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THE INFLUENCE OF E-PROCUREMENT STRATEGIES IN ENHANCING CUSTOMER SERVICE DELIVERY IN PUBLIC INSTITUTIONS (A SURVEY OF KISII AND NYAMIRA COUNTIES)

[1*] **Joyce Mokeira Onyiego**
Jomo Kenyatta University of Agriculture and Technology
mokeiraj@yahoo.com

[2**] **Dr. Walter Okibo Bichanga (PhD)**
Lecturer, Jomo Kenyatta University of Agriculture and Technology
bwokibo@jkuat.ac.ke

Abstract

The Rapid technology advancements have tremendously revolutionized the way business is done in today's world. Organizations that have not implemented e-procurement strategies have lagged behind and have got repeated audit queries year after year. Government institutions, as a matter of fact, are supposed to implement e-procurement strategies such as e-tendering, e-invoicing, e-payment and e-communication. Internal process is a vital part of an organization as it has a bearing on the external customer service delivery. The study embarked on the influence of e-procurement strategies in enhancing customer service delivery in public institutions. The research findings were presented through tables as a statistical technique. The findings indicated that e-tendering strategy influences customer service delivery in public institutions. The public organizations do not fully embrace e-tendering and hence are missing out on the advantages that it has to offer. E-tendering increases customer service delivery efficiency and improves control system of an organization. The findings led to a conclusion that e-invoicing strategy enhances customer service delivery in public institutions. Invoicing is done online in the public institutions. From the findings, it was concluded that e-payment strategy of suppliers enhances customer service delivery in public institutions. E-payment is efficient and timely and that E-payment ensures customer satisfaction through its efficiency and timely nature. Manual payment is not easy to manage than online payment. The study found out that e-communication strategy in procurement process enhances customer service delivery in public institutions. The study recommends that the government corporations should be sensitized on the importance of e-procurement on their production. The management should be encouraged to attend trainings on e-procurement strategies that enhance customer service. This enhances positive mind of practicing e-procurement in their institutions.

Keywords: E-Procurement Strategies, Customer Service Delivery, Public Institutions

1. Background of the study

Strategic Electronic procurement (e-procurement) sometimes known as supplier exchange, has tremendously uplifted the success of companies worldwide. However, many challenges have stood in the way which has resulted in fewer institutions adopting end to end e-procurement process. This is due to the fact that many institutions and suppliers or contractors have not realized the benefits or the service delivered through implementation of e-procurement strategies.

Public sector organizations use e-procurement strategies in contracts to achieve benefits such as increased efficiency and cost savings (faster and cheaper) in government procurement and improved transparency (to reduce corruption) in procurement services. Adoption of e-procurement strategies in the public sector has seen rapid growth in recent years (Turban et al., 2015).

The e-procurement strategies are: e-tendering, e-invoicing, e-payment and e-communication. E-procurement software may make it possible to automate buying and selling. Companies participating expect to be able to control parts inventories more effectively, reduce purchasing agent overhead, and improve manufacturing cycles. E-procurement and the use of computers in procurement is gaining grounds and becoming more popular in today's business. According to Qrunfleh and Tarafdar (2014), modern business state that for any business firm to succeed they must embrace and incorporate Information Technology into day-to-day running of the enterprise. This reason coupled with many other positive effects has prompted many companies both locally and all over the world to adapt and implement IT in its procurement process and overall running of the business (Rita and Krapfel, 2015).

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Procurement is an important part of the supply chain and does not only affect external stakeholders but also internal stakeholders. This means that it has potential to add value not only to the external side of the supply chain but also to the internal supply chain (Rita and Krapfel, 2015). The electronic application of procurement (e-procurement) has had many benefits to organizations such as cost savings and profits. Internal customers refer to departments and individuals who are supplied with goods and service by other departments and individuals within the same organization or government institutions. Fawcett et al., (2014) argues that "every part of an organization contributes to external customer satisfaction by satisfying its own internal customers." This entails that whatever the effects of e-procurement on the procurement department will inevitably affect other departments because they rely on procurement to bring in materials at the right time, price, quality, quantity and from the right source which are used to produce goods for the end customer. If for example, important components do not arrive in time,

production will be late, and the sales and marketing department may not live up to their promises to deliver to the customer as anticipated. This therefore implies that the entire supply chain which encompasses both the internal and external supply chains must be properly managed and coordinated as provision of goods and services to the final customer is wholly dependent on the efficiency and effectiveness of the entire supply chain.

E-procurement projects are often part of the country's larger e-Government efforts to better serve its citizens and businesses in the digital economy. For example, Singapore's GeBIZ was implemented as one of the programmes under its e-Government master plan. Public procurement has been a thorn in the flesh in ensuring fairness in expenditure of public funds to procure goods and services leading to establishment of anti-corruption institutions to tackle this menace with little success. Leading countries in Europe and Asia have successfully implemented central e-procurement system for procuring goods and services in for the public sector with great success (Turban et al., 2015).

Many public organizations have adapted the use of computers in managing their procurement process realizing many benefits. In Tanzania the e-procurement system adapted by the government institutions, enables e-checking and monitoring of procurement processes; it is a web-based system for online submission of annual procurement plans and reports on implementation of the plan to PPOA by procuring entities; Requires Internet, computers and IT skilled user (Public Procurement and Disposal Act, 2005). According to e-government strategy paper 2004, e-procurement was one of the medium term objectives which were to be implemented by June 2007, but the process has been very slow. The manual processes are costly, slow, inefficient and data storage and retrieval poor. Ku, Wu & Chen (2015) admit that any organization that does not adopt e-procurement in its buying process in the organization is disadvantaged and cannot compete effectively in the ever increasing competitive world.

2. Statement of the problem

Most financial institutions funding clients in the agricultural sector in Kenya have been experiencing financial difficulties due to high loan delinquency rate. This trend is threatening to cut off services to this crucial sector adding to the problem of inadequate and skewed financial services.

3. Purpose and Objectives of the Study

The general objective of this study was to analyze the influence of e-procurement strategies in enhancing customer service delivery in public institutions. The study was guided by the following specific objectives;

i) To determine e-tendering strategy enhance customer service delivery in public institutions.

ii) To examine how e-invoicing strategy enhance customer service delivery in public institutions.

iii) To find out how e-payment strategy of suppliers enhance customer service delivery in public institutions.

iv) To determine how e- communication strategy in procurement process enhance customer service delivery in public institutions.

4. Research methodology

The study used census sampling to involve 46 senior management, 40 middle level management, 80 lower level management and 14 suppliers from each of the government firms. The sample size was 180 respondents. The study used descriptive survey method. A descriptive survey is a method of collecting information by interviewing or administering a questionnaire to a sample of individuals

DATA ANALYSIS, INTERPRETATIONS AND PRESENTATION

5. E-tendering Strategy

The study investigated the e-tendering strategies that enhance customer service delivery in public institutions. This was done by examining if the public institutions accept e-tendering in their institutions and the extent at which the respondents agree or disagree on the statements touching on e-tendering and customer service.

Table 1: Acceptance of e-tendering in the institutions

Response	Frequency	Percentage
Yes	62	40%
No	93	60%
Total	**155**	**100%**

Majority 93 (60%) of the respondents disagreed that their institutions accept e-tendering while 62 (40%) agreed that they embraced e-tendering. This means that the firms that are not embracing e-tendering are missing out on the advantages that it has to offer. According to Turban et al., (2015), An organization which uses E-procurement has the following advantages: First, Price reduction in tendering: Empirical studies carried out Mohammad Almarabeh & Ali (2009) in the United States of America indicated that the two most important measures for the success of procurement processes are cost and time.

Table 2: Tenders are advertised online

Response	Frequency	Percentage
Strongly agree	80	52%
Agree	42	27%
Undecided	12	8%

Strongly disagree	14	9%
Disagree	7	4%
Total	**155**	**100%**

Table 2 shows tender advertisement in the public sector. Majority of the respondent 122 (79%) agreed that tenders are advertised online. This means that the public corporates apply e-procurement in their firms. This is an indication that the counter use e-tendering in advertising their tenders which is a good initiative. Vitkauskaite & Gatautis (2008) argues that e-procurement results in reduction in paperwork and this leads to lower administration costs. Fourthly, Reduction in procurement staff: since most of the procurement process is done electronically, the number of staff needed to facilitate the process reduces.

Figure 1 Prospective suppliers submit proposals online

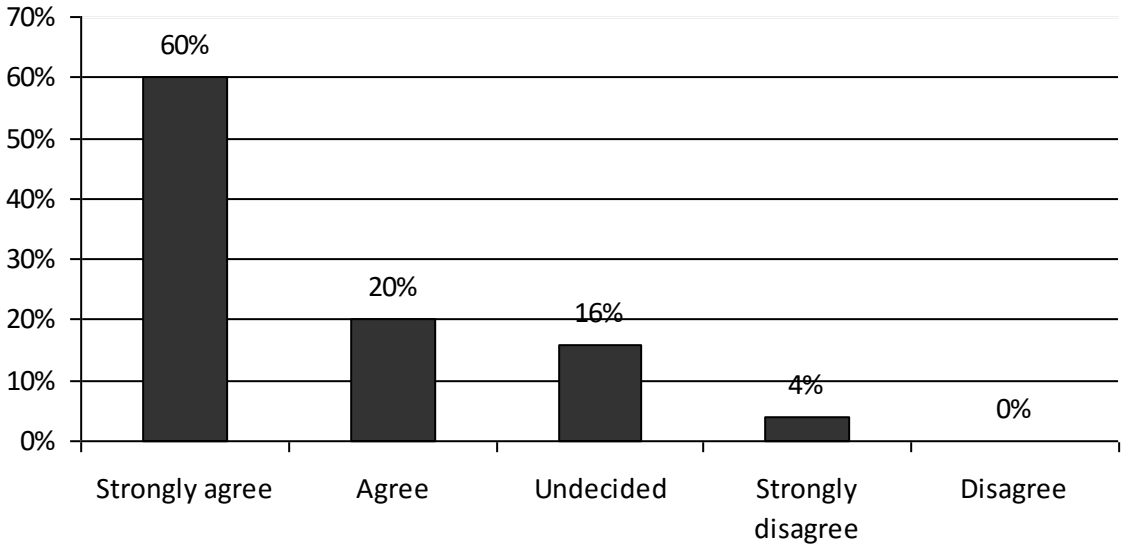

Figure 1 shows response on prospective suppliers submitting proposals online in the public sector. Majority of the respondent 124 (80%) agreed that prospective suppliers submit proposals online. This means that the public corporates apply e-procurement in their firms. This must be initiating efficiency in the handling of the tenders.

As Vitkauskaite & Gatautis (2008) noted, the reduction in staff is an important way of producing competitive advantage through reduced costs. This is further supported by Hong et al., (2010) in his study which revealed that through implementation of an e-procurement system, a steel supplier was able to carry out a multi-million pound project with only 20% of the staff the company would normally have used. Fifthly, e-procurement gives an organization competitive advantage over its competitors.

Table 3: Short listing of tenders is done by the e-procurement system

Response	Frequency	Percentage
Strongly agree	51	33%
Agree	28	18%
Undecided	40	26%
Strongly disagree	29	19%
Disagree	7	4%
Total	**105**	**100%**

Table 3 shows if short listing of tenders is done by the e-procurement system in the public sector. Majority of the respondent 79 (51%) agreed that short listing of tenders is done by the e-procurement system. This means that the public corporates apply e-procurement in their firms. This makes the tendering process easy and efficiency and accountability easily done.

A reduced Operating and Inventory cost is another benefit of e-procurement: This is from the fact that much if not all paperwork is eliminated. Postage costs are also not incurred, among other expenses associated with sending and receiving documents when sending them by post (Fenuga & Kolade, 2010).

Table 4: E-tendering in public institutions

Statement	Mean	Standard deviation
E-tendering helps in easy evaluation of major suppliers	1.32	1.11
E-tendering helps in easy receiving and attendance of major customers	1.12	1.32
It is easy and simple to handle e-tendering documents	1.21	1.42
It is easier and more simple to serve and integrate suppliers through e-tendering	1.37	1.21
E-tendering increases customer service delivery efficiency	1.25	1.65
E-tendering improves control system of an organization	1.18	1.34

From the findings shown in Table 4, majority of the respondents indicated that E-tendering helped in easy evaluation of major suppliers as revealed by a mean of 1.32 and a standard deviation of 1.11. E-tendering helps in easy receiving and attendance of major customers as shown by a mean of 1.12 and a standard deviation of 1.32. Majority of the respondents indicated

that it was easy and simple to handle e-tendering documents as indicated by a mean of 1.21and a standard deviation of 1.42. Respondents also revealed that it was easier and simpler to serve and integrate suppliers through e-tendering as shown by a mean of 1.37 and a standard deviation of 1.21. Majority of the respondents indicated that E-tendering increases customer service delivery efficiency as revealed by a mean of 1.25 and a standard deviation of 1.65. Majority of the respondents also indicated that E-tendering improves control system of an organization as shown by a mean of 1.18 and a standard deviation of 1.34. The results indicates that e-tendering has many advantages that an organization can realize. Both the suppliers and the organization seeking the services are able to easily track the process and accountability is enhanced.

6. E-invoicing strategy

The study investigated if E-invoicing strategy enhances customer service delivery in public institutions by examining if invoices are done online and probing the responses on the statements on E-invoicing strategy and customer service delivery in public institutions

Table 5: Invoices are done online

Response	Frequency	Percentage
Yes	47	30%
No	108	70%
Total	**155**	**100%**

Table 5 shows how invoicing is done in the public sector. Majority of the respondent 108 (70%) disagreed that invoicing is done online. This means that the public corporates do not apply online invoicing and therefore negatively influences customer service.

In a study on a network firm by Legner & Wende (2006) found that the customers are offered direct access to each other, as in payment mediation, or indirect access to a common pool, as in saving and loan services.

Table 6: E-invoicing strategy and customer service delivery in public institutions

Statement	Mean	Standard deviation
E-invoicing is efficient	1.11	1.21
E-invoicing ensure customer satisfaction through its efficiency	1.42	1.38
Manual invoicing is easy to manage than online	4.23	2.10
The cost of managing e-invoicing is high	3.56	1.52
E-invoicing helps in reducing corruption	1.10	1.29

Table 6 indicated that majority of the respondents agreed that E-invoicing is efficient as shown by a mean of 1.11 and a standard deviation of 1.21. Majority indicated that E-invoicing ensure customer satisfaction through its efficiency as shown by a mean of 1.42 and a standard deviation of 1.38. The respondents disagreed that manual invoicing is easy to manage than online as shown by a mean of 4.23 and a standard deviation of 2.10. Majority of respondents also disagreed that the cost of managing e-invoicing is high as shown by a mean of 3.56 and a standard deviation of 1.52. E-invoicing helps in reducing corruption as indicated by a mean of 1.10 and a standard deviation of 1.29. The findings means that manual invoicing is tedious unlike the e-invoicing which reduces corruption and can be managed easily. It is also efficient and enhances customers satisfaction.

To create a financially viable e-invoicing solution, corporate needs to create this critical mass by a value network of alliance partners and technology solution providers to add the necessary desirability for electronic invoicing through the Financial Supply Chain. A Value Network is a web of relationships that generates economic value and other benefits through complex dynamic exchanges between two or more individuals, groups or organizations. The Value Network models mediating firms as creating value through three basic primary activities: network promotion and contract management; service provisioning; and infrastructure. Michaelides & Kehoe (2006) through the set of mediation activities performed by the firm. Both value and cost are postulated as driven mainly by network characteristics.

7. E-payment Strategy of Suppliers

The study examined how E-payment strategy of suppliers enhances customer service delivery in public institutions by studying statements on E-payment strategy of suppliers and customer service delivery in public institutions. The findings are shown below.

Table 7: E-payment strategy of suppliers

Statement	Mean	Standard deviation
E-payment is efficient and timely	1.43	1.29
E-payment ensure customer satisfaction through its efficiency and timely nature	1.17	1.65
Manual payment is easy to manage than online payment	4.32	1.21
The cost of managing e-payment is high hence is more efficient to manage manual payment	4.65	1.34
E-payment helps in reducing corruption	1.12	1.32

From Table 7, majority of respondents agreed that E-payment is efficient and timely as shown by a mean of 1.43 and a standard deviation of 1.29. Majority of the respondents indicated that E-payment ensure customer satisfaction through its efficiency and timely nature as shown by a

mean of 1.17 and a standard deviation of 1.65. Majority disagreed that a manual payment is easy to manage than online payment as revealed by a mean of 4.32 and a standard deviation of 1.21. Majority disagreed that the cost of managing e-payment is high hence is more efficient to manage manual payment as shown by a mean of 4.65 and a standard deviation of 1.34. Majority indicated that E-payment helps in reducing corruption as shown by a mean of 1.12 and a standard deviation of 1.32. The findings depicted e-payment to be efficient and timely and reduces corruption. The organizations should therefore advocate for e-payment for easy management of the finances.

Al-Omari & Al-Omari (2006) stated more than ten e-payment benefits for both buyer and seller. Such as cost savings and speed in selling and purchasing, exposure to new customers, convenience and transparency to users, better quality of product/service, reduce need for office space and fewer resources required. The development of information technology and computer networks enhanced the usage of e-payment and improved the use of supply chain management. SCM focuses on the integrated planning, co-ordination and control of all logistical business processes and activities in the supply chain to deliver superior consumer value at less cost to the chain as a whole, whilst satisfying requirements of other stakeholders.

8. E-communication Strategy

The study examined how E-communication strategy in procurement process enhances customer service delivery in public institutions by studying the mode of communication with suppliers and responses on statements touching on e-communication strategy and customer service.

Table 8: Mode of communication with suppliers

Response	Frequency	Percentage
Yes	62	40%
No	93	60%
Total	**155**	**100%**

Majority 93 (60%) of the respondents indicated that they use physical communication as a mode of communication with suppliers while 62 (40%) indicated that they communicated online. This means that most of the public firms are missing out on the advantages of online communication.

According to Hayes, Sweeney & Argo (2010) many studies have pointed to areas where communication is vital to success of organizations. Yet it is still infrequently singled out for specific attention and it is often taken for granted. Proper communication across the departments through good information systems is important for any organization if it is going to achieve high levels of customer service and general performance. That is mostly the main aim in many organizations. It is important that the communication system adaptable is effective and is able to meet the organizations communication needs by using e-procurement.

Table 9: E- communication strategy and customer service delivery in public institutions

Statement	Mean	Standard deviation
Customers can launch complains and get services online with incorporation of e-communication	2.13	1.36
Customers preferred being served manually compared to online services	4.32	1.45
The time to serve one customer has reduced significantly with incorporation of IT on customer service delivery	1.23	1.76
The cost of employing customer service attendance has reduced while serving them online through e-communication	1.15	1.15
Manual customer attendance is more fulfilling than online attendance online services	4.31	1.29

From Table 9, majority of respondents agreed that customers can launch complains and get services online with incorporation of e-communication as indicated by a mean of 2.13 and a standard deviation of 1.36. Majority indicated that customers preferred being served manually compared to online services as shown by a mean of 4.32 and a standard deviation of 1.45. Majority agreed that the time to serve one customer has reduced significantly with incorporation of IT on customer service delivery as shown by a mean of 1.23 and a standard deviation of 1.76. The cost of employing customer service attendance has reduced while serving them online through e-communication as shown by a mean of 1.15 and a standard deviation of 1.15. Majority of the respondents disagreed that the manual customer attendance is more fulfilling than online attendance online services as revealed by a mean of 4.31 and a standard deviation of 1.29. This means that E- communication strategy positively influences customer service.

These findings agree with Joseph & Ibeh (2006) study which found out that, effective dialogue with customers assists in developing a level of trust with customers. The government organizations need to explore ways in which the organization adapts the use of computers in managing its procurement process. This would go a long way in the effectively managing the procurement process and ensuring that the required goods and services are available as required. Proper and effective communication channels should be put in place to facilitate easy communication between supplies and the organization not only when there is a problem but always even when there are suggestions to be made by the supplies.

Efficiency and Customer Service Delivery

The study probed efficiency and customer service delivery by examining if the procurement systems were efficient, extent to which procurement system were either efficient of inefficient and the rate of the improvement mechanisms of management towards reducing inefficient factors in the procurement process.

Table 10: Procurement systems being efficient

Response	Frequency	Percentage
Yes	16	10%
No	139	90%
Total	**155**	**100%**

Majority 139 (90%) of the respondents disagreed that the procurement system was efficient while a few 16 (10%) indicated that it was efficient. For an organization to be truly effective, every single part of it, each department, each activity and each person and each level must work properly together, because every person and every activity affects and in turn is affected by other. Central to this is the notion of the internal customer "every part of an organization contributes to external customer satisfaction by satisfying its own internal customers". From emanating perspective this internal customer notion is also well accepted Sigala (2009) has led to the concept of internal marketing. However, the application of notion of the internal customer service level to e-procurement is relatively new. The impact of e-procurement on an organization process and routines has concentrated primarily on the internal alignment characteristics of systems and practices within IT/IS strategy.

Table 11: Extent to which procurement systems are efficient

Response	Frequency	Percentage
Great extent	26	17%
Moderate extent	91	59%
Small extent	38	24%
Total	**155**	**100%**

Majority 91 (59%) of respondents rated the extent to which procurement systems to be efficient to be moderate while a few 38 (24%) rated it to be to a small extent. A few 26 (17%) rated it to be to a great extent. Public sector organizations use e-procurement strategies in contracts to achieve benefits such as increased efficiency and cost savings (faster and cheaper) in government procurement and improved transparency (to reduce corruption) in procurement services. Adoption of e-procurement strategies in the public sector has seen rapid growth in recent years (Turban et al., 2015).

Table 12: Extent to which procurement systems are inefficient

Response	Frequency	Percentage
Great extent	118	76%
Moderate extent	20	13%
Small extent	17	11%
Total	**155**	**100%**

Majority 118 (76%) of respondents indicated that procurement systems were inefficient to a great extent while 20 (13%) indicated it to be to a moderate extent. A few 17 (11%) indicated to a small extent. A study by Auta (2010) indicates that E-marketplaces propose to increase the efficiency and effectiveness of procurement activities by replacing traditional manual processes with automated electronic procedures and by expanding the number of available trading partners.

Table 13: Rate of the improvement mechanisms of management

Response	Frequency	Percentage
Excellent	14	9%
Very good	8	5%
Good	17	11%
Fair	91	59%
Poor	25	16%
Total	**155**	**100%**

Majority 91 (59%) of respondents rated the improvement mechanism of management towards reducing inefficient factors in the procurement process to be fair while a few 14 (9%) rated it to be excellent. This means that the public organizations are not keen in attending to the inefficiencies of the procurement process. This must be negatively influencing the customer service delivery.

Shelly, Rottman & Lacity (2004) investigated the reasons why consumers accept or reject technology. Electronic customer relationship management (CRM) while recognizing the potential for data mining, improved segmentation and one-one marketing appears also to have been primarily concerned with managing the relationship and indeed the contact with customers.

Regression Analysis

This study needed to establish relationship between; the sub variable (indicators) of each of the four determinants of the Customer Service Delivery, as well the relationship with the four determinants. Regression was used to obtain an equation which describes the dependent variable

in terms of the independent variable based on the regression model, (regression is used to determine the type of relationship).

The regression was calculated using the basic regression model

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_3 R X_4 + e$

Where;

Y is customer service delivery, X_1 is the e-tendering strategy, X_2 is the e-invoicing strategy

X_3 is the e-payment strategy, X_4 is the e- communication strategy

B_0 is a constant which is the value of dependent variable when all the independent variables are 0.

β_{1-n} is the regression coefficients or change induced by X_1, X2, X_3 and X_4 on Y. It determines how much each (i.e. X_1, X2, X_3 and X_4) contribute to Y

Table 14: Regression model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.78	.6084	.56	.64593

The regression had a correlation coefficient (R^2) of about 0.6084 and an adjusted R^2 of 0.56. This means that e-tendering strategy, e-invoicing strategy, e-payment strategy and e- communication strategy explain 56 percent of the variations in customer service delivery. The F-value of 4.31 with a significance of 0.00 at 5% significance level is significant indicated that the joint contribution of the independent variables was significant in predicting the dependent variable.

Table 15: ANOVA

Model	Sum of squares	Df	Mean Square	F	Sig
Regression	49.136	1	12.5243	23.871	0.00[b]
Residual	28.821	154	0.6291		
Total	77.957	155			

Table 15 shows the results of the regression analysis based on the sign of the coefficient of 0.00. This means the joint contribution of the four factors: e-tendering strategy, e-invoicing strategy, e-payment strategy and e- communication strategy positively influence customer service delivery. This indicates that the other factors that affect customer service delivery and have not been included in the model are statistically significant in determining customer service delivery. The

constant is also positively related to customer service delivery implying that the impact of these factors which are not in the model will influence customer service delivery positively.

Table 16: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	T	Sig.
(Constant)	.512	.160		3.4	.022
E-tendering strategy	1.271	.541	.082	2.438	.015
E-invoicing strategy	1.237	.368	.061	2.435	.020
E-payment strategy	1.281	.471	.490	2.720	.011
E- communication strategy	.85931	.357	.0.234	2.333	.050

Dependent variable: Customer service delivery

Hence the resultant regression model is:

$Y = 0.512+ 1.271X_1 + 1.237X_2 + 1.281X_3 + 0.8593X_4 + e$

E-payment strategy is positively related to customer service delivery and has the most statistically significant coefficient as indicated by a p-value of 0.011. This implies that the e-payment strategy improvement will positively affect the customer service delivery.

There is a positive relationship between customer service delivery and the e-invoicing strategy. E-invoicing strategy also has a statistically significant coefficient as indicated by a p-value of 0.020.

The e-tendering strategy is positively related to the customer service delivery. This is shown by the positive sign of the coefficient. The coefficient of e-tendering strategy is also statistically significant as indicated by a p value of 0.015. The study therefore concludes that e-tendering strategy is positively influences customer service delivery.

The e- communication strategy is positively related to the customer service delivery. This is shown by the positive sign of the coefficient. The coefficient is statistically significant as indicated by p-value of 0.050.

SUMMARY OF FINDINGS

The findings on the e-tendering strategy and customer service delivery in public institutions indicated that majority 93 (60%) of the respondents disagreed that their institutions accept e-tendering while 62 (40%) agreed that they embraced e-tendering. This means that the firms that are not embracing e-tendering are missing out on the advantages that it has to offer. Majority of the respondent 122 (79%) agreed that tenders are advertised online. This means that the public

corporates apply e-procurement in their firms. Majority of the respondent 124 (80%) agreed that prospective suppliers submit proposals online. This means that the public corporates apply e-procurement in their firms. Majority of the respondent 79 (51%) agreed that short listing of tenders is done by the e-procurement system. This means that the public corporates apply e-procurement in their firms. Majority of the respondents indicated that E-tendering helped in easy evaluation of major suppliers as revealed by a mean of 1.32 and a standard deviation of 1.11. E-tendering helps in easy receiving and attendance of major customers as shown by a mean of 1.12 and a standard deviation of 1.32. Majority of the respondents indicated that it was easy and simple to handle e-tendering documents as indicated by a mean of 1.21and a standard deviation of 1.42. Respondents also revealed that it was easier and simpler to serve and integrate suppliers through e-tendering as shown by a mean of 1.37 and a standard deviation of 1.21. Majority of the respondents indicated that E-tendering increases customer service delivery efficiency as revealed by a mean of 1.25 and a standard deviation of 1.65. Majority of the respondents also indicated that E-tendering improves control system of an organization as shown by a mean of 1.18 and a standard deviation of 1.34.

The findings on the study of how e-invoicing strategy enhance customer service delivery in public institutions indicated that majority of the respondent 108 (70%) disagreed that invoicing is done online. This means that the public corporates do not apply online invoicing and therefore negatively influences customer service. Majority of the respondents agreed that E-invoicing is efficient as shown by a mean of 1.11 and a standard deviation of 1.21. Majority indicated that E-invoicing ensure customer satisfaction through its efficiency as shown by a mean of 1.42 and a standard deviation of 1.38. The respondents disagreed that manual invoicing is easy to manage than online as shown by a mean of 4.23 and a standard deviation of 2.10. Majority of respondents also disagreed that the cost of managing e-invoicing is high as shown by a mean of 3.56 and a standard deviation of 1.52. E-invoicing helps in reducing corruption as indicated by a mean of 1.10 and a standard deviation of 1.29.

The findings on how e-payment strategy of suppliers enhance customer service delivery in public institutions indicated that majority of respondents agreed that E-payment is efficient and timely as shown by a mean of 1.43 and a standard deviation of 1.29. Majority of the respondents indicated that E-payment ensure customer satisfaction through its efficiency and timely nature as shown by a mean of 1.17 and a standard deviation of 1.65. Majority disagreed that a manual payment is easy to manage than online payment as revealed by a mean of 4.32 and a standard deviation of 1.21. Majority disagreed that the cost of managing e-payment is high hence is more efficient to manage manual payment as shown by a mean of 4.65 and a standard deviation of 1.34. Majority indicated that E-payment helps in reducing corruption as shown by a mean of 1.12 and a standard deviation of 1.32.

The study found out on how e- communication strategy in procurement process enhances customer service delivery in public institutions that majority 93 (60%) of the respondents indicated that they use physical communication as a mode of communication with suppliers

while 62 (40%) indicated that they communicated online. This means that most of the public institutions are missing out on the advantages of online communication. Majority of respondents agreed that customers can launch complains and get services online with incorporation of e-communication as indicated by a mean of 2.13 and a standard deviation of 1.36. Majority indicated that customers preferred being served manually compared to online services as shown by a mean of 4.32 and a standard deviation of 1.45. Majority agreed that the time to serve one customer has reduced significantly with incorporation of IT on customer service delivery as shown by a mean of 1.23 and a standard deviation of 1.76. The cost of employing customer service attendance has reduced while serving them online through e-communication as shown by a mean of 1.15 and a standard deviation of 1.15. Majority of the respondents disagreed that the manual customer attendance is more fulfilling than online attendance online services as revealed by a mean of 4.31 and a standard deviation of 1.29.

Conclusions

It can be concluded that e-tendering strategy influences customer service delivery in public institutions. The public organization do not fully embrace e-tendering and hence are missing out on the advantages that it has to offer. Tenders and submission of proposals are done online. This means that the public institutions apply e-procurement in their firms. E-tendering helped in easy evaluation of major suppliers. E-tendering helps in easy receiving and attendance of major customers. It is easy and simple to handle e-tendering documents and also easier and simpler to serve and integrate suppliers through e-tendering. E-tendering increases customer service delivery efficiency and improves control system of an organization.

The findings lead to a conclusion that e-invoicing strategy enhances customer service delivery in public institutions. Invoicing is not done online in the public institutions. This means that the public corporates do not apply online invoicing and therefore negatively influences customer service. E-invoicing is efficient and ensures customer satisfaction through its efficiency. The respondents disagreed that manual invoicing is easy to manage than e-invoicing which helps in reducing corruption.

The findings concluded that e-payment strategy of suppliers enhances customer service delivery in public institutions. E-payment is efficient and timely and that E-payment ensures customer satisfaction through its efficiency and timely nature. Manual payment is not easy to manage than online payment. The cost of managing e-payment is low hence is more inefficient to manage manual payment. E-payment helps in reducing corruption.

The study found out that e-communication strategy in procurement process enhances customer service delivery in public institutions. The public institutions use physical communication as a mode of communication with suppliers. This means that most of the public firms are missing out on the advantages of online communication. Customers can launch complains and get services online with incorporation of e-communication. Customers preferred being served manually compared to online services and the time to serve one customer has reduced significantly with incorporation of IT on customer service delivery. The cost of employing customer service

attendance has reduced while serving them online through e-communication. The manual customer attendance is more fulfilling than online services.

Recommendations

The government corporations should be sensitized on the importance of e-tendering on their performance in service delivery. The management should be encouraged to attend trainings on e-tendering strategies that enhance customer service. This will enhance positive mind of practicing e-tendering in their institutions.

The public institutions should mandate her employees to use e-invoicing since the findings revealed that e-invoicing strategy enhances customer service delivery. This means that the public corporates should apply online invoicing to positively influence customer service.

E-payment strategy of suppliers was found to enhance customer service delivery in public institutions. The public institutions should therefore encourage the use of e-payments by embracing a variety of technologies that can enhance service delivery. This can be done using the mobile applications or online services.

Since the study found out that e-communication strategy in procurement process enhances customer service delivery in public institutions. The public institutions should therefore improve their physical communication by introducing the modern technology which is faster and more reliable. This will help them improve customer service delivery.

Areas for Further Research

The following are areas suggested for further research as they have not been covered by this study;

i. The effect of employees' level of education on practice of e-procurement in state corporations in Kenya.

ii. The training of employees on e-procurement and its influence on production in state corporations in Kenya.

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