

**ADOPTION OF E-PROCUREMENT ON QUALITY OF SERVICE DELIVERY AT NEW  
KENYA CO-OPERATIVE CREAMERIES, UASIN GISHU COUNTY, KENYA**

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*Abstract*

*Procurement has become a section in many organizations that has the potential to improve operational effectiveness and efficiency. However, the key question is, how can and does adoption of e-procurement enhance quality service delivery in an organization like KCC? The main objective of the study was to establish the effect of adoption of e-procurement on quality service delivery at New Kenya Co-operative Creameries. It specifically sought to establish the effect of adoption of e-requisitioning; e-tendering; e-tracking and e-payments on quality service delivery at New Kenya Co-operative Creameries. This study was guided by three theories; Disruptive Innovation Theory, Innovation Diffusion Theory and Technology Acceptance Theory. The study adopted descriptive survey research design and the population of the study consisted of the 38 management employees of New Kenya Co-operative Creameries. It also targeted the 207 managers of firms that supply their services to the company and the senior procurement officer (1) of the company. Since the management staff population was small, census survey was used to get the entire 38 management staff while for the suppliers, the researcher drew the sample by simple random sampling in selecting 62 suppliers. Data was collected using questionnaires and document checklist. The researcher analysed data using descriptive analysis using descriptive statistics which included frequencies, and percentages through tables. Pearson's correlation analysis and multiple regression analysis were used to test the hypotheses. The results show that e-requisitioning, e-tendering, e-tracking and e-payment had a significantly positive influence on quality service delivery at NKCC. The study thus recommends that: The New Kenya Creameries management should full adopt e-procurement to enhance the process of service delivery. They should employ the use of e-requisitioning, e-tendering, e-tracking and e-payment in its entirety.*

*Keywords: Quality Service Delivery, E-procurement, E-requisitioning, E-Payment, Tendering*

## **I. INTRODUCTION**

### **1.1 Background of the Study**

Organizations the world over are consistently concerned with the quality of the service they deliver to its customers. In economics, a service is an intangible commodity. More specifically, services are an intangible equivalent of economic goods (Kanter, 2014). Hardy (2010) asserted that generally, the quality of service delivery is a panacea to organizational lethargy and often acts as a catalyst to organizational growth in the long-run. However, Anders and Michael, (2013) argued that the maintenance of quality service delivery was often problematic in many organizations due to lack of significant and strategic practices that include technological innovation, strategic leadership, lack of staff training and ineffective procurement practices among others.

So as to manage the costs associated to purchasing and its processes, the use of e-procurement through online systems has gained traction and popularity by both governments and companies. However, the adoption of the system has not been significant due to fear by the stakeholders despite knowledge as to its usefulness (Zheng, et al., 2014).

Parida and Parida (2015) defined e-procurement as a technology solution that facilitates corporate buying using the Internet. Gimenez and Lourenço (2014) on their part defined e-procurement as a process which supports the procurement and sourcing activities via Internet technologies and enables an efficient negotiation between buyers and suppliers. E-procurement is indicative of a host of processes which included e-requisitioning that is about the demand and supply of good and services using official order done electronically. Then there is e-payment which is the transfer of money for goods supplied via electronic means (Croom & Brandon-Jones, 2014). Others include e-tendering which is the official offer and presentation of goods via the online platform and e-tracking that is concerned with the monitoring of the goods passage from supplier to buyer also electronically (Gimenez & Lourenco, 2014).

Globally, e-procurement has gained popularity especially with the advent of technology. As an example, in United States of America, right before the commencement of the recession, progress in e-procurement was already reported. As soon as the year ended, e-procurement was significantly advanced to the level that online bidding was the order of the day (Reddick, 2014). The USA system is a seamless one with very few reported challenges. The e-procurement process in the country is also anchored in strong legislation and policy that makes it almost mandatory for public entities.

In Africa, the concept of e-procurement is just gaining popularity especially in the public sector. To somewhat counteract the ills of accountability and transparency, many African countries are

finding the adoption of e-procurement useful and necessary. Tanzania as an example is one country that e-procurement elements of e-payment, e-tendering, e-sharing, e-contacting, e-advertising, e-evaluation, among many others are done via the internet to a significant extent (Sijaona, 2010).

In Kenya, the government actively got involved in adoption of e-procurement when the Jubilee government came into power in 2015 (Wang'ondou, 2017). Since then there has been a lot of pressure and reforms to ensure all public procurement functions are conducted online. The Kenyan government made it mandatory for procurement of all public goods, works and services to be procured through online platforms. For County governments in particular, there is a directive for all procurement and finance operations to be conducted online. For instance, the government introduced integrated financial management information system (IFMIS) that is mandatory for all the 47 counties. IFMIS was introduced to improve governance by providing real time financial information and effectively programs, formulate budget budgets. It also enhances transparency and accountability and acts as a deterrent to corruption and fraud (USAID, 2011). However, unlike the public service sector, little is known about adoption of e-procurement in organizations like the New Kenya Cooperative Creameries (NKCC) where service delivery is both highly desired and demanded.

## **1.2 Statement of the Problem**

Since the dairy industry was liberalised in 1992 and other private processors came in, NKCC has had significant service delivery challenges in its bid to reengineer its operations or reduce high operating costs (Wang'ondou, 2017). The service delivery challenges have been characterized by reported serious delays in payments to farmers and suppliers and insufficient working capital all of which indicate a lapse in quality service delivery. Further, the extent to which e-procurement that was meant to help improve service delivery among other elements remain necessary to investigate considering the aforementioned service delivery challenges. It therefore becomes important to investigate adoption of e-procurement and quality service delivery at NKCC.

Studies have been done on e-procurement and its link to organizational performance, procurement performance and implementation levels. Greunen, et al., (2010) in a comprehensive study based on regulation and implementation of e-procurement in South Africa, found that the system is useful for organizational efficiency. The study found that e-procurement can enhance organizational efficiency. However, the study did not look at the effect of e-procurement on service delivery. Orori (2011) considered factors of e-procurement in supermarkets in Kenya. The study found out that one of the central factors that precipitate e-procurement is service delivery. However, the study did not consider the effect of e-procurement on quality serviced delivery as the present study will do.

### 1.3 Objective of the Study

The general objective was to establish the effect of adoption of e-procurement on quality service delivery at New Kenya Co-operative Creameries.

#### 1.3.2 Specific Objectives

- i. To establish the effect of adoption of e-requisitioning on quality service delivery at New Kenya Co-operative Creameries
- ii. To determine the effect of adoption of e-tendering on quality service delivery at New Kenya Co-operative Creameries
- iii. To assess the effect of adoption of e-tracking on quality service delivery at New Kenya Co-operative Creameries
- iv. To examine the effect of adoption of e-payments on quality service delivery at New Kenya Co-operative Creameries

### 1.4 Hypotheses of the Study

- H<sub>01</sub>:** Adoption of e-requisitioning has no significant effect on quality service delivery at New Kenya Co-operative Creameries
- H<sub>02</sub>:** Adoption of e-tendering has no significant effect on quality service delivery at New Kenya Co-operative Creameries
- H<sub>03</sub>:** Adoption of e-tracking has no significant effect on quality service delivery at New Kenya Co-operative Creameries
- H<sub>04</sub>:** Adoption of e e-payments has no significant effect on quality service delivery at New Kenya Co-operative Creameries

## II. LITERATURE REVIEW

### 2.1 Theoretical Review

This study was guided by three theories; Innovation Diffusion Theory, Theory of Planned behaviour, and Technology Acceptance Theory. These theories enhance understanding of innovative strategies like e-procurement.

#### 2.1.1 Innovation Diffusion Theory

Innovation diffusion theory was proposed by Rogers (1962). The theory presents that innovation is a process aimed to improve economic development. According to innovation diffusion theory, innovation is defined as an idea perceived as new by individuals. Andreean and Swaminathan (2013) defined innovation the conglomeration of organizational, innovation, financial, commercial and technological product or even processes that is used to bring out,

market and implement services and production. The first element is innovation that puts attention on the ability to come up with more efficient and better ways of doing things.

### **2.1.2 Theory of Planned Behavior**

This study was based on the theory of planned behavior as propagated by Ajzen (1991). Ajzen (1991) defined the Theory of Planned Behavior (TPB), as that attitude on the way to creating a behavior, and subjective norms, coupled with perceived control, that taken together profile an individual's behavioral intents and behaviors. TPB is basically an extension of the theory of reasoned action (TRA) that considered a person or group of persons and what reasons they made to accrue in a bid to finally make a decision that then shaped a behavior or action. The TPB extension is characterized by accumulation of perceived behavioral controls to the model, that comprise of attitude, subjective norms, behavioral intention, together with actual behavior (Madden, Ellen, & Ajzen, 1992; Yi et al., 2015). TRA is thus a model for the forecast of behavioral intention, straddling predictions of attitude and forecasts of behavior.

TPB and TRA are relevant to this study because one of the basic tenet for effective e-procurement is to somewhat control behavior and largely predict what a behavior is expected to be so as to improve service delivery of a business. Thus, certain factors like e-requisitioning, e-tendering, e-tracking and e-payment are noted because they eventually are the premises to which the service delivery of any company are predicated

### **2.1.3 Technology Acceptance Model**

Technology acceptance model was introduced by Devis (1986). According to this theory, emerging technologies cannot improve organizational effectiveness and performance if the change has not been accepted by the users (Davis, 1986). The theory of technology acceptance is one of the most popular theories in understanding adoption of computer technologies. Adoption of any innovation or especially information technology based requires investment in computer based tools to support decision making, planning communication. However, these systems may be risky. It is therefore very critical that the systems are specified on organizational preference and logic. It is also necessary to understand that people may resist technological changes. There must be an effort to understand why people resist changes and the possible ways through which such issues can be resolved. Appropriate organizational culture must be inculcated; the change must be adopted in an incremental way accompanied by communication. Everyone involved must be informed on their roles and empowered to perform the respective roles (Kamel, 2014).

Theory of technology is based on two assumptions; perceived usefulness of the system such as; improved performance, enhanced productivity, effectiveness and efficiency in operations etc. and the perceived ease of use of the new systems such as ease to learn, ease to use, ease to control and ease to remember. This theory brings an understanding that acceptance and use of new technology is a function of the users' feelings about the system and its perceived benefits.

## 2.2 Conceptual Framework

Ramey and Reichel (1997) define a conceptual framework as a collection of interrelated ideas and principles from enquiry of relevant literature and used to structure a graphical presentation showing systematic relations. The conceptual framework offers a diagrammatic representation of the link between the independent variables (e-requisitioning, e-tendering, e-tracking and e-payment) and the dependent variable (quality service delivery).

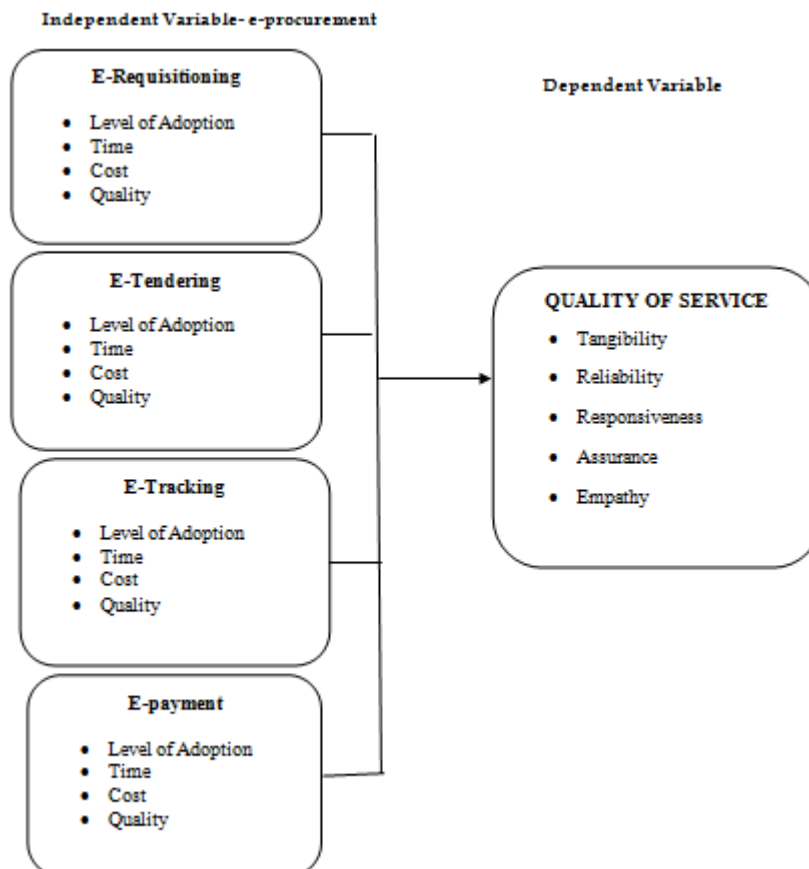


Figure 1: Effect of Adoption of e-procurement on quality of services delivered



### 2.3 Empirical Review

Roma and McCue, (2012) described e-procurement to be an ICT based system under which a procurement function is devised. Implementation of e-procurement in public procurement requires resources and specialized skills. In addition, the process requires a well-coordinated change management systems and training program (Garran, 2015). It is also important to put into place practices, processes and systems for the implementation of e-procurement (Vaidya, Sajeev & Callender, 2016).

Brazel and Dang (2011) asserted succinctly that e-tendering improves organizational flexibility which heightens earning management. She and Thuraisingham (2013) also noted the e-tendering was useful for security enhancement particularly of data that is important and elemental to the procurement function. However, the study did not link e-tendering with service delivery. Improved supplier and customer relations and enhance achievement of procurements strategic goals but there is still need to look at the effect of e-tendering on service delivery.

Berlin (2016) in his study revealed that different organizations adopt different online strategies for their procurement functions. However, the extent to which e-tracking affect service delivery needs to be investigated. Lewis (2014) conducted a study on Essentials of e-tracking: A Practical Guide for Managing the RFX Process in an "E" Environment. The study revealed that e-tracking can be used as a tool to reduce process time, generate tracking savings and to drive incremental revenues. He further found out that implementation of e-tracking starts with selection of an e-tool to complement organizational strengths, followed by change management and training of the staff and other stakeholders where possible. However, the extent to which e-tracking affect service delivery needs to be investigated.

Davila et al. (2013) in their study asserted the e-procurement was important to help in inventory, payment, tracking and overall supplier management. On his part, Eakin (2013) asserted that e-procurement was beneficial in two parts, hard benefits via price and process cost savings or soft through lead-time and individual liberties or benefits that are intangible like cultural and social change. Chaffey (2014) argued that the benefits of e-procurement include reduced purchasing cycle time and cost, enhanced budgetary control, elimination of administrative errors, increasing buyers' productivity, lowering prices through product standardization and consolidation of buys, improving the payment process, and improving information management.

### **III. RESEARCH METHODOLOGY**

#### **3.1 Research Design**

The study adopted descriptive survey research design which, according to Kothari (2014), is structured to examine variables and situations within organizations. Morris and Wood (1991) acknowledge the importance of descriptive survey research design especially when the intent is gaining broader understanding of the context of the research and processes being enacted in a relational framework.

#### **3.2 Target Population**

The population of the study consisted of the 38 management employees drawn from the Administration, ICT, Procurement, Sales and Marketing and Finance departments at the NKCC Eldoret office. It also targeted the 207 managers of firms that supplied their services to the company and the senior procurement officer (1) of the county bringing the total number of targeted population to 246.

#### **3.3 Census Survey**

Since the management and supplier staff population was small, census procedure was used to get the entire 38 management staff and the 207 supplier managers. Management staff was selected as they had an in-depth knowledge of the procurement practices of the company.

#### **3.4 Data Collection Instruments**

Data was collected using questionnaires, document checklist and interview schedule.

A structured Likert scale type questionnaire was used. According to Kothari (2014) likert scale questionnaire is best for measuring attitudes. A structured questionnaire is preferred for collecting data. To measure quality service delivery, the SERVEQUAL model by Parashuman (1998) was also used. The questionnaire was administered to NKCC staff and supplying employees.

The researcher used document checklist to carry out a critical analysis of recorded information relating to public procurement and Disposal Act and e-procurement. According to Oso et al (2015), documents checklist is used to obtain unobtrusive information at the pleasure of the researcher and without undue interruptions.



### 3.5 Data Processing and Analysis

The researcher first prepared data by coding the likert scale and inserting the codes to the analysis software. The data was analysed data using descriptive analysis. The data collected was systematically organized to facilitate analysis. The response in the questionnaire was assigned numerical value to aid in processing. Numbers were then assigned to the close ended questionnaires. Data from the interview schedule was analysed using narrative analysis with people's quoted words rendered verbatim based on the variables of the study.

Data was then converted to numerical codes representing attributes of variables. Code categories are exhaustive and mutually exclusive. Data was then described quantitatively using descriptive statistics which included frequencies, and percentages through tables. This was done with the aid of a computer programme-Statistical Package for Social Sciences (SPSS) version 22 for windows. Pearson's correlation analysis and regression analysis was used to test the hypotheses. The results were analyzed at 95% significance level.

#### Regression Model

$$Y_0 = \beta_0 + \beta_1 (X_1) + \beta_2 (X_2) + \beta_3 (X_3) + \beta_4 (X_4) + e \dots \dots \dots \text{equation 3.1}$$

Where the variables are defined as:

- Y<sub>0</sub>- QSD
- X<sub>1</sub>- e-requisitioning
- X<sub>2</sub>- e-tendering
- X<sub>3</sub>- e-tracking
- X<sub>4</sub>- e-payment
- e- Error term

The regression analysis was tested at the 95% confidence Interval.

## IV. RESULTS AND DISCUSSION

### 4.1 Quality Service Delivery

This part used SERVQUAL model to get expectations of respondents using a seven-point Likert scale ranging from "strongly disagree=1" to "strongly agree=7" to measure the 22 items. Table 1 shows the results

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**Table 1 Average SERVQUAL Scores of Staff and supplier Expectations and Perceptions**

<b>Dimension</b>	<b>Item</b>	<b>Perception</b>	<b>Expectation</b>	<b>SERVQUAL Score</b>
<b>Tangibility</b>	1. Excellent NKCC has modern looking equipment	4.87	5.61	-.744
	2.Excellent NKCC's physical facilities are visually appealing	5.04	5.62	-.577
	3.Excellent NKCC's reception desk employees are neat in appearance	4.88	5.48	-.599
	4.An excellent NKCC's receipts, cheques and similar materials are visually appealing	5.56	5.57	-.013
<b>Reliability</b>	5. When an excellent NKCC promises to do something by a certain time, it does so	5.57	6.06	-.489
	6. When customers have problems employees in an excellent NKCC will be sympathetic and reassuring	5.42	6.02	-.621
	7. An excellent NKCC performs the service right the first time	5.45	6.15	-.692
	8. An excellent NKCC provides its services at the time it promises to do so	5.37	6.03	-.665
	9. An excellent NKCC insists on error-free records	5.63	6.27	-.634
<b>Responsiveness</b>	10. Employees in an excellent NKCC tell exactly when the services will be performed	5.45	5.98	-.533
	11. Employees in an excellent NKCC give prompt services.	5.26	5.88	-.612
	12. Employees in an excellent NKCC are always willing to help customers	5.04	5.63	-.590
	13. Employees in an excellent NKCC are never too busy to respond to Customers' questions	5.07	5.50	-.427
<b>Assurance</b>	14. Employees in an excellent NKCC instill confidence in customers	5.34	5.96	-.626

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<b>Empathy</b>	15. Employees in an excellent NKCC always respect customers.	5.52	6.11	-.590
	16. Employees in an excellent NKCC have necessary knowledge to answer customers' questions.	5.21	5.91	-.699
	17. An excellent NKCC gives customers individual attention	4.87	5.73	-.859
	18. An excellent NKCC has working hours suitable for all customers	4.47	5.19	-.718
	19. An excellent NKCC has customer's best interest at heart	4.55	5.40	-.855
	20. The employees of an excellent NKCC understand supplier specific Needs	4.53	5.35	-.824

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The 20 sets (pairs) of statements are designed to fit into the five dimensions of service quality. A seven-point scale ranging from "strongly agree" (7) to "strongly disagree" (1) accompanies each statement. The "strongly agree" end of scale is designed to correlate with high expectations and high perceptions. Service quality happens in the event the expectations are met but the reverse, when it occurs creates a service quality gap. When the perception score is higher than the expectation score, it is noted that the service quality is high and the reverse is also true (Parasuraman et al., 1988).

From Table 4.4 it is clear that as shown in the table SERVQUAL scores for all items bear negative signs meaning that expectations are greater than performance, then perceived quality is less than satisfactory and a service quality gap materialized.

Research conducted, are of the sort that support SERVQUAL scale. Common result of the relevant researches can be summarized as such, that, perceived service quality is the result of comparison of service performance with customer expectations and the evaluation of service quality does not only depend on final output but also on the way of how the service is provided (Juran *et al.*, 1988). This result further agrees with Heracleous, (2012) and Hardy (2015) who argued that service gaps was common and negative SERVQUAL scores were the order of the day particularly in the NKCC where the perceptions and expectations of both customers and staff, often similar, showed that there was no quality service delivery in the NKCC.

#### **4.2 Inferential Analysis**

The study employed a summated Pearson's correlations and regression analyses. The results are presented below

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**4.2.1 Correlation Analysis**

As part of the analysis, Pearson's Correlation Analysis was done on the Independent Variables and the dependent variables. The results is as seen on Table 2

**Table 2 Correlations**

		Quality Service Delivery	E-requisitioning	E-tendering	E-tracking	E-payment
Quality Service Delivery	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	180				
E-requisitioning	Pearson Correlation	.655**	1			
	Sig. (2-tailed)	.000				
	N	180	180			
E-tendering	Pearson Correlation	.635**	.533**	1		
	Sig. (2-tailed)	.000	.000			
	N	180	180	180		
E-tracking	Pearson Correlation	.578**	.410**	.227**	1	
	Sig. (2-tailed)	.000	.000	.002		
	N	180	180	180	180	
E-payment of the fund	Pearson Correlation	.710**	.205**	.198	.557**	1
	Sig. (2-tailed)	.000	.005	.000	.000	
	N	180	180	180	180	180

\*\* . Correlation is significant at the 0.01 level (2-tailed).

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Pearson correlation analysis was done too consider the relationship index between variables. Based on the Cooper and Schindler (2000) correlation coefficient value ( $r$ ) range matrix, with the highest correlation coefficient at 0.710 which is less than 0.8, there was no multicollinearity problem in this research (Table 4.10).

All the independent variables had a positive correlation with the dependent variable with e-payment having the highest correlation of ( $r=0.710$ ,  $p< 0.01$ ) followed by E-requisitioning with a correlation of ( $r=0.655$   $p< 0.00$ ) and then e-tendering with a correlation of ( $r=0.635$   $p< 0.00$ ), e-tracking had the least correlation of ( $r= 0.578$   $p< 0.00$ ). This indicates that all the variables are statistically significant at the 99% confidence interval level 2-tailed. This shows that all the variables under consideration have a positive relationship with the dependent variable.

#### 4.2.2 Regression Analysis

Since the measures that are used to assess the primary constructs in the model are quantitative scales, regression analysis can be used to achieve this end. Regression analyses are a set of techniques that can enable us to assess the ability of an independent variable(s) to predict the dependent variable(s). As part of the analysis, Regression Analysis was done. The results are as seen on Table 2, 3 and 4

**Table 2 Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.882 <sup>a</sup>	.778	.702	.176	2.390

a. Predictors: (Constant), E-requisitioning, e-tendering, e-tracking, e-payment

b. Dependent Variable: Quality Service Delivery

From table 2 it is clear that the R value was .882 showing a positive direction of the results. R is the correlation between the observed and predicted values of the dependent variable. The values of R range from -1 to 1 (Wong and Hiew, 2005). The sign of R indicates the direction of the relationship (positive or negative). The absolute value of R indicates the strength, with larger absolute values indicating stronger relationships. Thus the R value at .882 shows a stronger relationship between observed and predicted values in a positive direction. The adjusted coefficient of determination  $R^2$  value was 0.602. This shows that 60.2 per cent of the variance in dependent variable (Quality Service Delivery) was explained and predicted by independent variables (E-requisitioning, e-tendering, e-tracking, e-payment).

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**Table 3 ANOVA<sup>b</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	232.743	4	43.096	114.391	.000 <sup>a</sup>
	Residual	12.878	227	.664		
	Total	245.621	231			

a. Predictors: (Constant), E-requisitioning, e-tendering, e-tracking, e-payment

b. Dependent Variable: Quality Service Delivery

The F-statistics produced (F = 114.391.) was significant at 5 per cent level (Sig. F < 0.05), thus confirming the fitness of the model and therefore, there is statistically significant relationship between E-requisitioning, e-tendering, e-tracking, e-payment, and Quality Service Delivery.

**Table 4 Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
(Constant)	2.767	.361	.287		7.668	.000
E-requisitioning	.385	.078	.393		5.968	.000
E-tendering	.168	.065	.193		2.593	.004
E-tracking	.284	.065	.324		4.383	.000
E-payment	.211	.162	.213		3.987	.002

a. Dependent Variable: Quality Service Delivery

The t-value of constant produced (t = 7.668) was significant at .000 per cent level (Sig. F < 0.05), thus confirming the fitness of the model. Therefore, there is statistically significant relationship between E-requisitioning, e-tendering, e-tracking, e-payment, and Quality Service Delivery. The results show that all the variables were statistically significant because they had a p value less than 5%. Further based on the beta results the study thus interprets the model as:

$$Y_0 = 2.767 + 0.385 (X_1) + 0.168 (X_2) + 0.284(X_3) + 0.211 (X_4) + e$$

This implies that for every unit increase in e-requisitioning quality service delivery increases with 0.385 units, for any increase in e-tendering, quality service delivery increases with 0.168 units; for any increase in e-tracking, quality service delivery increases with 0.284 units and finally for any increase in e-payment, quality service delivery increases with 0.211 units



Thus, the four hypotheses:

**Table 5 Hypotheses Testing**

<b>Hypothesis</b>	<b>Test</b>	<b>Results</b>	<b>Remarks</b>
H <sub>01</sub> : adoption of e-requisitioning does not affect Quality Service Delivery at NKCC	Regression .000	Significant	Rejected
H <sub>02</sub> : adoption of E-tendering does not affect Quality Service Delivery at NKCC	Regression .004	Significant	Rejected
H <sub>03</sub> : adoption of e-tracking does not affect Quality Service Delivery at NKCC	Regression .000	Significant	Rejected
H <sub>04</sub> : adoption of e-payment does not affect Quality Service Delivery at NKCC	Regression .002	Significant	Rejected

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## V. CONCLUSIONS AND RECOMMENDATIONS

Based on the first objective, e-requisitioning had significant influence on quality of service delivery. Also, through e-procurement the requisitioning process was faster and had cut significant costs of the process. However, the adoption of e-requisitioning was considered low inasmuch as what they used it for had shown signs of its potential to improve quality service delivery. It can thus be concluded that e-requisitioning had a significantly positive effect on service delivery at NKCC.

Based on the second objective, e-tendering had significant influence on quality of service delivery. Also, through e-procurement the tendering process was faster and had cut significant costs of the process. However, the adoption of e-tendering was considered low inasmuch as what they used it for had shown signs of its potential to improve quality service delivery. Also, the level of readiness employees felt regarding e-tendering was significantly not as high. It can thus be concluded that e-tendering had a significantly positive effect on service delivery at NKCC.

Based on the third objective, e-tracking had significant influence on quality of service delivery. Basically, through e-procurement the tracking process was faster and had cut significant costs of the process. However, the adoption of e-tracking was considered low inasmuch as what they used it for had shown signs of its potential to improve quality service delivery. Also, the level of readiness employees felt regarding e-tracking was significantly not as high. It can thus be concluded that e-tracking had a significantly positive effect on service delivery at NKCC.

Based on the fourth objective, e-payment had significant influence on quality of service delivery. Basically, through e-procurement the payment process was faster and had cut significant costs of the process. Also, the level of readiness employees felt regarding e-payment was significantly high. However, the adoption of e-payment was considered low inasmuch as what they used it for had shown signs of its potential to improve quality service delivery. It can thus be concluded that e-payment had a significantly positive effect on service delivery at NKCC.

The study thus recommends that, the New Kenya Creameries management should full adopt e-procurement to enhance the process of service delivery. They should employ the use of e-requisitioning, e-tendering, e-tracking and e-payment in its entirety.

The New Kenya Creameries management should ensure that the process of adopting e-procurement is coupled with staff motivation and training to make them ready for the process. The New Kenya Creameries management should also engage with suppliers to ensure that they are also attuned to the e-procurement process to spur growth and progress in the service delivery.

The government through the line ministry to have a policy that makes it mandatory for adoption of e-procurement in all public entities to stop corruption and safeguard the interest of its citizens.

The study recommends certain salient recommendations on theory and to begin with, it is recommended that Innovation diffusion theory as proposed by Rogers (1962) be used to highlight innovation is a process aimed to improve economic development. The Theory of Planned Behavior (TPB), as that attitude on the way to creating a behavior, and subjective norms, coupled with perceived control, that taken together profile an individual's behavioral intents and behaviors should be enacted by e-procurement players.

## REFERENCES

- [1] Aberdeen Group (2011). Best Practices in e-Procurement. *The Abridged Report*. Quebec. Pincas.
- [2] Ackerman, L. (2016). Development, Transition or Transformation: The Question of Change in Organizations. *Open Discourse Practitioner*, pp. 1 – 8.
- [3] Anders, G., & Michael D. J, (2013). *Competing in a Service Economy*. San Francisco: Josey-Bass.
- [4] Barahona, J., & Elizondo, E. A. (2012). The Disruptive Innovation Theory Applied to National Implementations of E-procurement. *Electronic Journal of e-Government Volume 10 Issue*. Pg 45-67
- [5] Brazel, J. & Dang, L. (2011). The Effect of ERP System Implementations on the Management of Earnings and Earnings Release Dates. *Journal of Information Systems*, 22(2)1-21
- [6] Chaffey, D. (2014). *E-business and e-commerce management: strategy, implementation and practice*. 2nd edition. Financial Times Prentice Hall.
- [7] Coe, R. (2010). *What is an "Effect Size"? A Guide for Users*. Retrieved from the World Wide Web, <http://www.davidmlane.com> on 22 Feb 2013.
- [8] Croom, S., & Brandon-Jones, A. (2014). "E-Procurement: Key issues in e-Procurement implementation and operation in the public sector", *13th International Purchasing & Supply Education & Research Association (IPSERA) Conference, April 4-7, Catania, Italy*.
- [9] Davis, F. D. (1986). *A technology acceptance model for empirically testing new end – user information systems: theory and results*, Ph. D. dissertation. Cambridge, MA: MIT Sloan School of Management.
- [10] Flynn, B., Huo, B. & Xhao, X. (2010) The Impact of Supply Chain Integration on Performance: A Contingency and Configuration Approach. *Journal of Operations Management* 28 (1) pp 58-71.
- [11] Giménez, C., & Lourenço, H.R., (2014) E-Supply Chain Management: Review, implications and directions for future research, *Institut D' estudis Territorials, Working Paper* no: 17.
- [12] Govender, P., Moodley, S. & Parumasur, S.B. (2010). The Management of Change at Selected Higher Education Institutions: An Exploration of the Critical Ingredients for Effective Change Management. *SA Journal of Industrial Psychology*, 2010, Vol. 31 (1), pp. 78 – 86.
- [13] Greunen, D. V., Herselman, M. E. & Niekerk, J. V. (2010) Implementation of regulation-based e-procurement in the Eastern Cape provincial administration. *African Journal of Business Management* Vol. 4(17), pp.3655-3665
- [14] Hardy, C.,(2010), *Managing Strategic Change; Power Paralysis and Perspective*, IAF Press I
- [15] Kanter, R. (2014), *Frontier of Management; Harvard Business School Review*. 89-98 (2) 45

- [16] Kothari, C.R. (2014). *Research Methodology-Methods and Techniques*. New Delhi: New Age International (P) Limited Publishers.
- [17] Les Robinson, (2009). *A summary of Diffusion of Innovations*. California. Enabling Change
- [18] Lewis, D. (2014). *Essentials of e-Sourcing: A Practical Guide for Managing the RFX Process In An "E" Environment*. 89th Annual International Supply Management Conference, April 2014.
- [19] Mariotti, J. (2011). *The Challenge of Change*, *Industry Week*, Vol. 247 (7), p. 140.
- [20] Martinez R. (2011). *Using Electronic Procurement to Facilitate Supply Chain Integration: An Exploratory Study of US-based Firms*. *Americaii Journal of Basiness*, Vol. 23, No. 1.
- [21] Nah, F. & Santiago D. (2016). *Critical Success Factors for Enterprise Resource Planning Implementation and Upgrade*. San Francisco. Banna.
- [22] Nauheimer H. (2010). *A Survey On the Practice and Future of Change Management*. New York. Routledge
- [23] Nelson, R., Moody, E., & Stegner, J. (2011), *"The Purchasing Machine: How the Top Ten Companies Use Best Practices to Manage their Supply Chain"*, New York. The Free Press.
- [24] OECD. (1997). *Economic Surveys: Switzerland*. OECD.
- [25] Orori, J. M. (2011) *Factors That Effect the Introduction of E-Procurement in Retail Industry: A Survey of Retail Chain Supermarkets in Kenya*, Unpublished research, Jomo Kenyatta University of Agriculture and Technology
- [26] Parida, U., & Parida V. (2015) *E-procurement: An Indian and Swedish Perspective*, A Masters Thesis, Luleä University of Technology.
- [27] Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1985), *"A conceptual model of service quality and its implications for future research"*, *Journal of Marketing*, Vol. 49 No. 3, pp. 41-50.
- [28] Reddick, C. (2014). *The Growth of E-Procurement in American State Governments: A Model and Empirical Evidence*. *Journal of Public Procurement*, 4(2)151-176
- [29] Roma, A. & Mcue, G. (2012). *E-Procurement: Mythe or Reality?* *Journal of Public Procurement*, 12 (2), 221-248.
- [30] Sababu, B. M. (2011) *The Effect of Business Policy on Organizational Performance: The Case of Consumer Cooperatives in Kenya*. Egerton University PhD Thesis.
- [31] Sijaona, K. (2010). *3rd East African Procurement Forum – White Sands Hotel, Dar es salaam, Tanzania – 29th Sept-1st. e-procurement in Tanzania*
- [32] Snider, K. & Rendon, R. (2011) *Public Procurement: Public Administration and Public Service Perspectives*. *Journal of Public Affairs Education*. 8(2)49
- [33] USAID. (2011). *Addressing Procurement Bottlenecks. A Review of Procurement Bottlenecks in Public Sector Medicine Supply Chains and Practical Approaches Taken*. Arlington: USAID.
- [34] Vaidya, A. Sajeev, B., & Callender, G. (2016). *Critical Factors that Effect E-Procurement Implementation Success in the Public Sector*. *Journal of Public Procurement*, Volume 6, Issues 1 & 3, 70-99

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- [35] Van Tonder, C.L. (2014). *Organisational Change. Theory and Practice*. Pretoria. Van Schaik Publishers.
- [36] Wango'ndu J. I., (2017). *The Impact of the Method of Privatization used on Firm's Financial Performance: A Study of New Kenya Co-operative Creameries*, Unpublished Thesis, Kenyatta University, Kenya.
- [37] Young, A.P. (2010). "I'm just me". A Study of Managerial Resistance. *Journal of Organizational Change Management*, Vol. 13, No. 4, 2010, pp. 375 - 388.
- [38] Yossuf, S., Islam, A. & Yusuf, H. (2011). Electronic Government Procurement Adoption Behavior amongst Malaysian SMEs. *International Business Research*, 4(1)100-111
- [39] Zheng et al., (2014), Small firms and e-business: cautiousness, contingency and cost-benefits. *Journal of Purchasing & Supply Management*, 10(1), 27-39.