



**EFFECT OF ELECTRONIC PROCUREMENT ADOPTION ON PERFORMANCE OF PREFERENTIAL
PROCUREMENT IN DEVOLVED SYSTEM OF GOVERNMENT IN KENYA**

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ABSTRACT

This research study explored the effect of e-procurement adoption on performance of preferential procurement in devolved system of government in Kenya. The study specific objectives were the effect of e-sourcing on performance of preferential procurement, the effect of e-tendering on performance of preferential procurement, to determine the effect of e-ordering on performance of the preferential procurement and to establish the effect of e-informing on performance of the preferential procurement in devolved system of government in Kenya. The study was carried out in 5 selected county governments of Kenya out of 47 counties which included Nairobi, Kajiado, Machokos, Murang'a and Kiambu. This study was informed by Transactional Cost Theory, Resource Based Theory, Technology Acceptance Theory and Innovation Diffusion Theory. The target population of the study was 202 respondents from departments of procurement, finance and administration as they dealt directly with procurement processes in five selected County Governments of Kenya. The study adopted a random sampling technique to select sample of 134 respondents. The study employed descriptive survey design and reliable instrument of collecting primary data was administering and picking questionnaires after two weeks for analysis. 134 questionnaires were administered out of which 98 were returned. The quantitative data was analyzed by both descriptive statistics and inferential statistics (Mutiple Regression, Pearson correlation and ANOVA) with the aid of SPSS version 24 software. Report findings from the pilot test of 13 respondents conducted revealed that the level of reliability was sufficient for the research study indicating values above 0.7. Findings from the research study showed that E-sourcing, E-tendering, E-ordering and E-informing have significant effect on performance of preferential procurement basing on overall means of 3.41, 3.44, 3.49 and 3.53 respectively. From the survey findings, the study deduced that majority of county governments in Kenya have adhered to the preferential procurement to a high extent and adoption of e-procurement system has enhanced performance of preferential procurement and increased participation of SIGs. It was the recommendation of this research study that there ought to be adoption of the appropriate e-procurement practices by the Government of Kenya in all public institutions to facilitate platforms for procuring entities to engage more with Special Interest Groups to access government procurement opportunities.

Key Words: E-Sourcing, E-Tendering, E-ordering, E-informing

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INTRODUCTION

Procurement is the movement of evaluating, purchasing and receiving goods, works and administrations. It is public at whatever point this procedure is performed by public associations or at whatever point it is performed for their sake or again supported by public associations (Arrowsmith, 2010). Public procurement makes up a major part of any country's economy, measuring from ten to over 30 per cent of Gross Domestic Product. Globally, this adds up to trillions of dollars spent yearly by governments. Given this scale and the potential effect on the economy, numerous nations have started to utilize public procurement to accomplish certain social and ecological strategy goals, coordinating their spending towards the burdened gatherings they wish to strategically support, to help overcome obstacles to participation in the procurement process. This serves to achieve simultaneous goals of procuring necessary goods and services while doing so in a way that aligns with other government initiatives, such as achieving the Sustainable Development Goals. This is referred to as preferential public procurement (DCED, 2018). Its efficiency is therefore critical and can be achieved through complying with the laid down rules and regulations (Mwangi, 2017). A preferential procurement is an acquisition strategy that elevates destinations extra to those related with the quick objective of the procurement itself (Simayi, 2005).

The term Preferential Procurement (PP) bears indistinguishable highlights from governmental regarding minorities in society in the United States of America (USA). As indicated by McCrudden (2004: 260) the term governmental regarding minorities in society picked up ubiquity during the 1960s with the point of accomplishing more noteworthy uniformity for the distraught gatherings in USA. Starks (1996) demonstrated that governmental regarding minorities in society arrangements were every now and again utilized in granting business contracts, in enlisting and advancements, and in college affirmations and

conceding of grants. In most created nations, the obtainment work is changing from an administrative non-vital unit to a n effective socio-economic unit that is able to influence decisions and add value (Mulwa, Kalai & Migosi, 2013).

In United Kingdom for example, existing writing demonstrate that public obtainment is connected to upgrading a more extensive scope of financial improvement objectives and executing administrative angles identified with issues like handling joblessness, advancement of reasonable installment of reasonable wages and working circumstances by private entities supervisors (McCrudden, 2004). Hessel et al (2000) discovers how public procumbent was exploited by enormous Municipal governments in Netherlands for societal purposes as well as to build work investment particularly for those that had been jobless for extensive stretches of time. In South Africa for instance the law accommodates utilize specific public obtainment contracts for the Black Africans to lighten social differences occasioned by the post-Apartheid (McCrudden, 2004).

In Kenya, the public procurement outline in Kenya has practiced noteworthy improvements. From being a system with no rules during the 1960s to a framework managed by Treasury Circulars throughout the 1970s, 1980s and 1990s, the presentation of the Procurement Regulations of 2006 acquired new norms for open obtainment Kenya. Numerous investigations were done on acquirement before the Public acquisition and Disposal Act (2005) and Guidelines of 2006 to assess the effectiveness of the obtainment procedure in presence at that point (Grifith, & Grifith, 2002; Wanyama, 2010). The significant discoveries of the investigations were that open acquisition was not working effectively and that the state was losing a great deal of cash through poor arrangements. The presentation of the Public Procurement and Asset Disposal Act (PPADA) of 2005 and the Procurement Regulations of 2006 presented new measures for open acquirement in Kenya. In 2010 Public Procurement was tied down

in the New Constitution under Article 227 and in 2013 Preference and Reservations came into spot to give the impact of superseding financial prerequisites of the nation. The Public Procurement and Disposal (Preference and Reservations) Regulations 2011 was gazetted in the legitimate notification number 58. These guidelines give a structure to the execution of obtainments in Kenya's open acquisition.

This Act planned to upgrade proficiency, honesty, reasonableness, responsibility, to elevate nearby businesses and to offer bookings for distraught gatherings including ladies, youth and people with incapacities (PPADA, 2015). The PPADA (2015) likewise settled three elements to smooth acquisition exercises: The Public Procurement Regulatory Authority (PPRA) to uphold consistence, execution and observing of open obtainment frameworks. The Public Procurement Oversight Advisory Board is liable for supervising managerial and budgetary activities of PPRA.

The adoption of the Constitution of Kenya in 2010 and the County government structure in Kenya was embraced with high expectations of good governance and overly good performance owing to the decentralized government. It is significant to note that decentralization in government and political systems rests on the assertion that, with the empowerment and democratization of the local political bodies, institutions become accountable to the local citizens and serve their needs appropriately (Babatunde&Emem, 2015). The constitution of Kenya makes 47 province governments. This number depends on the outline of authoritative electronic procurements as created under the Provinces and District procurements Act of 1992.

Counties are the biggest consumers of the national budget. According to the Commission of Revenue Allocation (CRA), distribution of County Governments' equitable revenue share allocation for FY 2018/19 is Sh314 billion. Thirty percent of this budget of this equates to 94.2 billion. This is a huge sum of money which if it is directed

appropriately to the AGPO programme a huge number of Youth, Women and PWDs will participate in government businesses which will in turn boost both economic and social objectives.

Statement of the Problem

For quite some time, the preferential procurement has been experiencing a myriad of challenges since its inception in 2013. Established small endeavors possessed by youth, ladies and PWDs have confronted moves, for example, absence of access to data on Government Procurement Opportunities, high transactional costs, bureaucratic processes, lack of centralized control which have influenced their development and benefit, henceforth lessening their capacity to contribute viably to practical advancement through open acquirement (Knudsen, 2013). This has unfavorably affected the rate and nature of progress in understanding the destinations of national improvement.

Improving procurement processes through improvement of the cooperation of SMEs in the open substances is one method for accomplishing sound acquirement rehearses. Much could be picked up by empowering progressively Special Interest Groups to contend by encouraging an increasingly level playing field. Procurement in the open division has always been characterized by malpractices and disregard to fundamental reforms such as a reservation polices that result in forfeiture of government funds. Snider and Rendon (2001) contend that this has pushed a majority of governments globally to adopt innovation in procurement in a bid to alleviate such incidences. Many studies have linked e-procurement and organizational presentation. E-Procurement has been broadly studied as an end-to-end arrangement that incorporates and streamlines numerous acquisition forms all through organizations for better performance. According to (Berger & Zeng, 2006) e-procurement strategies enables customers to realize a thing in an electronic succession, generate a demand, steer the request demand for support, make and transfer

the request to vendors, and additionally serve to systemize the invoicing and installment process. Noor, (2014) stated that implementing e-procurement in public procurement processes which has for long been overshadowed with inefficiency, corruption and disregard of fundamental social considerations enhances transparency and costs reduction, yet many public institutions have not fully adopted e-procurement. Any great e-acquisition programming framework today is intended to extraordinarily decrease exertion and time required to finish buying exchanges by wiping out conventional paper chain of installment compromise, approvals, requisitions and receiving (Kipyego,2012) which are solutions to challenges faced by youth, women and PWDs.

Despite the fact that reviews have been directed on e-acquirement appropriation internationally amid state none of the studies has so far, the linked e-procurement adoption and performance of preferential procurement. This research therefore was undertaken to respond to the issues above. Using an all-inclusive set of variables, this study sought to determine which e-procurement characteristics and benefits e-procurement impact the performance of preferential procurement. The research project contributes to literature gap on the link between e-procurement and disadvantaged groups' empowerment to access government procurement opportunities as the current uptake is against an available resource of 30% of the government procurement expenditure. The research endeavored to establish the extent to which e-procurement influence the decisions of sourcing, tendering, ordering and managing supplier information in devolved system of government to award tenders to SIGs to meet the recommended minimum of thirty percent of their total procurement spend.

Objectives of the Study

- To determine the effect of e-tendering on the performance of preferential procurement in devolved system of government in Kenya.

- To determine the effect of e-ordering on performance of preferential procurement in devolved system of government in Kenya.

LITERATURE REVIEW

Theoretical Review

Transaction Cost Theory (TCT)

Transaction Cost Theory is thought to be relevant for this so as to establish the effect of e-sourcing on the performance of preference procurement in devolved systems to county government in Kenya, hence it gives a theoretical background for this study. Since one of the significant goals of e-sourcing appropriation is to decrease by wiping out exchange costs of sourcing, TCT remains the best model to be used in answering all questions pertaining to e-sourcing on procurement performance (Straub, 2009).

Transaction Cost Theory (TCT) is tied down on the reason that the connection among human and ecological elements is the motivation behind why exchange costs increment in the monetary framework (hart, 2006).The relationship of variables adding to exchange expenses can add to their expansion or diminishing. Along these lines, exertion to diminish exchange expenses ought not target decreasing the impact of a solitary factor yet the impacts of the association between factors (Ghoshal, 2008).

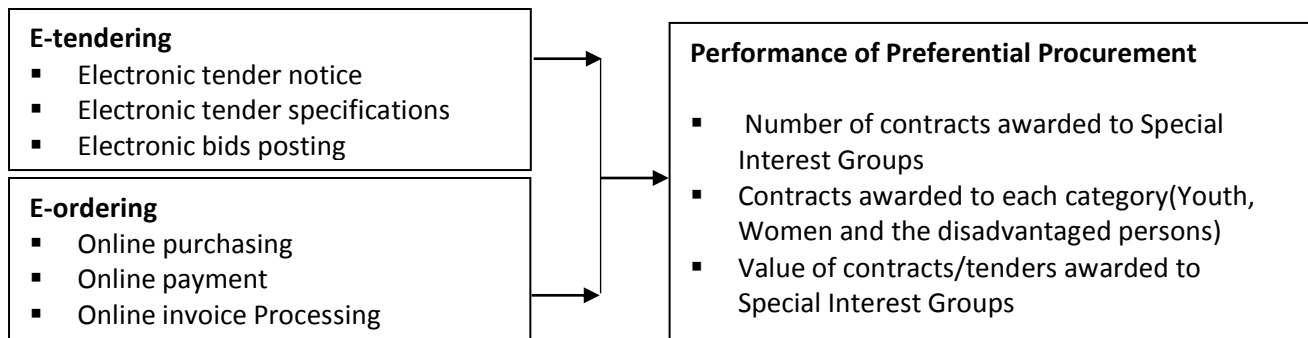
Resource Based Theory

Resource Based Theory is thought to be relevant for this so as to establish the effect of e-tendering on the performance of preference procurement in devolved systems to county government in Kenya; hence it gives a theoretical background for this study. Improved data systems such as inbuilt e-tendering systems for the most part through the web can help improve the proficiency of extraordinary gatherings' providers as they vie for government contracts with huge players. Such upgrades in data access can improve exchange prospects by making these providers increasingly

satisfactory sellers to worldwide colleagues (Murray, 2007).

A study done by Spender, Groen and Kraaijenbrink (2010) states that an asset-based theory attempts to elucidate the interior wellsprings of a company's supported upper hand. In addition, Elgar (2002) uses the asset-based hypothesis to explain execution just as execution enhancements. The asset-based hypothesis perspective battles that

proceeded with high ground is made by the unique pile of advantages at the focal point of the firm (Corner and Prahalad, 2007; Barney 2001). The term resources were envisioned extensively as whatever can be suspected of a quality or a shortcoming of the firm (Wernerfelt 2007). An asset-based view thinks about certain assets of a firm as sources of upper hand (Barney and Hertely, 2012). The resource-based theory hence provides a rationale for competitive advantage (Peng, 2001).



Independent Variables

Dependent Variable

Figure 1: Conceptual Framework

Empirical Review

A similar study on Youth by Muraguri, (2013) on the usage of the young inclination and reservation strategy in open acquisition in state-claimed undertakings inquired about on the difficulties confronting execution. Following the aftereffects of the examination it was clear to infer that Public Procurement Preference and Reservations arrangement among the young in open acquirement had not been actualized and that all things considered, the administration enterprises have not prioritized the youth in the procurement opportunities due to a myriad of challenges such as ineffective e-tendering to legislative challenges. Frankwick, (2004) in his study argues that e-tendering has developed in prominence as of late. A portion of the ongoing advancements incorporate help for explicit product obtainment, virtual plans rooms to encourage improvement acquisition, expanded mix with current acquirement forms, electronic offer convenience and sponsorship for by greeting tendering and increasing acceptance by the supplier network of electronic tendering

practices which all serve to increase supply chain performance.

Raheem & As-Sabeer, (2014) in their reserch assert that web based requesting framework is an online business work where an organization permits clients to arrange items or administrations by means of their site. Kim and Schunk (2014) satiate that on account of e-requesting, the merchandise and enterprises requested are aberrant products and ventures i.e., non-item related merchandise and enterprises and that EDI electronic requesting is perfect for providers wishing to build up a mechanized buying framework for orders.

Bello et al, (2002) then again express that Electronic information exchange (EDI) electronic requesting is perfect for clients wishing to build up a computerized buying framework for orders. By killing dull manual procedures and evacuating the requirement for administrative work, requesting preparing empowers the business to diminish costs, increment efficiency and improve client care therefore improved production network execution. (Bello, Osmonbekov, and Gilliad, 2002) Afande

(2015) realised that there exists a positive linkage between procurement performance and e-ordering. He opined that automated endorsement technologies enhance efficacy in acquisition procedures due to lead going with: minimize the cost of dispatching purchase orders to suppliers as a result of reduced processing expenses; minimize the timeline from requisition convenience to generation of purchase orders; enhances compliance with spend confines as long as the hierarchy is accurately maintained and checked during endorsement.

METHODOLOGY

This research used descriptive survey design. The target population of the study was staff from departments of Procurement, finance and administration from the 5 selected counties in Kenya. The sample frame for the present study included respondents sourced from the Human Resource Department data base from Procurement, Finance and Administration departments from the five selected county governments of study. A suitable and reliable instrument of collecting data

E-tendering

Table 1: Effect of E-tendering on Performance of Preferential Procurement

		SD	D	N	A	SA	Mean	Std. Dev
We electronically provide tender notice to suppliers with disability, youth and other disadvantage groups	Freq.	2	10	16	27	43	4.01	1.10
	%	2	10.2	16.3	27.6	43.9		
We electronically send tender specifications to suppliers	Freq.	0	9	18	54	17	3.81	0.83
	%	0	9.2	18.4	55.1	17.3		
We electronically allow suppliers to post their bids on our online portals	Freq.	0	7	16	35	40	4.10	0.93
	%	0	7.1	16.3	35.7	40.8		
We electronically send tender price suppliers	Freq.	2	1	24	57	14	3.82	0.77
	%	2	1	24.5	58.2	14.3		
We electronically post tender documents which can be downloaded easily	Freq.	2	1	25	40	30	3.97	0.89
	%	2	1	25.5	40.8	30.6		
We electronically receive tender response from the suppliers	Freq.	2	10	28	32	26	3.71	1.04
	%	2	10.2	28.6	32.7	26.5		
E-tendering							3.44	0.74

was administering questionnaires done by employed research assistants. It was also cheaper and easy to deliver to respondents. Data analysis is the procedure undertaken to give meaning, order and structure to the huge amount of data acquired. Upon acquisition of questionnaires, editing and coding for consistency and completeness was carried out. Statistical package for sciences (SPSS) version 24 was employed to carry out data analysis using inferential and descriptive statistics.

FINDINGS

Response rate of survey was a crucial matter in a study since it ascertains the validity of the surveys collected for data analysis (Hair *et al.*, 2010). It is defined as the percentage of respondents who participated in the survey from the determined sample size of the research (Hamilton, 2009). Out of the 134 questionnaires administered, 98 questionnaires were retrieved making a response rate of 95.15%. According to Sekaran & Uma (2013) response rate of 30% is acceptable for surveys and therefore response rate for this study is sufficient for further analysis.

From the findings, 18 (18.4%) and 37 (37.8%) of the respondents agreed and strongly agreed respectively that GoK departments electronically provide tender notice to suppliers with disability, youth and other disadvantaged groups, while 2(2%), 10 (10.2%) and 16 (16.3%) of the respondents strongly disagreed, disagreed and were not sure respectively giving a mean response of 4.01 indicating agreement by majority of the respondents. The measure of dispersion around the mean of dispersion around the mean was 1.10 an indication that the responses were varied.

secondly, it was determined that 54(55.1%) and 17(17.3%) of the respondents agreed and strongly agreed respectively that GoK departments electronically send tender specifications to suppliers, while 9 (9.2%) and 18 (18.4%) of the respondents disagreed and were not sure of this respectively giving a mean response of 3.81 indicating agreement by majority of the respondents. The measure of dispersion around the mean of dispersion around the mean was 0.83 an indication that the responses were varied.

Thirdly the findings revealed that 35 (35.7%) and 40 (40.8%) of the respondents agreed and strongly agreed respectively that GoK departments electronically allow suppliers to post their bids on our online portals, while 7 (7.1%) and 16 (16.3%) of the respondents disagreed and were not sure respectively giving a mean response of 4.10 indicating agreement by majority of the respondents. The measure of dispersion around the mean of dispersion around the mean was 0.93 an indication that the responses were varied. Further, the study findings revealed that 57 (58.2%) and 14 (14.3%) of the respondents agreed and strongly agreed respectively that GoK departments electronically send tender price to suppliers, while 2(2%), 1 (1%) and 24 (24.5%) of the respondents disagreed and were not sure respectively giving a

mean response of 3.82 indicating agreement by majority of the respondents. The measure of dispersion around the mean of dispersion around the mean was 0.77 an indication that the responses were varied.

The findings also revealed that 40 (40.8%) and 30 (30.6%) of the respondents agreed and strongly agreed respectively that GoK departments electronically post tender documents which can be downloaded easily, while 2 (2%), 1(1%) and 25(25.5%) of the respondents strongly disagreed, disagreed and were not sure respectively giving a mean response of 3.97(SD = 0.89) indicating agreement by majority of the respondents. The measure of dispersion around the mean of dispersion around the mean was 0.89 an indication that the responses were varied..

Finally, the findings revealed that 32 (32.7%) and 26 (26.5%) of the respondents agreed and strongly agreed respectively that GoK departments electronically receive tender response from the suppliers, while 2(2%), 10(10.2%) and 28(28.6%) of the respondents strongly disagreed, disagreed and were not sure respectively giving a mean response of 3.71(SD = 1.04) indicating agreement by majority of the respondents. The measure of dispersion around the mean of dispersion around the mean was 1.04 an indication that the responses were varied. The overall mean response was 3.44 which showed agreement by majority of the respondents on E-tendering. The overall measure of dispersion around the mean of dispersion around the mean was 0.74 an indication that the responses were varied. The findings are consistent with the findings of a study by Berlin (2006) which established that different organizations adopt different online strategies such as e-tendering through e-selection, e-mailing, e -awarding for their procurement functions.

E-ordering

Table 2: Effect of E-ordering on Performance of Preferential Procurement in Devolved System of Government in Kenya

		SD	D	N	A	SA	Mean	Std. Dev
We electronically purchase for our product and services	Freq.	0	3	40	18	37	3.91	0.95
	%	0	3.1	40.8	18.4	37.8		
We electronically order for receipt for payment of goods and services supplied	Freq.	0	2	16	46	34	4.14	0.76
	%	0	2	16.3	46.9	34.7		
We electronically process suppliers' invoice	Freq.	1	0	10	52	35	4.22	0.71
	%	1	0	10.2	53.1	35.7		
We electronically process payment to our supplier	Freq.	8	0	1	55	34	4.09	1.05
	%	8.2	0	1	56.1	34.7		
electronically purchase approval are done	Freq.	17	8	17	25	31	3.46	1.45
	%	17.3	8.2	17.3	25.5	31.6		
We conduct online order requisitions	Freq.	7	14	29	20	28	3.49	1.25
	%	7.1	14.3	29.6	20.4	28.6		
E-ordering							3.19	0.91

The findings revealed, that 18 (18.4%) and 37 (37.8%) of the respondents agreed and strongly agreed respectively that GoK departments electronically purchase for our product and services, while 3 (3.1%) and 40 (40.8%) of the respondents strongly disagreed, disagreed and were not sure respectively giving a mean response of 3.91 indicating agreement by majority of the respondents. The standard deviation for this item was 0.95 and indication that the responses were varied.

In addition, 46(46.9%) and 34(34.7%) of the respondents agreed and strongly agreed respectively that GoK departments electronically order for receipt for payment of goods and services supplied, while 2 (2%) and 16 (16.3%) of the respondents disagreed and were not sure of this respectively thus giving a mean response of 4.14 indicating agreement by majority of the respondents. The standard deviation for this item was 0.76 and indication that the responses were varied.

Moreover the findings revealed, that 52 (53.1%) and 35 (35.7%) of the respondents agreed and strongly agreed respectively that GoK departments electronically process supplier invoice, while 1 (1%) and 10(10.2%) of the respondents strongly disagreed and were not sure respectively giving a mean response of 4.22 indicating agreement by majority of the respondents. The standard deviation for this item was 0.71 and indication that the responses were varied.

Furthermore revealed that 55 (56.1%) and 34 (34.7%) of the respondents agreed and strongly agreed respectively that GoK departments electronically process payment to our supplier, while 8(8.2%) and 1 (1%) of the respondents disagreed and were not sure respectively giving a mean response of 4.09 indicating agreement by majority of the respondents. The standard deviation for this item was 1.05 and indication that the responses were varied.

The findings also revealed that 25 (25.5%) and 31 (31.6%) of the respondents agreed and strongly agreed respectively that GoK departments

electronically purchase approval are done, while 17 (17.3%), 8(8.2%) and 17(17.3%) of the respondents strongly disagreed, disagreed and were not sure respectively giving a mean response of 3.46(SD = 1.45) indicating agreement by majority of the respondents. The standard deviation for this item was 1.45 and indication that the responses were varied.

Finally, the results revealed that 20 (20.4%) and 28 (28.6%) of the respondents agreed and strongly agreed respectively that GoK departments conduct online order requisitions, while 7(7.1%), 14(14.3%) and 29(29.6%) of the respondents strongly disagreed, disagreed and were not sure respectively giving a mean response of 3.49 indicating agreement by majority of the respondents. The standard deviation for this item was 1.25 and indication that the responses were varied.

The overall mean response was 3.19 which showed agreement by majority of the respondents on E-ordering. The overall standard deviation for this item was 0.91 and indication that the responses were varied. Based on Afande (2015) there is a positive relationship between procurement performance and online ordering. He elucidated

that computerized approval systems improves efficacy in procurement procedures as a result of its prospective to carry out the following: minimize the timeline from requisition submission to generation of purchase orders; minimize the expense of dispatching purchase orders to suppliers due to lower processing overheads. The findings are also consistent with Subramaniam and Shaw (2009) who argued that some of the e-ordering practices that are expected to reduce transaction costs are e-requisitions, e-cataloguing, e-authorization, e-receipt, and e-inspection.

Relationship Between E-Procurement and Performance of Preferential Procurement.

Correlation analysis was used to determine the significance, direction and strength of relationship between pairs of variables and to predict the level of variation in the dependent variable (performance of preferential procurement) caused by the independent variable (e-procurement). Pearson Product Moment correlation analysis was used to investigate the outlook of the linkage between the dependent and independent variables including the linkages among the independent variables.

Table 3: Summary of Pearson's Correlations

		Performance	E- tendering	E -ordering
Performance	Pearson Correlation	1		
	Sig. (2-tailed)			
E tendering	N	98		
	Pearson Correlation	.705**	1	
	Sig. (2-tailed)	0.00		
E ordering	N	98	98	
	Pearson Correlation	.696**	.592**	1
	Sig. (2-tailed)	0.00	0.00	
	N	98	98	98
	N	98	98	98

From the results, a positive correlation is seen among each of the independent variables and performance of preferential procurement. The results showed that there is a positive and stronger relationship between e-sourcing and performance of preferential procurement ($r = 0.765, p= 0.00$). In addition, the relationship was found to be

statistically significant at 5% confidence level ($p=0.00, p<0.01$). In addition, the study exhibited a positive relationship between e-tendering and performance of preferential procurement ($r = 0.705, p=0.00$). The relationship was found to be statistically significant at 5% confidence level ($p=0.00, p<0.01$). Likewise, a positive relationship

was exhibited between e-ordering and performance of electronic procurement ($r = 0.695$, $p=0.000$). Besides, the relationship was found to be statistically significant at 5% confidence level ($p=0.000$, $p<0.01$). Finally, there was a weak positive relationship ($r = 0.688$, $p= 0.000$) between e-informing and performance of preferential procurement. This relationship was found to be statistically significant at 5% confidence level ($p=0.000$, $p<0.01$).

Model Summary

Table 4 illustrates the model summary of multiple regression model, the results showed that all the four e-procurement parameters (e-sourcing, e-tendering, e-ordering and e-informing) explained 70.4% percent variation of performance of preferential procurement (R squared =0.704).

Table 4: Model of Goodness Fit

R	R ²	Adjusted R ²	Std. Error of the Estimate
.839a	0.704	0.691	0.45641

a) Dependent variable: performance of preferential procurement

b) Predictors (constant), e-sourcing, e-tendering, e-ordering, e-informing

The independent variables reported R value of .839a indicating a strong relationship between e-procurement practices (e-sourcing, e-tendering, e-ordering and e-informing) studied and the performance of preferential procurement in devolved system of government in Kenya. R square value of 0.704 means that 70.4% of the variation in performance of preferential procurement can be explained or predicted by e-procurement adoption (e-sourcing, e-tendering, e-ordering and e-informing) which indicated that the model fitted the study data. The results of regression analysis revealed that there was a significant positive relationship between dependent variable and independent variable.

The ANOVA results demonstrated that the significance value was 0.000 which is less than 0.05 thus the model is statistically significant in predicting how e-sourcing, e-tendering, e-ordering and e-informing affect the performance of preferential procurement in the devolved system of government in Kenya. Since F calculated which can be noted from the ANOVA table was 55.22 .It was concluded that the overall model was significant. Consequently, the model was fit to predict the effect of e-procurement (e-sourcing, e-tendering, e-ordering and e-informing) on the performance of e-procurement in developed system of government in Kenya. The ANOVA results were as presented in table 5.

Table 5: Analysis of Variance (ANOVA)

	Sum of Squares	df	Mean Square	F	Sig.
Regression	46.011	4	11.503	55.22	.000b
Residual	19.373	93	0.208		
Total	65.384	97			

a Dependent Variable: Preferential procurement performance

b Predictors: (Constant), E-informing, E-ordering, E-tendering, E-sourcing

Coefficients of Estimate

The first objective of the study sought to assess effect of e-tendering on preferential procurement performance in devolved system of government.

Findings showed that e-tendering had coefficients of estimate which was significant basing on $\beta_2 = 0.263$ (p -value = 0.003 which is less than $\alpha = 0.05$) hence we conclude that e-tendering has a

significant influence on preferential procurement performance. This implies that for each unit increase in E-tendering, there is up to 0.003 unit increase in AGPO. The findings are consistent with the findings of a study by Berlin (2006) which established that different organizations adopt different online strategies such as e-tendering through e-selection, e-mailing, e-awarding for their procurement functions to ease tendering procedures and create a fair playing field.

The second objective of the study sought to ascertain effect of E-ordering on preferential procurement performance in devolved system of government. Study findings showed that had coefficients of estimate which was significant basing on $\beta = 0.19$ (p -value = 0.028 which is less than $\alpha = 0.05$) hence E-ordering has a significant effect on preferential procurement performance. This indicates that for each unit increase in E-ordering,

there is up to 0.19 units increase in preferential procurement performance. Kim, (2002) opines that online ordering is the procedure involved in generating and approving endorsing purchasing requisition, placing purchase orders and acquiring commodities and services ordered, through the use of an online based software system that considerably enhances the supply chain performance. E-ordering processing optimizes supply chain performance since it allows enterprises to minimize overhead, enhance performance and optimize customer service through the annihilation of unvaried manual practices and alleviating the reliance on paperwork (Bello, Osmonbekov, & Gilliad, 2002). Raheem & As-Sabeer, (2014) contends that e-ordering system is an online commerce function where a company allows customers to order products or services via their website.

Table 6: Coefficients of Estimate

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	P value.
(Constant)	0.259	0.232		1.119	0.266
E-tendering	0.263	0.087	0.245	3.041	0.003
E-ordering	0.19	0.085	0.198	2.232	0.028

a Dependent Variable: Preferential Procurement Performance

CONCLUSION AND RECOMMENDATIONS

Based on the findings, e-tendering positively affect performance of preferential procurement policy in Devolved System of Government. From the survey findings, the study deduces the implementation of e-tendering system enhances performance of performance of preferential procurement policy in Devolved System of Government. The enhanced performance manifested through electronically providing tender notice to suppliers, electronically sending tender specifications to suppliers, electronically allow suppliers to post their bids on our online portals and electronically sending tender price suppliers with disabilities, youth and women. In addition, by electronically posting tender documents which can be downloaded easily and electronically receiving tender response from the

suppliers counties can improve performance of Preferential Procurement Policy in Devolved System of Government.

More findings concluded that e-ordering increase performance of preferential procurement policy in Devolved System of Government. This can be attributed to use of technology to electronically purchase for products and services, electronically order for receipt for payment of goods and services supplied, electronically process supplier's invoice, electronically process payment to suppliers and electronically purchase approval are done. All these e-ordering practices reduced paperwork, costs, human errors which are the limitations to SIGs participating in government procurement opportunities. These challenges have been

overcome e-ordering practices which have encouraged marginalized groups participate in accessing procurement opportunities in county governments.

E-tendering improves performance of preferential procurement from the research findings. It is the recommendation of this study that county governments fully automate their tendering processes to replace the manual tedious processes. Built-in E-tendering ought to be adapted to aid executive team recognize how tender evaluation online can minimize fraud during the award to special groups so to empower them and uplift their lives. E-tendering lead to reduced paper work and increased transparency when competed officer are involved to excuse their daily duties on any available tenders on online platforms The study also recommends that devolved system of government should put in place guidelines, policies, governance structures and legislations that focusses on setting

protocols which will support e-tendering to increase transparency on any available tenders on online platforms. This way, there will be more participants from SIGs hence improving performance of preferential procurement thereby supporting the SIGs in doing business with the governments thereby benefitting the socioeconomic.

The findings of the study revealed that aspects of e-ordering (online expediting, online invoice processing and online payment) increase performance of preferential procurement. It is the recommendation of this study that Devolved System of Government in Kenya to emphasize on carrying out all purchases through online platforms only. Actors supporting AGPO such as Treasury should adopt full automation of registration and reduce registration waiting times. E-ordering should be exploited as a niche for improvement of performance of preferential procurement.

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