

# Efficacy of Accounting Systems on the Performance of Public Universities in Kenya: A Case of Egerton University

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**Abstract-** Accounting systems is a system that records and process data of transaction and events into meaningful information for use in planning, controlling and operation of business. The purpose of this study was to establish the effect of accounting systems on performance of Public Universities in Kenya. The study adopted descriptive research design using a case of one public University in Kenya. The study targeted all the 106 staff working in the Administration and Finance division of Egerton University. Simple random sampling technique was used to select 83 respondents out of which 79 respondents participated in the study. Data was collected using self-administered questionnaire. Quantitative data collected were analyzed using descriptive statistics. Simple regression model was also used to analyse the results. The study established that there was statistically significant relationship between Accounting systems and the performance of university. The study recommends that the management of university should consider and improve on their Accounting systems to enhance accuracy of accounting reports, customer satisfaction, management accountability and transparency, since they significantly affected their performance. The study also recommended that the same study be carried out in Finance and Microfinance institutions, private and other public sectors to find out if the same results would be obtained.

**Index Terms-** accounting systems, public universities, Kenya

## I. INTRODUCTION

Accounting is an essential part of any business, large or small owners, profit making or not for profit making organizations. Accounting plays a very important role in the management and success or failure of contemporary business institutions. Manual and computerised accounting systems perform basically the same processes, the accounting principles and concepts are the same with differences lying in the technicalities of the process. Although accounting system is expensive, its advantages lie on speed and being able to store information. Accounting systems are responsible for recording, analyzing, monitoring and evaluating the financial condition of companies, processing of documents necessary for tax purposes and providing information support to many other organizational functions, Amidu *et al.*, (2011).

The revolution in information technology has significantly changed the nature of business and created competitive

advantages for those who appreciate its effects Porter *et al.*,(1985). The advent of IT has affected the form and substance of information, accounting not excepted. With proper systems, new and updated financial information could be readily available for purposes of, among others, making decisions. Moreover, the accounting systems need also be able to capture the non-financial information to support the financial information for better decision-making Brecht *et al.*, (1996). Thus, the accounting systems should be able to produce relevant, accurate, reliable, and timely information to users in the information age. It shows that successful implementation of accounting systems will benefit improvement in work qualities, improved flexibility, motivation of using software application, increased productivity and performance. Accounting Systems allows a company to manage its business with potential benefits of improved process flow, reduced inventories, better data analysis, better customer service and improved profit margins Fang *et al.*,(2006).

According to Romney *et al.*, (2000), an accounting system is a system that processes data and transactions to provide users with information they need to plan, control and operate their business. In this definition, accounting information systems are considered as tools that help management in planning and controlling processes by providing the relevant and reliable information for decision making. From this perspective, accounting system functions are not solely for purpose of producing financial reports rather the role goes beyond this traditional view and can also be used as a controlling mechanism such budgeting. Full adoptions of the system will essentially require attainment of all the benefits of the system. Gelinis *et al.*,(2005), asserts that Accounting System is a system which combines accounting principles and concepts as well as the concept of information system to record, process, analyse and produce financial information to its users for making economic decisions. Performance measurement is the process whereby an organization establishes the parameters within which programs, investments, and acquisitions are reaching the desired results Graham *et al.*, (1998). Controlling performance is also critical in measuring the organizational performance. Controlling ensures that the organization know how well they are progressing along the route, how correct their map is, and what deviations, if any they need to make to stay on course.

Managers are usually judged on their performance in one of the three principal Ways, in terms of business outcomes turnover, profits, return on investment, in cases where they are directors or senior managers; in terms of their agreed departmental/unit

objectives, as agreed under some system of management by objectives an approach especially favoured for middle management levels, in terms of how they have performed generally in carrying out their responsibilities, as stated or implied in their job descriptions, and where performance is assessed as much on the individual manager's input into the job as on any outcomes he or she has achieved Cole, (2005). The chief goal of a business is to achieve financial or maximization of wealth for the Shareholders Becker *et al.*, (1996). These include measures that impact on effectiveness, efficiency, development, satisfaction, innovation, product quality, profitability and sales growth. According to Schuler (1992), drawing on behavioural psychology perspective, organizational performance can be observed in terms of its sales growth, profit growth, improved quality, global response to competition, and global business performance and success.

In all forms of business units, accounting information are of crucial importance. In fact, they are the basis to any business success. Moreover, economic conditions and competition create pressure about costs of information. Generally, maintenance of sound Accounting records is a major factor that contributes proper decision making process since it is the root through which relevant informational requirements is derived and aid individuals in performing their jobs. Consequently, public and private sector firms in both developing and developed economies view Accounting System as a vehicle to ensure effective and efficient information flow in the recording, processing, and analysis of financial data. Effective and efficient information flow enhances managerial decision-making, thereby increasing the firm's ability to achieve corporate and business strategy objectives Manson *et al.*, (2001).

The Public Universities in Kenya has for the last decade seen various expansions with establishments of new universities, expansion of academic programmes, expansion of learning centres and increased competition. The public universities have continued to incorporate information technology in their operations to remain competitive and visible in their web presence. Currently, public universities management are put on performance contracting by the Government and the attainment of these performance contracts are cascaded downwards to various university units. Several studies have been conducted on accounting systems , Nzomo .(2013) In the Study "Impact of Accounting Information System on Organisational Effectiveness of Automobile Companies in Kenya", Management in the automobile organizations in Kenya relies heavily on information generated from the AIS employed by the company. Quality reports are very key to arrive at an ideal investment. Investment in good and reliable accounting systems has become a major concern for all managers as it leads to better management and analysis of firm's performance.

The findings of the study indicated that Accounting Information Systems are an important mechanism for organizations' effective management, decision-making and controlling activities. The study concluded that AIS are critical to the production of quality accounting information on a timely basis and the communication of that information to the decision makers. For instance, Study done by Otieno *et al.*, (2013), found that only 36% of the institutions reported that they had a regular program or equivalent in place while another 24% were

in the process of implementation of the computerised system. More than 40% of the participating institutions lacked computerized audit implementation plan.

Ismail *et al.*,(2007), also found out that the information systems of accounting work smoothly as they connect information from the top and bottom that help workers in companies to achieve their goals, in addition using these systems will enable companies to give accurate information to the relevant government agencies. Moreover, no research has been carried out on the Effects of accounting systems on performance of public universities in Kenya.

Therefore this study will be useful in addressing the gaps left in the previous studies elsewhere and extent it more specifically to Public Universities in Kenya at large . The overall objective of the study was to establish the effect of accounting systems on performance of Public Universities in Kenya. Study conducted by Otieno *et al.*, (2013), On the Effect of Computerised Accounting Systems on Audit Risk Management in Public Enterprises, Established that only 36% of the institutions reported that they had a regular Program or equivalent in place while another 24% were in the process of Implementation of the computerised system. More than 40% of the participating Institutions lacked computerized audit implementation plan.

Ismail *et al.*,(2007) Studied the factor influencing the alignment of accounting information system in small and medium sized Malaysian manufacturing firms. The study aimed to identify the factors that affect the use of accounting information systems in factories, small and medium-sized Malaysian manufacturing firms. The study also found out that the information systems of accounting work smoothly as they connect information from the top and bottom that help workers in companies to achieve their goals, in addition using these systems will enable companies to give accurate information to the relevant government agencies.

Nzomo (2013), In the Study entitled "Impact of Accounting Information System on Organisational Effectiveness of Automobile Companies in Kenya, It was found that, the Management in the automobile organizations in Kenya relies heavily on information generated from the AIS employed by the company. Quality reports are very key to arrive at an ideal investment. Traditional way of recording, summarizing and reporting company financial reports led to less optimal decisions. Investment in good and reliable accounting systems has become a major concern for all managers as it leads to better management and analysis of firm's performance. This has led the researcher to investigate on the application and use of accounting systems by automakers and thus, its impact on the organizational effectiveness.

The findings of the study indicated that Accounting Information Systems are an important mechanism for organizations' effective management, decision-making and controlling activities. The results are consistent with empirical reviews which indicated that there exist a relationship between AIS and organizational performance. AIS are an effective decision-making tool for controlling and coordinating the activities of an organization. The study concluded that AIS are critical to the production of quality accounting information on a

timely basis and the communication of that information to the decision makers.

Hunton (2002) study investigated the relationship between automated accounting information system and organizational effectiveness; showed that there was strong relationship between accounting information system and organizational effectiveness, which means access to accounting information, will lead to organizational effectiveness. Several recent studies on value of accounting information for equity valuation, share price and earnings prediction have queried current financial reporting model in the developed world. The same issue can be raised in Kenya about the value relevance of accounting numbers to investors. This assists the researcher to determine whether the result agrees or digresses from the previous studies.

Christopher *et.al* (2014) , studied the Adoption of Computerized Accounting Systems by Coffee Societies in Kenya. This study sought to analyze the effect of the hindrances affecting the adoption of computerized accounting system by coffee societies in Nyeri County. The findings of the study indicate that: Coffee societies have not fully adopted computerized accounting systems; Cost, human resource proficiency and availability of related infrastructures are the most important hindrances affecting adoption of computerized accounting system; and users' perception on the computerized accounting systems is insignificant in respect to adoption of computerized accounting systems but further studies may be commissioned to confirm or disapprove our findings.

According to Samuel (1991), financial reports are outputs of an accounting system and they are prepared at the end of the year, hence the name final accounts. According to Horne (1998), the financial reports should include a narrative description of the organizations activities and audited financial statements. He argues that these enable the stakeholders to see the organization's performance and the overall financial situation of the organization. Samuel (1991), states that managers and accountants are usually required to defend the results shown in the financial reports as part of the accountability process. According to Indira (2008), timeliness is an important characteristic of quality financial information. To benefit users, financial information must be presented at the right time otherwise it loses relevance. Relevance is also a characteristic of quality of financial reports. Frankwood indicates that financial

information is relevant if it is capable of making a difference in decisions made by helping users to form predictions about the outcomes of the past, present and future events either to confirm or correct prior expectations. Comparability is another characteristic, Frankwood (1999) also stresses that users must be able to compare the financial statements of the enterprise over time in order to identify trends in its financial position and performance. According to Pallai (2007) Understand ability as a quality of financial reporting that enables users to perceive the significance of financial information. He argues that users are assumed to have reasonable knowledge of business and willingness to study and understand the information.

## II. RESEARCH METHODOLOGY

The study was carried out in the main campus Egerton University in Nakuru county Kenya, and it was limited to the topic effects of accounting systems on performance of Public Universities in Kenya.

The research study used Descriptive research design. Kothari, (2004), descriptive studies are those studies which are concerned with describing the characteristics of particular individual or of a group. Descriptive research designs are used in preliminary and explanatory studies to allow researcher to gather information, summarize, present and interpret for the purpose of clarification. The strategy is popular both in business and management research since it answers the questions of who, what, where and how much in the study Saunders, Lewis, & Thornhill, (2009). The justification for using this design is that it explored the existing Status of two or more variables at a given time. Therefore descriptive research design is thus suitable in studying the effects of accounting systems on performance of Public universities in Kenya.

Target population is defined as a set of individuals, cases/objects with some common observable characteristics of a particular nature distinct from other population. The target population of the study is 106 employees of Egerton university main campus, within Accounting and Finance, Audit, I.C.T and Procurement departments.

**Table 1**  
**Target population**

<b>Departments</b>	<b>Population (Frequency)</b>	<b>Percentage%</b>
Finance and Accounts	55	51.8
Finance	3	2.8
Internal Audit	4	3.7
I.C.T	27	25.4
Procurement	17	16
<b>Total</b>	<b>106</b>	<b>100</b>

**Source: Research data, (2017)**

Sampling is the process of selecting a sub-set of cases in order to draw conclusions about the entire sets. According to Cohen,(2003), determinants such as expense, time and accessibility frequently prevent researchers from gaining

information from the entire population ,therefore there is need to obtain a smaller group of subset of the total population in such a way that is representative of the total population under study.

The sample size for this study was determined using Krejcie's (1970) formula:

$$n = (\chi^2 Npq) / (d^2 (N-1) + \chi^2 pq)$$

Where:

n = desired sample size

N = target population

p = population proportion (take 0.5)

d = degree of accuracy by the amount of error that can be tolerated in fluctuation a size about the population and corresponds to the significance level with a standard error of the proportion at the corresponding confidence level (0.05).  $\chi^2$  = the table chi-square value for one degree of freedom relative to the desired level of confidence ( $\chi^2 = 3.841$  at confidence level). This yielded a sample size of 83 was proportionately distributed across the various departments as shown below in Table 2.

**Table 2**  
**Distribution of Sampled Respondents according to Departments**

Departments	Population (Frequency)	Percentage%
Finance and Accounts	43	51.8
Finance	2	2.8
Internal Audit	4	3.7
I.C.T	21	25.4
Procurement	13	16
<b>Total</b>	<b>83</b>	<b>100</b>

Source: Research data, (2017)

In picking the 83 respondents that constitute the sample size, simple random sampling technique were used. This is appropriate since population of interest is subdivided into homogenous groups or strata to obtain a representative sample.

Research instruments are techniques of data collection such as a quantitative standardised instrument Creswell, (2003), Van Manen(1990). The study collects primary and data for the purpose of analysing the relationship between accounting systems and performance of public universities in Kenya. Primary data was collected using a questionnaire. The past studies were referred in literature review, theories and variables of the study. The researcher used questionnaire as the main tool for collecting data from all the categories of respondents. The selection of these tools has been guided by the nature of data to be collected, the time available as well as by the objectives and hypotheses of the study. The researcher is mainly concerned with the views, opinions, perceptions, feelings and attitudes. Such kind of information can be best collected through the use of questionnaires (Cohen *et.al*, 2000). The questionnaire to be designed in this study comprised of two sections. The first part is designed to determine the fundamental issues including the demographic characteristics of the respondents, while the second part consist questions where the variables were focused.

Validity of the instrument according to Mugenda, (1999) refers to how accurately the tool measures what it is designed to measure. Essentially, validity is concerned with establishing whether the questionnaire content is measuring what it is supposed to measure. Validity is the degree to which the empirical measure or several measures of the concepts, accurately measure the concept. Content validity is a non-statistical method used to validate the content employed in the questionnaire; the variables selected for this study were obtained from previous studies and tested for relevance.

Reliability is the degree to which an assessment tool produces stable and consistent results Phelan *et.al*,(2006). Test were used to establish the reliability of the research instruments. The responses were compared using Cronbachs alpha reliability

coefficient which normally ranges between 0 and 1. From the study, a correlation coefficient of more than 0.6 indicated a high reliability of the research instruments.

Data collection involves a self administered questionnaire. The researcher drops the questionnaires and then leaves the questionnaires with the respondents and picks them later. Each questionnaire is coded and only the researcher knows which person responded. The coding technique is only used for the purpose of matching returned completed questionnaires with those delivered to the respondents.

The data collected was then coded, edited and analyzed using Descriptive statistics. Descriptive techniques usually employ factual information about a situation to provide an understanding of performance levels. Wilson, (2006), Descriptive statistics is statistical devices that help summarize data. The measures of the independent variables, using the rating /Likert scales were converted to mean values and then to percentage to permit application of Simple regression model.

A Simple regression model was used for the analyses of data. The effect of accounting systems on performance of public universities in Kenya was determined by the equation below:

$$Y_i = \alpha + \beta_1 X_1 + \epsilon$$

Where:

$$Y_i = Y_1, Y_2, Y_3.$$

$\alpha$ = Constant (Performance of the University not attributable to Accounting Systems)

$X_1$ =Accounting Systems

$\epsilon$ = Is Error term

Specific Equations

$$1. Y_1 = \alpha + \beta_1 X_1 + \epsilon \quad \text{Where } Y_1 = \text{Accuracy of Accounting Reports}$$

$\alpha$ = Constant

$X_1$ =Is Accounting Systems

$\epsilon$ = Is Error term

$$2. Y_2 = \alpha + \beta_2 X_1 + \epsilon \quad \text{Where } Y_2 = \text{Customer Satisfaction.}$$

3.  $Y_3 = \alpha + \beta_3 X_1 + \varepsilon$  Where  $Y_3$ =Management Accountability and Transparency.  
Organization Performance =  $\alpha + \beta X$  (Accounting Systems) +  $\varepsilon$

### III. FINDINGD AND DISCUSSIONS

The study targeted 83 respondents in collecting data with regard to the effect of accounting systems on performance of public universities in Kenya. From the study 79 out of the 83 sampled respondents filled –in and returned the questionnaires making a response rate of 95.1%. This is a reliable response rate for data analysis as Barbbie (2012) posted that any response of 50% and above is adequate for analysis.

The study sought to focus on gender distribution within Egerton University in which the responded work. This observation of the distribution of respondents according to gender and the role played in the use of accounting systems. To analyse this, the respondents were asked to state the gender within the University. Findings revealed that majority (53.2%) of the respondents were male, while 46.8 % of the respondents were female. This shows that majority of the staff who works in the University are male and female are few in number.

Concerning the age brackets of the respondents within the study revealed that the majority of the respondents were below the age of 35years. The details of the age brackets of the respondents is presented in Table 3

**Table 3**  
**Age bracket of the Respondents**

Age	Frequency	Percentage (%)	Cumulative (%)
25-35 years	38	48.1	48.1
36-45 years	31	39.2	87.3
46-50 years	4	5.1	92.4
50 years and above	6	7.6	100.0
<b>Total</b>	<b>79</b>	<b>100</b>	

**Source: Research data ( 2017)**

From the Table 3 ,it was evident that majority(48.1%) of the employees indicated that they were between 25-35 years who are still active and energetic in the service ,(39.2%) of the respondents fell between (36-45) years who are still active and energetic also in service,(7.6%) of the employees indicated that they were above 50 years thus become inactive and no longer energetic and (5.1%) of the employees indicated that they were between 46-50 years and are lesser active and lesser energetic in service.

The research study sought to find out the highest education level the respondent had achieved. According to the findings shown in Table 4.4, 77.2% of the respondents had 1<sup>st</sup> Degree, 16.5% of the respondents had a Masters Degree, 5.1% of the respondents had a Diploma and 1.2% of the respondents had a Doctorate Degree.

**Table 4**  
**Respondents Education level**

	Frequency	Percentage (%)	Cumulative percent (%)
Diploma	4	5.1	5.1
1 <sup>st</sup> Degree	61	77.2	82.3
Masters Degree	13	16.5	98.8
Doctorate	1	1.2	100
<b>Total</b>	<b>79</b>	<b>100</b>	

**Source: Research data ( 2017)**

According to Table 4, majority of the respondents (77.2%) had 1<sup>st</sup> Degree,(16.5%) of the respondents had Masters Degree ,(5.1%) of the respondents had a Diploma and (1.2%) of the respondents had a Doctorate Degree. This indicates therefore that most of the respondents were educated hence well informed of the effects of Accounting Systems on performance of the University.

Regarding the number of years the respondents had served in the University as indicated in Table 4.5 below ,(46%) of the respondents had served the university for 6-10 years ,(38%) of the respondents had served the University for 11-20 years,(13%) of the respondents had served the university for below five years and (3% ) of the respondents had served the university for 21 years and above.

**Table 5**  
**Number of years the Respondents had served in the University**

	Frequency	Percentage (%)	Cumulative percent (%)
Below 5 years	10	13	13
6-10 years	36	46	59
11-20 years	30	38	97
21 years and above	3	3	100
<b>Total</b>	<b>79</b>	<b>100</b>	

**Source: Research data (2017)**

From the results in Table 5 ,The various number of years worked in the institution have some influence to help the university achieve the evaluation of effects of Accounting Systems on Performance whereby (46%) of the respondents had served in the University for 6-10 years thus a good representation of the number of staff who have worked there,(38%) of the respondents had served in the University for 11-20 years thus a representation of number of staff who have worked there also,(13%) of the respondents had served the university for below five years ,this is a slight representation of number of staff who have worked in the University and 3% of the respondents had served the University for 21 years and above. The various number of years worked in the institution have some influence to help the university achieve the evaluation of performance.

The research study sought to find out the terms of service of the respondents. The study established that majority (72%) of the respondents indicated that there terms of service is permanent,(17% ) of the respondents indicated that there terms of

service is casual/contract and (11% ) of the respondents indicated that there terms of service is Temporary.

After the describing the characteristics of the sample, the study descriptive analysis of the accounting systems and organizational performance was considered. Respondents were

requested to state to what extent they agreed with specific statements regarding the accuracy of accounting records .The statement was ranked in terms of their mean and standard deviation to portray the outcome of the result.

**Table 6**  
**Descriptive statistics on accuracy of accounting reports**

	Min	Max	Sum	Mean	Std. Dev
Accounting reports meets the needs of organization and timelines	0	5	262	3.32	1.419
Communication and coordination of activities is among departments	2	5	293	3.71	.663
Each department has measures of their quality of service	2	5	264	3.34	.749
Organization performance is measured regularly	0	5	259	3.28	1.414
Performance measures are shared regularly with staff	0	5	362	4.58	.496
Financial report users understand the reports and interpret	2	5	308	3.90	1.033
Financial reports are published regularly and shared among staff.	1	5	296	3.75	.854
Reports generated meet the financial obligation and integration of cost data related to operation	2	4	240	3.04	.775
Reports used for data adjustment, amendment and decision making.	2	5	284	3.59	.793
Managers set personal and business objectives in report preparation.	2	5	279	3.53	.889

**Source: Research data (2017)**

The research sought to find out the agreement level of the respondents on the statements regarding the effect of accuracy of accounting reports on performance of the organization. According to the findings majority of the respondents strongly agreed that performance measures were shared regularly with staff in the University as shown by a mean of 4.53 with standard deviation of 0.713, the respondents also agreed that Financial report users understand the reports and interpret in the University as revealed with a mean value of 3.90 which is tending towards a maximum value of point 4 in the likert scale.

As presented in Table 6, the respondents agreed that the University Financial reports are published regularly and shared among staff as reflected by a mean of 3.75 with standard deviation of 0.854. However, this is done to improve the performance of the organization .The study as revealed in Table 4.8 also shows that the respondents seemed to agree that in the University communication and coordination of activities is among departments as reflected with a mean 3.71.However ,the corresponding standard deviation also reflected a significant figure of 0.663.This shows that there is clear variation in the

responses provided by the respondents about the accuracy of reports on improving performance of the organization.

The result reflected in Table 6, indicates that the respondents agreed that the reports were used for data adjustment, amendment and decision making as shown by mean of 3.59 and standard deviation of 0.793.This ensures that proper decisions are taken on improving performance of the organization. The respondents undecided also shows in that all the departments has measures of quality of service , organization performance are measured regularly and accuracy of accounting reports meet the needs of organisation whereas indicated by means of 3.34, 3.28 and 3.32 respectively with their corresponding standard deviations of 0.749 , 1.414 and 1.419 respectively.

Table 7 shows the measures of effects of customer/client satisfaction on performance of University in different statement obtained from the respondents .The statement was ranked in terms of their mean and standard deviation to portray the outcome of the result

**Table 7**  
**Descriptive statistics on Customer Satisfaction.**

	N	Min	Max	Mean	Std. Dev
Accounting system improves speed of financial entries and transactions.	79	1	4	2.92	1.010
Accounting system helps improve timeliness of report generation.	79	2	5	3.71	.803
The use of accounting improves accounts record keeping and retrieval.	79	2	5	3.42	.914

Posting accounting transaction to the ledger and double entry helps quality of data compilation and operations	79	2	5	3.47	.845
Accounting systems aid customer service, decision making process and accountability.	79	1	5	3.39	1.114
Increase in the quality of statement analysis and management by customers.	79	0	5	4.32	.885
Accounting systems are aligned to the organizational objectives	79	3	5	4.33	.674
Product ,service, quality has improved	79	3	5	3.63	.511
Improvement in productivity, efficiency and gaining competitive advantage	79	2	5	3.41	.610

**Source Research data (2017)**

From the results in the Table 7 it is clearly indicating that respondents were strongly agreeing that university customers are satisfied that there is increase in the quality of statement analysis and management by customers as per the rates shown by mean value of 4.32 which is tending towards maximum value of 4 in the Likert scale. However, the standard deviation of 0.885 suggests variation in responses by the various respondents. According to Table 4.9 ,it was found that respondents agreed that the customers are satisfied that the Accounting systems are aligned to the organizational objectives as shown by mean value of 4.33 .The revealed standard deviation of 0.674 seems to suggest variation in the responses generated for the test.

From the study in Table 7, it was found that respondents agreed that the accounting systems helps to improve timeliness

of report generation to customer and helps in improving performance as reflected by mean value of 3.71. However, a standard deviation of 0.803 suggests a variation in responses generated by various respondents. From the same Table, respondents agreed that product; service quality has improved as indicated by mean value of 3.63 and standard deviation of 0.511 generated by the respondents.

Table 8 shows the measures of effects of management accountability and transparency on performance of University in different statement obtained from the respondents .The statement was ranked in terms of their mean and standard deviation to portray the outcome of the result.

**Table 8**  
**Descriptive statistics on management accountability and transparency**

	N	Min	Max	Mean	Std. Dev
Management adhere to policies and procedures in day to day operations	79	2.00	4.00	3.506	.552
Do the university management have open door policy	79	2.00	4.00	3.430	.592
University management share progress report	79	1.00	5.00	2.848	1.350
University management is clear with resources and operations within the university.	79	2.00	4.00	3.164	.940
Control of information within the university is exercised and universal access to information	79	2.00	4.00	3.279	.750
Organizational structure helps control ,integrate and co-ordinate work activities	79	1.00	5.00	3.670	.873
Information provided is important to both internal and external users.	79	1.00	5.00	3.747	1.315
Transaction process and steps taken by management towards achieving efficiency is satisfactory	79	1.00	5.00	4.051	.846
The level of training offered to staff is sufficient to spearhead the use of accounting systems.	79	1.00	5.00	2.823	1.196
Staff contribution to use and improve accounting systems in organization is influenced by motivation.	79	2.00	4.00	3.367	.559
Audit trail and audit database are undertaken regularly	79	.00	5.00	2.443	1.185

**Source :Research data (2017)**

Results of Table 8, shows a mean value of 4.05 which is tending to a maximum value of 5.This suggests that respondents agree with the statement that transaction process and steps taken by management towards achieving efficiency on accounting systems is satisfactory on improving performance .However a

standard deviation of 0.845 reveals a variation in the responses generated by the respondents. It can deduced that the respondents agree that information provided is important to both internal and external users as provided by management .This is revealed by a mean value of 3.746 with a standard deviation of 1.315 which shows the variation in the responses by the respondents.

According to the same table 4.10, respondents seem to agree that the university management organization structure helps to control, integrate and coordinate work activities and improve performance. This is shown by mean value of 3.67 with a standard deviation of 0.872 suggests variation in responses given by the respondents.

Besides the descriptive statistics, a simple linear regression models was applied to determine the relative importance of each of the three dependent variables (accuracy of accounting reports, customer satisfaction, management accountability and transparency) with respect to the effects of accounting systems on the performance of public Universities in Kenya

**Table 8**  
**Accounting systems and accuracy of accounting**

Model	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of the Estimate	Change Statistics							
				R <sup>2</sup> Change	F Change	df1	df2	Sig. Change	F		
1	.246	.061	.049	.58601	.061	4.979	1	77	.029		
Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.					
	B	Std. Error	Beta								
1	(Constant)	2.438	.344			7.094	.000				
	accuracy of reports Y1	.213	.095	.246		2.231	.029				

(a) Predictors: Constant (Accuracy of reports); (b) Dependent Variable :Accounting Systems  
 Source : Research data ( 2017)

The study thus established significant relationship between accuracy of reports and performance of universities in Kenya (p=0.00<0.05)

**Table 9:**  
**Accounting Systems and customer satisfaction**

Model 1	Unstandardized Coefficients		Standardized Coefficients		t	Sig.					
	B	Std. Error	Beta								
	(Constant)	2.511	.332			7.564	.000				
	Customer satisfaction Y2	.186	.089	.232		2.088	.040				

(a) Predictors: Constant (Customer satisfaction)  
 (b) Dependent Variable :Accounting Systems  
 Source :Research data ( 2017)

The established regression equation was  $Y = 2.511 + .186X_1 + \epsilon$ . The regression equation above has established that holding the factor (Customer satisfaction) constant, performance of the Universities in Kenya will be 2.511. The findings presented also shows that taking the independent variable at zero, a unit increase in accuracy of

reports will lead to a .186 increase in the performance of universities in Kenya. The study thus established significant relationship between customer satisfaction and performance of universities in Kenya (p=0.00<0.05)

**Table 10:**  
**Accounting systems and management responsibility**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	.575	.210	2.735	.008
	Management accountability Y3	.797	.063	.821	.000

(a)Predictors: Constant (Management Accountability)

(b) Dependent Variable : (Accounting Systems)

**Source :Researcher 2017**

The established regression equation was  $Y=2.438+0.213X_1+\epsilon$ . The regression equation above has established that holding the factor(Accounting systems) constant ,performance of the Universities in Kenya will be 2.438.The findings presented also shows that taking the independent variable at zero, a unit increase in accuracy of reports will lead to a 0.213 increase in the performance of universities in Kenya

The study used the R square. The R square is called the coefficient of determination and tells us how the Accounting system vary with performance of University. The independent variable Accounting systems explain 67.5% of the variance in performance of public Universities in Kenya as measured by management accountability and transparency. This means that other factors contribute 32.5% of management accountability and transparency on the Performance of Public Universities in Kenya. The study thus established significant relationship between accuracy of reports and performance of universities in Kenya( $p=0.00<0.05$ )

The established regression equation was  $Y=2.511+.186X_1+\epsilon$ .The regression equation above has established that holding the factor(Customer satisfaction) constant ,performance of the Universities in Kenya will be 2.511.The findings presented also shows that taking the independent variable at zero, a unit increase in accuracy of reports will lead to a .186 increase in the performance of universities in Kenya The study thus established significant relationship between customer satisfaction and performance of universities in Kenya( $p=0.00<0.05$ )

The established Simple regression equation was : $Y=-2.784+0.495X_1-0.397X_2+1.499X_3$   
 Where Constant=-2.784.

From the regression equation ,the study reflected that if Accuracy of accounting reports ,customer satisfaction and management accountability and transparency provided by university were all rated as zero, performance of university would stand at -2.784.

$X_1=0.495$ , shows that one unit change in accuracy of reports results in 0,495 units increase in performance of university,  $X_2 =-0.397$ , shows that one unit change in customer satisfaction results in 0.397 units decrease in performance of universities and  $X_3=1.499$ , shows that one unit change in management accountability and transparency results in 1.499 units increase in performance of universities

The established regression equation was  $Y=.575+.797X_1+\epsilon$ . The regression equation above has established that holding the factor(Management accountability and transparency) constant

,performance of the Universities in Kenya will be .575.The findings presented also shows that taking the independent variable at zero, a unit increase in management accountability and transparency will lead to a .797 increase in the performance of universities in Kenya. The study thus established significant relationship between management accountability and transparency and performance of universities in Kenya ( $p=0.00<0.05$ )

#### IV. CONCLUSIONS AND RECOMMENDATIONS

The study found that majority of the respondents indicated that the accuracy of reports affected the performance of university to a little extent .Performance measures were shared regularly with staff in the University affected the performance as the staff were aware of their expectation as shown by mean of 4.53.Financial report users understands the reports and interpret which also affected the performance of university to a very great extent as shown by mean of 3.90.The respondents strongly agreed that the financial reports are published regularly and shared among staff as shown by mean of 3.75

From the study the respondents indicated that customer satisfaction affected performance of the university to a great extent. Customer satisfaction ensures that the organization is sustainable and gain competitive edge. The university was involved in aid of customer service, decision-making process and accountability as shown by mean of 3.39.The respondents strongly agreed that the increase in the quality of statement analysis and management by customers affected the performance of the university as it is necessary for the customers to understand the content of the statement as shown by mean of 4.32

Finally the study found that Management accountability and transparency affected the performance of the university to a very great extent. The respondents strongly agreed that University achieving process and steps taken by management towards achieving efficiency is satisfactory as shown by mean value of 4.05. In this case, the transaction process could be considered effective from organization performance perspective. The study concluded that accuracy of reports affected performance of university. The performance measures are shared regularly among the departments in the university which is used for comparisons. From the findings the University Financial reports are published regularly and shared among staff affected performance this is done to improve performance in the University, it was also concluded that communication and

coordination of activities was among the departments also affected the performance as it helps sharing of information and attaining the same goals.

The regression analysis model also concludes that customer satisfaction affected performance of the University which the university needs to address since customers are important in any organization. Also it was concluded that increase in the quality of statement analysis and management by customers affected the performance since the customers can give feedback based on statement analysis and improve on performance. Finally, the study concludes that transaction process and steps taken by management towards achieving efficiency on accounting systems is satisfactory as this helps in improving performance, it was concluded that the university management adheres to policies and procedures in day to day operations which promotes transparency and accountability thus performance.

Based on the findings of the study, the study therefore recommended that accuracy of reports be considered since it affects performance of universities, financial reports to be published regularly and shared among the staff and also communication and coordination of activities should be among departments in order to achieve the goals. The study recommended that the university quality of statements, analysis and management by customers be looked into since it affects performance since customers give feedback and suggestion on decisions to be made, also it was recommended that improve on timeliness of report generation be done which affected the performance .

Finally the study recommended that transaction process and steps taken by management towards achieving efficiency on accounting systems be done and all necessary support to that be allocated since it enhances performance of the whole university, also it was recommended that university management to control, integrate and coordinate work activities in the university this is very important since all the activities of the university are interlinked and thus improve in the performance. This study has reviewed the effect of accounting systems on performance of public universities in Kenya. To this end therefore, a further study should be carried out to establish how universities have been able to come up with various strategies, policies, and systems to comply with competitive business environment.

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