence on SMEs performance within Cape Town Region. Study revealed that e-invoicing improved the performance of the business and moderately improved customer satisfaction and market share. The study also established that the e-invoicing highly enhanced data security in businesses and reduced delays and highly promoted timeliness in invoicing settlements by the suppliers. E-payment has positive as well as significant impact on SMEs performance within Cape Town Region. In addition, the study established that epayment enables to reduce transaction costs, increase transparency and to reduce the time taken to pay suppliers. The study

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found that e-payment has moderately increased profitability of the business, but moderately increased customer satisfaction and market share of businesses.

The conclusion of this study was that e-sourcing has positive as well as significant impact on SMEs performance in Cape Town Region. This research showed that e-sourcing improved the performance of the business, offered cost efficient means of sourcing goods and helped to reduce delays in the sourcing process. Further, e-sourcing moderately increased customer satisfaction and the market share of SMEs within Cape Town Region.

5.2 Recommendations

The study found that most SMEs within Cape Town lack an online supplier contract management system that facilitates tendering processes. This survey therefore recommends the embracing of e-tendering management system by SMEs to ensure effective and efficient tender awarding and also ensure the suitable criteria for contractor selection. SMEs should adopt and utilize e-tendering to streamline the process of procurement and reduce the costs involved. All SMEs within Cape Town Region should work towards ensuring full adoption of electronic invoicing which will in turn improve services offered to customers hence making them more satisfied. In addition, small and medium enterprise should adopt e-invoicing to reduce costs associated with storage, printing and delivery of paper invoices.

Adoption of electronic payment by all SMEs in Cape Town Region so as to ensure easy, fast and safe transactions hence increasing the level of customer satisfaction. The study further recommends that all SMEs should adopt e-payment to improve performance by improving efficiency in payments and reducing errors related to cash transactions. SMEs within Cape Town should embrace supplier management systems which will help them track their entire suppliers and ensure continuous supply of good hence increasing market share and improving the level of customer satisfaction. Further, small and medium enterprises should adopt e-sourcing as it increases access to many suppliers and reduce time taken to award a contract.

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Conflict of Interest

The authors declares no conflict of interest.

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