

**FACTORS AFFECTING THE EFFECTIVE MANAGEMENT OF BUDGET IN  
SELECTED COUNTY GOVERNMENTS IN KENYA (MAKUENI, NAIROBI,  
NAROK AND KAKAMEGA COUNTIES).**

**BY**

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**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE  
REQUIREMENTS FOR THE AWARD OF MASTER OF SCIENCE IN COMMERCE  
DEGREE (FINANCE AND ACCOUNTING) IN THE SCHOOL OF BUSINESS AT  
KCA UNIVERSITY**

**NOVEMBER, 2017**

**DECLARATION**

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for award of a degree. I also declare that this contains no material written or published by other people except where due reference is made and author duly acknowledged.

Sign.....Reg.No 13/01557

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I do hereby confirm that i have examined the masters' dissertation of

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And have certified that all revisions that the dissertation panel and examiners recommended have been adequately addressed.

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## ABSTRACT

With the adoption of county governments in Kenya, it was vital to establish the influence of public participation, staff competency, government regulations and the application of information technology on effective management of budget in County Governments in Kenya. The problem that the study sought to address was lack of effective management of the budget. This was demonstrated by the huge sums of unspent amounts in County Governments' accounts at the end of the Financial Year but with many incomplete projects according to a report from the National Treasury. The target population was County Government employees in the County Governments in Kenya while the accessible population were a sample of 96 was selected by the application of stratified sampling technique were employees working for the County Governments of Makeni, Nairobi, Narok and Kakamega. The researcher collected data through administering questionnaires to senior county government officials in each department. Descriptive research technique was applied to analyze and interpret data that made it possible to draw conclusions on the factors affecting effective management of the budget in County Governments. Analyzed data and findings were presented in tables, charts and graphical presentations. These were aided by the utilization of STATA which is a statistical software. The study established that there was a positive and significant relationship between the explanatory variables as tabulated above and effective management of the budget in County Governments in Kenya posting an R-Squared of 50.47%. The study therefore concluded that, public participation, staff competency and government regulations should be embraced since they demonstrated a significant positive relationship with the dependent variable.

**Key words:** Budget, stratified sampling, public participation, staff competency, information technology, STATA and population

## **ACKNOWLEDGEMENT**

I acknowledge the assistance i received from my supervisor Dr. Peter Njuguna. I also acknowledge the support from my family and employer. I can also not fail to recognize my classmates whom we consulted during the writing of the dissertation.

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## **DEDICATION**

I dedicate this research study to KCA University. This would be for the purpose of enhancing research at the university with the main reason being forming a basis for future research.

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## ACRONYMS AND ABBREVIATIONS

<b>OCOB</b>	-	Office of the Controller of Budget
<b>CSOs</b>	-	Civil Society Organizations
<b>FMIS</b>	-	Financial Management and Information System
<b>CBEF</b>	-	County Budget and Economic Forum
<b>PFM</b>	-	Public Finance Management Act
<b>MTEF</b>	-	Medium Term Expenditure Framework
<b>GDP</b>	-	Gross Domestic Product
<b>USA</b>	-	United States of America
<b>NSA</b>	-	National Security Agency
<b>IFMIS</b>	-	Integrated Financial Management and Information System
<b>LG</b>	-	Local Government
<b>PEMS</b>	-	Public Expenditure Management Systems
<b>KCAU</b>	-	Kenya College of Accountancy University
<b>PHD</b>	-	Doctor of Philosophy
<b>PB</b>	-	Participatory Budgeting
<b>FGD</b>	-	Focus Group Discussions

## **OPERATIONAL DEFINITION OF TERMS**

**Effective budget management** - Effective budget management is the ability of an organization to formulate, adopt and execute a budget and also put in place control measures to ensure achievement of both long term and short term goals and obligations of the organization (Hashem, 2014)

**Public participation** - Budgetary participation is the level of involvement and influence of individuals in the preparation of the budget (Muammar et al 2015)

**The budgetary process** - The budget process is defined as the process through which government expenditures are determined or allocated. Normally a budget process is composed of four main stages: formulation, adoption, execution, and control.(Hashem, 2014)

**Budget implementation** - Budget implementation is the actual functioning, performance and execution of a specific revenue and expenditure estimation. Budget implementation has been very low in most less developed countries including Nigeria.(Oketa, 2013)

**Devolution** - Devolution is the statutory delegation of powers from the Central Government of a sovereign state to govern at a subnational level, such as a regional or local level. It is a form of administrative decentralization. Devolved territories have the power to make legislation relevant to the area.(Wikimedia Foundation, 2016)

**Budget** -A budget refers to a comprehensive plan in writing, stated in monetary terms that outline the expected financial consequences of management's plans and strategies for accomplishing the organization's mission for the coming period. (Abdullah., 2008)

**Budgeting** -Budgeting refers to the process of preparation, implementation and operation of budgets decisions into specific projected financial plans. (Abdullah., 2008)

**Budgetary control** -It refers to any management approach that involves setting some kind of targets, regularly measuring variances between the original targets and actual outcomes, and motivating people to reduce those variances. (Abdullah., 2008)

**Agency theory** -An agency relationship is a contract under which one or more persons; the principal(s) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent (Michael C. Jensen, 1976).

**Normative theory** - It is a theory which contains criteria for determining what ought to be in the budget and is nothing less than a theory stating what the government ought to do.

**Financial management and information system** -FMIS usually refers to computerization of public expenditure management processes including budget formulation, budget execution, and accounting with the help of a fully integrated system for financial management of the line ministries and other spending agencies.

**Population** -a population refers to the entire group of persons or elements that have at least one thing in common.

**Target population**- Target population is defined as all members of a real or hypothetical set of people, events or objects to which a study wishes to generalize the results of the research study (Bryman and Bell, 2007)

**Validity** -Validity is the degree to which an instrument measures what it purports to measure (Borg & Gall, 1996)

**Sampling technique** - sampling is the procedure a researcher uses to gather people, places or things to study.

**Competency** – is the capability or ability or an underlying characteristic of an individual which is casually related to effective or superior performance.(Boyatzis (2008)

**Research design** - It refers to the method used to carry out a research.

**Descriptive research design method** - It is a process of collecting data in order to test hypothesis or to answer questions concerning the current status of the subjects in the study (Olive M. Mugenda & Abel G.Mugenda, 2003)

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the study

Effective budget management is the ability of an organization to formulate, adopt and execute a budget and also put in place control measures to ensure achievement of both long term and short term goals and obligations of the organization (Hashem, 2014)

Budget is an important component in County Government planning and decision making. Almost every organization, regardless of size, complexity or sector, relies heavily on budgets and budgetary systems to achieve strategic goals (Oketa, 2013). In practice, budgets are rarely effectively managed. This can be for legitimate reasons, such as adjustments in policies in response to changes in economic conditions, or for negative reasons, including mismanagement, poor budgetary process, unauthorized expenditures, inefficiency, or fraud (Nebraska, 2015)

Lack of effective management of Budget was not only a Kenyan challenge but a global challenge. Budgeting has succeeded in many countries including New Zealand, Australia, Singapore, Netherlands, Norway, Sweden, USA, Canada, Mauritius, Rwanda and South Africa but also failed in others like Sri Lanka and Thailand as measured by poverty index and GDP (World Bank Group, 2017)

In Kenya, the budgeting process in the Government Ministries was with a lot challenges. In the year 2011/2012 budget, over Kshs.100 Billion was returned back to the Treasury having not been utilized. Such amount of funds returned affects project implementation process as well as realization of goals. Counties returned to treasury a lot of unspent funds may be due to poor timeliness or allocation. In the 2016/2017 budget and as at 18<sup>th</sup> January 2017, county governments had collectively accumulated cash balances in various CBK accounts amounting to KSH 33 billion which is equivalent to 11.8 percent of

their equitable share allocation. (National Treasury, 2017) Perennial delay of the disbursement of funds from the National Treasury and frequent breakdowns of the Integrated Financial Management and Information system also continued to hamper development and was a major cause of pecuniary embarrassment to the county governments. (Ochieng, 2017)

In spite of the several attempts at reforming the budgetary process including implementation and control, the county budget in Kenya has remained an unsatisfactory instrument of achieving county policies because of poor budget management. The high percentage of under-utilization of the budget has a negative effect to the citizens of a country in regard to achieving the desired goals and objectives. It was with this in mind that the researcher sought to establish and analyze the factors that are likely to affect the effective management of budgets in county government in Kenya.

### ***1.1.1 Effective management of the budget***

An effective budget is a budget that leads an organization to meet both its short-term and long-term goals and obligations. An effective Budget Preparation Life Cycle includes; determining needs of community being served, to set up program/project goals and objectives, to decide strategy to accomplish the goals, to translate strategy into dollars, to prepare the budget, to set up Budget Control process, to compare budget to actual and to modify the budget for a realistic scenario. (Nebraska, 2015)

Effective management of the Budget is one of the critical aspects in determining the success of a government, a government unit, an organization and even County Government. (Nebraska, 2015) The qualities of an effective budget are; it should be realistic, consistent with organizational objectives, cost effective and flexible (Nebraska, 2015) In practice, budgets are rarely effectively managed. This can be for legitimate reasons, such as adjustments in policies in response to changes in economic conditions, or for negative

reasons, including mismanagement, poor budgetary process, unauthorized expenditures, inefficiency, or fraud (Nebraska, 2015)

Lack of effective management of the Budget was not only a Kenyan challenge but a global challenge. Budgeting has succeeded in many countries including New Zealand, Australia, Singapore, Netherlands, Norway, Sweden, USA, Canada, Mauritius, Rwanda and South Africa but also failed in others like Sri Lanka and Thailand as measured by poverty index and GDP (World Bank Group, 2017)

The United States of America realized that of all of the functional areas of finance, the one most in need of guidance was government budgeting. These culminated to the release by the National Advisory Council on State and Local Budgeting of a set of recommended practices representing a milestone in budgeting. In one document, governments had a comprehensive set of processes and procedures that defined an accepted budget process and budget. The practices advocated for a goal-driven approach to budgeting that covered the planning, development, adoption, and execution phases of the budget. (Government Finance Officers Association, 1998). As a result of the evolving nature of good budgeting practice, the developed budgeting practices served as a blueprint for governments to make improvements to their budget processes. Implementation of these practices was expected to spur economic development over the years. (Government Finance Officers Association, 1998)

In Nigeria, Local Government has historically provided services of importance to its citizens in rural and urban areas which include provision of basic services like water, roads, health services, education, etc. Of late, the role of local government in providing these services has attracted public concern. Furthermore, it has generated a national crisis as a result of increasing rate of poverty among the rural people. Some scholars view this development to poor budgeting and implementation while others associate it to the federal

and state government's interference. Whatever may be the reason; there is considerable emphasis, possibly an over-emphasis on budgeting in the federal government against the under emphasis on budgeting practices and procedures in state and local governments in Nigeria (Ukpere et al., 2009)

### ***1.1.2 County governments in Kenya***

The road to devolution in Kenya was long and tortuous. As a matter of priority, the immediate post-colonial government addressed the grievances aired during the independence struggle. Through "sessional paper No.10 of 1965 on African Socialism and its application to planning in Kenya, the government laid down development policies aimed at correcting regional imbalances and eradicating poverty, ignorance and disease. But this was not to be, as many years down the line, poverty has not been eradicated. (Ochieng, 2017)

Kenya's decentralization was among the most rapid and ambitious devolution processes going on in the world, with new governance challenges and opportunities as the country builds a new set of County Governments from scratch. (The World Bank Group, 2016)

Economic conditions faced by the Kenyan Government currently requires County Governments' ability to survive and thrive, this capability depends on how County Governments take appropriate decisions. Budget is an important component in County Government planning and decision making. Almost every organization, regardless of size, complexity or sector, relies heavily on budgets and budgetary systems to achieve strategic goals (Oketa, 2013). Effective management of the budget in county governments was measured by establishing the Percentage number of complete projects, Percentage number of ongoing projects, budget absorption rate for each department per annum and the achieved percentage of the annual work plan for each department. Questionnaires were developed and



administered to county government employees heading departments of the county government of Makueni, Narok, Nairobi and Kakamega.

### ***1.1.3 The budgetary process***

The budget process in this context was defined as the process through which government expenditures are determined or allocated. Normally a budget process is composed of four main stages: formulation, adoption, execution, and control (Hashem, 2014). Considering that a budget is a list of all planned expenses and revenues. A budget according to macroeconomic analysis and objectives of a country is the core of Public Finance in revenue generation and public expenditure (Oketa, 2013)

The Budget undergoes some processes before it becomes both a law and an economic tool. Budgetary process involves all centres, programmes and administrative units of an entity in the development of periodic budget. It refers to the totality of the processes a budget passes through before it finally becomes a document. It involves all the executive and legislative processes, that is, collection of estimates from the various government departments to the defense before the various committees of the legislature and debates in the floor of the Houses, the passage into law and the final implementation and monitoring (Ukpere et al, 2009) While each of Kenya's 47 counties were required to produce and publish their own quarterly budget implementation reports, in practice most had failed to do so. This made the OCOB reports all the more useful as a source of implementation data (Lakin, 2015)

### ***1.1.4 Budget implementation***

Budget implementation is the actual functioning, performance and execution of a specific revenue and expenditure estimation. Budget implementation has been very low in most less developed countries including Nigeria (Oketa, 2013)

In practice, budgets are rarely implemented exactly as approved. This can be for legitimate reasons, such as adjustments in policies in response to changes in economic

conditions, or for negative reasons, including mismanagement, unauthorized expenditures, inefficiency, or fraud. CSOs can use analysis during and after budgets are implemented to identify problems in execution and use this information to strengthen their advocacy efforts to increase accountability, improve programs, and inform future budget debates (Lakin, 2015)

The importance of a realistic budget cannot far fetch from its implementation such that; a realistic budget is implemented with few significant deviations from plan; Low level of corruption in public expenditure; high transparency in public finance; public funds spent for authorized public purposes; reported expenditure corresponding to actual expenditure; reliable external and/or internal controls and where spending units have reasonable certainty as to the funds that will be available (Oketa, 2013)

## **1.2 Statement of the problem**

Lack of effective management of the budget was not only a Kenyan challenge but a global challenge. In Nigeria, Local Government has historically provided services of importance to its citizens in rural and urban areas which include provision of basic services like water, roads, health services, education, etc. Of late, the role of local government in providing these services had attracted public concern. Some scholars view this development to poor budgeting and implementation while others associate it to the federal and state government's interference. (Ukpere et al., 2009)

Budgeting has succeeded in many countries including New Zealand, Australia, Singapore, Netherlands, Norway, Sweden, USA, Canada, Mauritius, Rwanda and South Africa but also failed in others like Sri Lanka and Thailand as measured by poverty index and GDP (World Bank Group, 2017). The problem that the study sought to address was lack of proper management of the budget and the budgetary process that culminated to a low pace of development which was contrary to what was anticipated after the promulgation of the new constitution in 2010.

The budgeting process in the Government Ministries and county governments in Kenya continued been with lot challenges therefore posing a difficulty in achieving the anticipated development. In the year 2011/2012 budget, over Kshs.100 Billion was returned back to the Treasury having not been utilized. Such amount of funds returned affected project implementation process as well as realization of goals. Counties returned to treasury huge amounts of unspent funds may be due to poor timeliness or allocation. In the 2016/2017 budget and as at 18<sup>th</sup> January 2017, county governments had collectively accumulated cash balances in various CBK accounts amounting to KSH 33 billion which was equivalent to 11.8 percent of their equitable share allocation as at 31<sup>st</sup> December 2016. (National Treasury, 2017).

While there are various empirical evidences on the effectiveness of the budget such as, Moolchand Raghunandan et al (2012) Behavioral Aspects of Budgeting with particular emphasis on Public Sector/Service Budgets and Pandeya (2015) who sought to answer the following question. Does citizen participation in local government decision-making contribute to strengthening local planning and accountability systems? “An empirical assessment of the stakeholders’ perceptions in Nepal” there was limited research that was carried out to determine exactly why devolved units were not able to achieve their budgetary objectives.

Inspite of the several attempts at reforming the budgetary process including implementation and control, the county budget in Kenya remained an unsatisfactory instrument of achieving county policies because of poor budget management. The high percentage of under-utilization of the budget had negative effect to the citizens of the country in regard to achieving the desired goals and objectives. It was with this in mind that the researcher sought to establish and analyze the factors that were likely to affect the effective management of budgets in county government in Kenya.

### **1.3 Objectives of the study**

#### ***1.3.1 General objective***

The main objective of the study was to establish the factors affecting effective management of the budget in County Governments in Kenya.

#### ***1.3.2 Specific objectives***

1. To establish the impact of public participation on the effective management of budgets in County Governments in Kenya
2. To establish the impact of staff competency in County Government Departments on the effective management of budgets in County Governments in Kenya
3. To investigate how the application of information technology impacts on the effective management of budgets in County Governments in Kenya
4. To establish how government regulations and laws impacts on the effective management of budgets in County Governments in Kenya

#### ***1.3.3 Research questions***

1. What effect does public participation have on the effective management of budget in County Governments?
2. What effect does the competency of staff in County Governments departments have on the effective management of budget in County Governments?
3. What effect does the application of information technology have on the effective management of budget in County Governments?
4. What effect does the application government regulations and laws have on the effective management of budget in County Governments?

### **1.4 Justification of the study**

There was an outcry from the public that County Governments were unable to effectively implement budgets. These was demonstrated by a consistent trend that indicated very low

absorption rates of funds allocated to the County Governments (Auditor General, 2016) Perennial delay of the disbursement of funds from the National Treasury and frequent breakdowns of the Integrated Financial Management and Information system continued to hamper development and was a major cause of pecuniary embarrassment to the county governments (Ochieng, 2017)

The study on the factors affecting effective management of budget in selected County Governments was conducted in Makueni, Nairobi, Narok and Kakamega Counties. In selection of the counties, several factors were considered which included geographical position of the county, size of the county in terms of population and the level of funding from the National Government. The decision to carry out the study was also informed by the fact that budgeting in County's was at its infancy stage because it was a new concept. The study would also after establishing the factors affecting the effective management of budgets in County Governments make recommendations on how to achieve effectiveness on the same.

It was anticipated that the research would be of much benefit to county governments in Kenya and also the national governments since the principles of budgeting are the same. The study was also expected to form a basis of further research in the same field and also to other related areas which may not have been adequately researched.

### **1.5 Significance of the study**

The study had a lot of benefits to the general public and all the stake holders involved in the budgeting process. It contributed to the body of knowledge in the academic field.

To the general public, the study explained the budgeting process and the role of the citizens in the budgeting process. The study also sensitized the citizens on their rights with regard to the budget making process. To the county government and the central government; the study explained why effective management of budgets had not been achieved as anticipated. It provided reference information for purposes of implementing budgets effectively. The

findings also provided insights to the regulatory bodies and the government at large on the factors affecting the effective management of budgets and also reasons for poor implementation of budgets. This would enable County Governments to make appropriate interventions when things tend to move outside the plan.

To other researchers, the study provided useful basis upon which further studies on effective management of budgets would be conducted. The study made a contribution to the academic literature and therefore contributed to the body of knowledge in budgetary issues and the related fields. The researcher strongly believed that after the conclusion of the study, if the recommendations made will be implemented to the letter, the matter of ineffective budget management shall be addressed adequately.

#### **1.6 Scope of the study**

The scope of this study was to identify the factors affecting effective management of budgets in County Governments in Kenya and the various possible ways of addressing them. This study on the factors affecting effective management of budgets in County Governments was conducted in Makueni, Nairobi, Narok and Kakamega counties. In selection of the counties, several factors were considered which included geographical position of the county, size of the county in terms of population and the level of funding from the National Government. The data collection was conducted by applying stratified sampling technique in departments within Counties. Data for the study was collected by the use of questionnaires. The target population was chief officers, budget officers, and other resourceful officers working in different departments of the specified County Governments. The researcher was confident that the selected population provided an adequate base upon which a sample was drawn that was able to provide reliable results after the analysis. The reliable results generated led to good recommendations that if implemented would lead to solving the problem of ineffective budget management in County Governments.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The purpose of literature review is to help the researcher develop a thorough understanding and insight in to previous works and trends that have been recorded pertaining to the research problem. It will also highlight the gap and put across justifications of the study (Oso & Onen, 2009) The purpose of this chapter also shall be to help the researcher develop a thorough understanding of and an insight in to previous works and trends that have been done regarding the same or related research problem (Mugenda, 2003)

First, a theoretical review was conducted focusing on the issues related to the factors affecting the effective management of the budget and budget making process in devolved units in detail. Secondly, the empirical review of the studies that were conducted on the effective management of budgets was presented.

The chapter presented the literature review on issues related to budgeting and the factors affecting effective management of budgets including implementation and specifically focused on the County Governments budgets and the budgeting process. This was literature about the effective management of budgets and the budgeting process and any other literature related to the budgeting cycle. The specific area covered in this chapter was to identify and read literature that was related to factors affecting the effective management of budgets and budget implementation in Government or Government units.

The main focus was to review literature that would enable the researcher to be able to establish the impact of public participation on the effective management of budgets, establish the impact of staff competency in County Government Departments on the effective management of budgets, investigate how the application of information technology impacts on the effective management of budgets and finally establish how government regulations

impacted on the effective management of budgets. Finally, all the literature reviewed was analyzed and the research gap demonstrated.

## **2.2 Theoretical Review**

Public budgeting, as a field of study, has grown tremendously in recent years both in form and substance. With such growth comes a need to have a coherent theory or body of theories that allows one to understand the field, its essential core that guides its development, and its scope for dealing with real world problems (Forrester, 2002).

### **2.2.1 Agency theory**

An agency relationship is a contract under which one or more persons; the principal(s) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent (Michael C. Jensen, 1976)

The objective in agency theory is to structure the contractual relationship between these groups so that agents take actions to maximize the welfare of principals. At the heart of public budgeting are relationships among those who provide agency services and those who allocate resources to service providers. Schick (1988) as cited by (Forrester, 2002) has referred to these individuals as claimants and conservers, respectively. Others have entitled them more generally as agents and principals, respectively (Demski, 1998; Baiman, 1982; Holstrom, 1979) as cited by (Forrester, 2002). In other words, those who make claims on governmental resources are agents and those who allocate and ration the resources are principals. In this relationship, the principals contract with agents to provide services to the public, and the main focus for all those involved is the contract (i.e., the budget) itself. Two key questions for both participants are; “What can be done to draw up the most effective contract possible?” and “How can the contract be upheld?” (Forrester, 2002)

The budgeting process is conducted or steered by public servants who undertake that function on behalf of the citizens of a country or a county. Both the agent and the principals



have divergent interests and hence the agents do not necessarily act in the best interest of the principals. Agency theory therefore describes the conflict arising between self-interested managers (agents) and the owners (principals). The principals must try to reduce the agent's actions in advancing their interest through establishment of appropriate incentives for the agent and by incurring monitoring costs designed to limit their self-benefiting activities (Michael C. Jensen, 1976). It was also important to point out that currently, the information asymmetry between the principals and agents in counties are being addressed by increased recognition of the role of county assemblies, civic budget groups and the general public in the budget formulation process. (Mutuma, 2016)

Financial accountability asserted that the implementation of public budgets was based on the interests of the people, as who provide the mandate to the government to plan and implement the budget. Budget in favor of the people is the budget not only in terms of expenditure, which meets the allocation of public services as expected, but also from the revenue side. The Office of controller of budget (COB) in liaison with national treasury exercise financial control in all counties and is required to serve the public interest. County governments can be seen as agents of the people (the principal) because they are required to produce a certain level of public output including the quality of county government expenditure returns in exchange for taxes paid by the people. The objective of COB is to oversee the county government in implementing public expenditure programs and projects. (Mutuma, 2016)

In view of the above explanation of the agency relationship, failure of the agent to act in the best interest of the principal could be one of the reasons of not attaining effective management of the budget. Public participation and strict adherence to government regulations should be applied to ensure that the agents act in the best interest of the principals who are the citizens. This will ensure an effective management of the budget. The staff

should also be capacity built to a high competence level of understanding the law in regard to budgetary provisions.

### ***2.2.2 Stewardship theory***

Agency theory argues that shareholder interests require protection by separation of incumbency of roles of board chair and CEO. Stewardship theory argues shareholder interests are maximized by shared incumbency of these roles. Results of an empirical test fail to support agency theory and provide some support for stewardship theory (Donaldson, 1991)

These theoretical considerations argue a view of managerial motivation alternative to agency theory and which may be termed stewardship theory (Donaldson 1990a, 1990b; Barney 1990). The executive manager, under this theory, far from being an opportunistic shirker, essentially wants to do a good job, to be a good steward of the corporate assets. Thus, stewardship theory holds that there is no inherent, general problem of executive motivation. Given the absence of an inner motivational problem among executives, there is the question of how far executives can achieve the good corporate performance to which they aspire. Thus, stewardship theory holds that performance variations arise from whether the structural situation in which the executive is located facilitates effective action by the executive. (Donaldson, 1991)

The issue becomes whether or not the organization structure helps the executive to formulate and implement plans for high corporate performance (Donaldson 1985). Structures will be facilitative of this goal to the extent that they provide clear, consistent role expectations and authorize and empower senior management. Specifically, as regards the role of the CEO, structures will assist those to attain superior performance by their corporations to the extent that the CEO exercises complete authority over the corporation and that their role is unambiguous and unchallenged. This situation is attained more readily where the CEO is also chair of the board. Power and authority are concentrated in one person. There is no room

for doubt as to who has authority or responsibility over a particular matter. Similarly, the expectations about corporate leadership will be clearer and more consistent both for subordinate managers and for other members of the corporate board. (Donaldson, 1991) The organization will enjoy the classic benefits of unity of direction and of strong command and control. Thus, stewardship theory focuses not on motivation of the CEO but rather facilitative, empowering structures, and holds that fusion of the incumbency of the roles of chair and CEO will enhance effectiveness and produce, as a result, superior returns to shareholders than separation of the roles of chair and CEO (Donaldson, 1991)

In the context of the study, the CEO manages the organization on behalf of the other stakeholders. For the county governments, they manage resources on behalf of the national government and for the interest of the citizens. The governor been the CEO of the county should execute the interests of the citizens through a budget. To ensure effective management of the budget, public participation should be done according to the Constitution of Kenya 2010 sect.35 (1) in the Bill of Rights and PFM Act 2012 about financial legislations to ensure there is accountability and transparency. Public participation and strict adherence to government regulations should be applied to ensure that the agents act in the best interest of the principals who are the citizens. The staff should also be capacity built to a high competence level of understanding the law in regard to budgetary provisions.

### ***2.2.3 Public interest theory.***

Public interest theory is an economic theory that holds that regulation is supplied in response to the demand of the public for the correction of inefficient or inequitable market practices (Christensen, 2010). It is believed that the regulations are prepared in the public interest when they are demanded by the public for correcting inefficient practices. Regulations are understood to do good to the whole society rather than any individual's interest. Regulation is one of the state's core functions. It is also one of its classical functions. In a historical

perspective the state engaged in regulation long before government also took upon it to provide welfare services to its citizens. Regulation defines the border between state and society, government and market. Therefore, regulation represents government's attempt to set limits to the scope of private activities (Christensen, 2010)

Public interest theory in this study reflect what is enshrined in the Constitution of Kenya 2010 sect.35 (1) in the Bill of Rights and PFM Act 2012 about financial legislations to ensure there is accountability and transparency which will add value to environment protection and public participation. In relation to the study, the employees in the county governments should be in a position to understand the law and government regulations which clearly outline the functions of government that will eventually determine what should be in the budget. This demonstrates that application of public interest theory would lead to effective management of the budget. Application of the public interest theory also would ensure that the budget would be implemented according to the laid down regulations.

### **2.3 Empirical review**

In this part, studies conducted in respect of effectiveness of budgets in Governments were reviewed. The review adopted a funnel approach where global, regional, and local studies were reviewed.

#### ***2.3.1 Public participation and effective management of budgets***

Citizen participation in local government is usually considered to be an important mechanism for achieving development gains, strengthening local accountability, and empowering citizens (Kelly, 2007). Nearly two-thirds of projects are unsuccessful due to difficulties experienced in trying to control project deliverables, schedules and budget and therefore the need to manage and control scope is vital to give the project manager a chance of meeting the approved objectives and achieving successful projects. Studies have shown that there are various influences of stakeholder participation on the public budgeting process. Some of

these include the efficiency of the process, the effectiveness of the process and equity in the allocation of funds. (Kelly, 2007)

A study was conducted in the United Kingdom by Muammar et al (2015) on the effect of budget participation and budget adequacy on individual performance with job satisfaction as an intervening variable. The study applied the following methodology; the study used purposive sampling technique, so that the sampling would be done by a logical representation. The sample in the study were the officers involved in the preparation of the budget comprising of 16 heads of agencies, 48 heads of sub-divisions and 46 head of divisions involved in the budgeting process at the government institution of Aceh Utara district. Research data required is the primary data. Muammar et al (2015) came up with the following findings. “The results of the study indicated that budgetary participation significantly affected individuals’ performance. Budgetary participation affects job satisfaction. Budget adequacy significantly affects budget satisfaction; budget adequacy significantly affects individual performance.

He finally came up with the following conclusion “Budgetary participation and budget adequacy significantly effected on performance through job satisfaction” the findings in this study do not address the topic at hand but address similar issues that are also important to the County Governments’ budgetary process” The researcher was of the view that purposive sampling technique that was applied in identifying the sample was not the appropriate method; the census method though expensive could have produced a sample that would have been a better true representative of the population.

Pandeya (2015) also conducted a study which sought to answer the following question. Does citizen participation in local government decision-making contribute to strengthening local planning and accountability systems? “An empirical assessment of the stakeholders’ perceptions in Nepal”

The study used exploratory interviews with 35 people who have had at least five years of experience and expertise in the field of local governance and citizen participation. The interviewees, selected through purposive and snowball sampling, were 17 mid-level and high-ranking LG officers (local development officers, joint secretaries and under-secretaries), eight practitioners working in participatory projects, five participation experts, and five activists working for non-governmental organizations (NGOs). (Pandeya, 2015)

Pandeya (2015) came up with the following finding. “The lack of elected representatives, a condition that existed for more than a decade, appeared to be a major stumbling block toward promoting effective participation in Nepal. Many respondents felt that a long-term political vacuum, which is, in fact, a major obstacle to building local democracy and governance, was one of the major detrimental factors that discouraged many citizens from participation. This vacuum also limited the scope of effective communication between citizens and LG officials. These findings were not relevant in the Kenyan context because elections were mandatory as stipulated in the Kenyan constitution

Pandeya (2015) came up with the following conclusion. The results drawn from an examination of factors associated with citizen participation in LG decision-making show that institutional and policy frameworks and participation mechanisms are favorable, or at least pose no hindrance, to the promotion of effective participation in Nepal. The researcher was of the view that exploratory interviews technique that was applied in identifying the sample was not the appropriate method; purposive sampling method could have produced a sample that would have been a better true representative of the population.

Since the early 1980s, many scholars have increasingly focused on citizen participation in administrative decision-making. For example, in the beginning of participatory government, Kweit and Kweit (1981) argued that “participation in government improved public service delivery and increased the trust of citizens in government. However,

the outcomes of citizen participation depended on: the characteristics of participation mechanisms; the characteristics of the target organization, especially its capacity, structure, and commitment to the process; and environmental characteristics, such as the size of the community, and the forms of government involved. This argument may be valid for certain contexts but it may not apply to all contexts” as cited by (Pandeya, 2015)

Consistent with the findings of Kweit and Kweit (1981), King, Feltey, and Susel (1998) argued in a study based on interviews and focus group discussions (FGDs) conducted in Ohio State that there are three major sets of factors relevant to effective participation: participation policies and mechanisms; types of administrative systems and practices; and the nature of contemporary society, such as the characteristics of the citizens and community organizations involved, and the prevailing political culture. However, because this research was done in a developed country, the findings may not be applicable to other contexts as cited by (Pandeya, 2015). From the literature reviewed, the researcher was able to conclude that there was a positive relationship between public participation and effective management of the budget.

### ***2.3.2 Staff competency and effective management of budgets***

Boyatzis (2008), as cited by (Apiyo and Mburu,2014) define competency as “a capability, ability or an underlying characteristic of an individual which is casually related to effective or superior performance. It is a set of related but a different set of behavior organized around an underlying construct, which we call the “intent”. The behaviors are alternate manifestations of the intent, as appropriate in various situations or times”. Competence is a cluster of related abilities, commitments, knowledge, and skills that enable a person (or an organization) to act efficiently in a job or situation. Competencies indicate sufficiency of knowledge and skills that enable someone to act in a wide variety of situations (Aketch and Karanja, 2013) as cited in (Apiyo and Mburu,2014)

The budget process is a technical process that requires people with expertise and experience to execute. It would first involve setting realistic goals, planning on how to execute the goals and also conducting budgetary review. This process requires a lot of accuracy in estimations and serious accountability at execution. These states of affairs clearly demonstrate that highly trained personnel are required to execute the budget. (Aketch and Karanja, 2013) as cited in (Apiyo and Mburu,2014)

Moolchand Raghunandan et al (2012) conducted a study where they examined the Behavioral Aspects of Budgeting with particular emphasis on Public Sector/Service Budgets. The study applied simple random sampling technique to come up with the data for analysis. This was done by administering questionnaires to government employees in various departments.

The researcher came up with the following findings; Management accountants must recognize that accounting techniques and human relations bound with each other. The behavior aspects of budgeting are significant and the management accountant has a responsibility to minimize the behavioral problems within the accounting systems for control. It follows that management accountants should work more closely with behavioral scientists to gain an understanding of the essential role that human behavior plays in successful budget use. The researcher came to the conclusion that Budgeting is a complex process, and the best results can only be achieved when a mix of factors is taken into account. The personalities of the participants, the type of budget being set (revenue or expense), the approach to performance reporting and the degree of uncertainty present are all important factors that cannot be overlooked.

The researcher was of the view that simple random sampling technique that was applied in identifying the sample was not the appropriate method; purposive sampling



method could have produced a sample that would have been a better true representative of the population.

A study was conducted by Apiyo and Mburu (2014) to explore the factors that affect procurement planning in County Governments in Kenya. This study concluded that there was a positive relationship between staff competence and the procurement planning. The study adopted a descriptive case study design; which enabled the researcher to keep track of the research activities and helped to ensure that the ultimate research objectives are achieved. This method is preferred because it allowed for in-depth study of the case

From the findings, a unit increase in staff competence led to a 0.252 increase in the procurement planning. It also concluded that, there was a positive relationship between management support and the procurement planning. From the findings, a unit increase in management support led to a 0.786 increase in the procurement planning. From the literature reviewed; the researcher was able to conclude that there was a positive relationship between public participation and effective management of the budget.

### ***2.3.3 Information technology and effective management of budget***

In terms of terminology, a FMIS usually refers to computerization of public expenditure management processes including budget formulation, budget execution, and accounting with the help of a fully integrated system for financial management of the line ministries and other spending agencies. The full system should also secure integration and communication with other relevant information systems. Because of the integration requirement, the FMIS is commonly characterized as an integrated financial management information system (IFMIS). (Diamond and Khemani, 2006)

The consequent lack of reliable and timely revenue and expenditure data for budget planning, monitoring, expenditure control, and reporting has negatively impacted budget management. The results have been a poorly controlled commitment of government

resources, often resulting in a large buildup of arrears; excessive borrowing, pushing up interest rates and crowding out private sector investment; and misallocation of resources, undermining the effectiveness and efficiency of service delivery. Further, governments have found it difficult to provide an accurate, complete, and transparent account of their financial position to Parliament or to other interested parties, including donors and the general public. . (Diamond and Khemani, 2006)

The lack of information hindered transparency and the enforcement of accountability in government, and only contributed to the perceived governance problems in many of the countries. In light of these adverse developments, it was perhaps not surprising that many developing countries pressed for, or have been pressed into, adopting financial management information system (FMIS) projects to strengthen their PEM systems. (Diamond and Khemani, 2006) The establishment of a FMIS has consequently become an important benchmark for the country's budget reform agenda, often regarded as a precondition for achieving effective management of the budgetary resources. Although it is not a panacea, the benefits of an FMIS could be argued to be profound. (Diamond and Khemani, 2006)

In the study conducted by Diamond and Khemani (2006); on Introducing Financial Management and Information Systems in developing countries. They conducted the study after realizing that financial information systems in developing countries continued to fail. This article investigates the reason for almost universal failure to implement and sustain FMISs in developing countries. The study used the following methodology; it started with a review of the "received wisdom" in implementing these projects, and then analyzed problems in its application in the developing country context to identify key factors to explain why FMIS projects have been so problematic. Based on the identified negative factors, suggestions for addressing them were offered in the hope of improving success rates.

The study came up with the following findings; first, the improved recording and processing of government financial transactions also allowed prompt and efficient access to reliable financial data. This supported enhanced transparency and accountability of the executive to Parliament, the general public, and other external agencies. Second, an FMIS strengthened financial controls, facilitating a full and updated picture of commitments and expenditure on a continuous basis. Once a commitment was made, the system was able to trace all the stages of the transaction processing from budget releases, commitment, purchase, payment request, reconciliation of bank statements, and accounting of expenditure. This allows a comprehensive picture of budget execution. Third, it provided the information to ensure improved efficiency and effectiveness of government financial management. Generally, increased availability of comprehensive control, accounting, and audit and reporting. Financial information on current and past performance assists budgetary control and improved economic forecasting, planning, and budgeting. (Diamond and Khemani, 2006)

After the study they came up with the following conclusion; The FMIS should include functionality for preparation of annual budgets. This module should be able to exchange data with separate applications for macroeconomic analysis and projections, and facilitate the top-down and bottom-up approach for the formulation of budget estimates. (Diamond and Khemani, 2006) this finding demonstrates that there is a positive relationship between information technology and effectiveness of the budget

Hence, a separate budget preparation system with an interface to the FMIS should assist in the evaluation of the budget proposals. This system should be able to access and generate data from the previous years. While time series and compatibility of codes and classifications are vital features, the budget planning system should also be supplemented with tools for assessing the actual performance of ongoing projects, evaluations, and cost-benefit analysis for new proposals. (Diamond and Khemani, 2006)

Another study was conducted by Mutuma (2016) on challenges of budget implementation in the public sector: a case of Meru County in Kenya. IFMIS and public sector performance have drawn much attention among scholars and researchers. Gallagher (2007) in his study on building fiscal infrastructure in post-conflict societies found that lack of high level commitment, ineffective project coordination; loose project design and planning were the hindrances. Jack and Khemani (2005) argued that over ten years of implementation, this system has still not been able to fully provide the expected benefits of integrated financial planning, implementation and control of public expenditure due to staff resistance, management commitment, System complexity and capacity and skills of users. The capacity and technical knowhow was found to be low due to lack of training and the hurried implementation of the system.

The controller of budget in her review report for county budget implementation for half year 2013/14 cites slow operationalization of the IFMIS and in FY 2014/2015 Meru County made little progress in embracing the use of IFMIS to process financial transactions and especially in end to end procurement process (Mutuma, 2016) The study adopted a descriptive design and was limited to the public sector with the main emphasis being government employees in Meru County. According to Meru County Government database 2016, there were 80 members of staff who were in management positions in the thirteen (13) departments of Meru County and within the executive arm. A sample was drawn from these targeted 80 employees in the county. Data was collected using self-administered structured questionnaires. In this study, ten (10) County Executive committee members (CECM) ten (10) Chief Officers (CO) and twenty (20) Directors of all the Meru County departments were used to respond to the research instrument thus comprising a sample size of 40. The data was analyzed using multiple regressions and presented using charts, bar graphs, frequency tables (Mutuma, 2016)

The findings were, the variables for the study were institutional constraints, performance in revenue collection, use of IFMIS and effective oversight and audit function. The output of the multiple regressions indicated the significance of each of the predictor variables.

The conclusion of the study was that institutional constraints, use of IFMIS and effective oversight and audit function had significant influence on budget implementation (Mutuma, 2016). The researcher was of the view that a bigger sample selected by the application of stratified random sampling could have produced a more representative result.

#### ***2.3.4 Government regulations/laws and effective management of the budget***

The drafters of the constitution ensured that an adequate legal framework governing budgets and the budgetary process in the devolved units was put in place. This was put in place to ensure an effective management of the budgetary process. But with the adequate legal framework stipulated in the constitution, Kenyan counties have been unable to effectively manage the budget.

Constitution of Kenya 2010, County Governments Act, No. 17 of 2012, Public Finance Management Act, No. 18 of 2012, Intergovernmental Relations Act, and No. 2 of 2012.(National Council for Law Reporting, 2016) Chapter 11 of the constitution section 190 (1) stipulates that parliament shall by legislation ensure that County Governments have adequate support to enable them to perform their functions. (2) County Governments shall operate financial management systems that comply with any requirements prescribed by national legislations.(Uraia Trust, 2012)

Chapter 12 of the constitution section 201 sub-section (a) stipulates that there shall be openness and accountability, including public participation in financial matters. Section 220 (1) stipulates that budgets of the National and County Governments shall contain (a) estimates of revenue and expenditure, differentiating between recurrent and development expenditure.(Uraia Trust, 2012)

The public finance and management Act 2012 section 104 (1) stipulates that subject to the constitution, a county treasury shall monitor, evaluate and oversee the management of public finances and economic affairs of the county government including – (a) Developing and implementing financial and economic policies in the county; (b) Preparing the annual budget for the county and co-coordinating the preparation of estimates of revenue and expenditure of the county government (c) Co-coordinating the implementation of the budget of the county government. (Uraia Trust, 2012)

Kenya's 2010 Constitution and subsequent legislation, such as the County Governments Act and the Public Finance Management Act, require public participation in matters of public finance. While there are numerous references to public participation in these laws, most are vague and contain no further guidance. There is one major exception to this, however, which is the very specific requirement that every county set up a County Budget and Economic Forum (CBEF). The CBEF is mandated by the Public Finance Management (PFM) Act. The Act states that counties shall create these forums in order to “provide a means for consultation by the county government on: preparation of county plans, the County Fiscal Strategy Paper, and the Budget Review and Outlook Paper for the county; and matters relating to budgeting, the economy and financial management at the county level.” (International budget Partnerships, 2016)

### ***2.3.5 Summary of literature***

Budgeting is one of the fundamental decision making processes in organizations. During budget formulation and implementation, the responsible officials determine the portion of the organizations resources to be allocated to each unit. Budgets establish performance goals among other functions.

Pandeya (2015) conducted a study which sought to answer the following question. Does citizen participation in local government decision-making contribute to strengthening

local planning and accountability systems? “An empirical assessment of the stakeholders’ perceptions in Nepal” He came up with the following findings. “Lack of elected representatives, a condition that existed for more than a decade, appeared to be a major stumbling block toward promoting effective participation in Nepal” the researcher established that the study by Pandeya addressed a narrow perspective of the budget and therefore did not adequately establish the factors affecting the effectiveness of the budget; it was also noted that the sample size was not adequate to be a true representative of the population.

In the study conducted by Diamond and Khemani (2006); on Introducing Financial Management and Information Systems in developing countries. They conducted the study after realizing that financial information systems in developing countries continued to fail. This article investigates the reason for almost universal failure to implement and sustain FMISs in developing countries. It starts with a review of the “received wisdom” in implementing these projects, and then analyses problems in its application in the developing country context to identify key factors to explain why FMIS projects have been so problematic. The researcher established that the study by Diamond and Khemani (2006) addressed a narrow perspective of the budget and therefore did not adequately establish the factors affecting the effectiveness of the budget; it was also noted that the study was conducted in different environment from Kenya and therefore could not be adequately applied in the Kenyan perspective.

A study was conducted in the United Kingdom by Muammar et al (2015) on the effect of budget participation and budget adequacy on individual performance with job satisfaction as an intervening variable. He came up with the following findings. “The results of the study indicated that budgetary participation significantly affects individuals’ performance. Budgetary participation affects job satisfaction. Budget adequacy significantly affects budget satisfaction; budget adequacy significantly affects individual performance. Budgetary

participation and budget adequacy significantly effect on performance through job satisfaction” the findings in this study do not address the topic at hand but address similar issues that are also important to the County Governments’ budgetary process.

Moolchand Raghunandan et al (2012) conducted a study where they examined the Behavioral Aspects of Budgeting with particular emphasis on Public Sector/Service Budgets.

The study applied simple random sampling technique to come up with the data for analysis. This was done by administering questionnaires to government employees in various departments. The researchers came up with the following findings; Management accountants must recognize that accounting techniques and human relations are inextricable bound with each other. The behavior aspects of budgeting were significant and the management accountant has a responsibility to minimize the behavioral problems within the accounting systems for control. It follows that management accountants should work more closely with behavioral scientists to gain an understanding of the essential role that human behavior plays in successful budget use. He came to the conclusion that Budgeting is a complex process, and the best results can only be achieved when a mix of factors is taken into account. The personalities of the participants, the type of budget being set (revenue or expense), the approach to performance reporting and the degree of uncertainty present are all important factors that cannot be overlooked.

The researcher was of the view that simple random sampling technique that was applied in identifying the sample was not the appropriate method; purposive sampling method could have produced a sample that would have been a better true representative of the population.

A study was conducted by Apiyo and Mburu (2014) to explore the factors that affect procurement planning in County Governments in Kenya. This study concluded that there was a positive relationship between staff competence and the procurement planning.



The study adopted a descriptive case study design; which enabled the researcher to keep track of the research activities and helped to ensure that the ultimate research objectives were achieved. This method was preferred because it allowed for in-depth study of the case. In this study, a census method was adopted where all the 103 staff in procurement department was issued with questionnaires. From the findings, a unit increase in staff competence will lead to a 0.252 increase in the procurement planning. It also concluded that, there was a positive relationship between management support and the procurement planning. From the findings, a unit increase in management support led to a 0.786 increase in the procurement planning.

The researcher was of the view that the census technique that was applied in identifying the sample was not the appropriate method; purposive sampling method could have produced a sample that would have been a true representative of the population and that which would have taken a shorter period to be collected.

### ***2.3.6 Research gap***

The review carried out above clearly demonstrated that the impact of public participation, staff competency, adoption of information technology and the application of government regulations on the effective management of the budget in county governments in Kenya had not been exhaustive enough particularly due to the fact that devolution was only introduced in Kenya three years ago (2013) after the adoption of the current constitution. It is therefore this gap that the current study sought to address with the hope that the views and findings of the study will be incorporated in the county budget management process to ensure the process is more beneficial to both the county government and the citizens in the various counties in the Kenya.

The researcher further noted that there was no specific study conducted on the factors affecting the effective management of budgets not only in Kenya but also in other developing

countries owing to the fact that devolution was a new concept in Africa. The studies in the literature review were mainly confined to foreign countries and not much evidence was availed on the effective management of budgets in Kenya or even in the devolved units. In spite of the several attempts at reforming the budgetary process including implementation and control, the county budget in Kenya remained an unsatisfactory instrument of achieving county policies because of poor budget management.

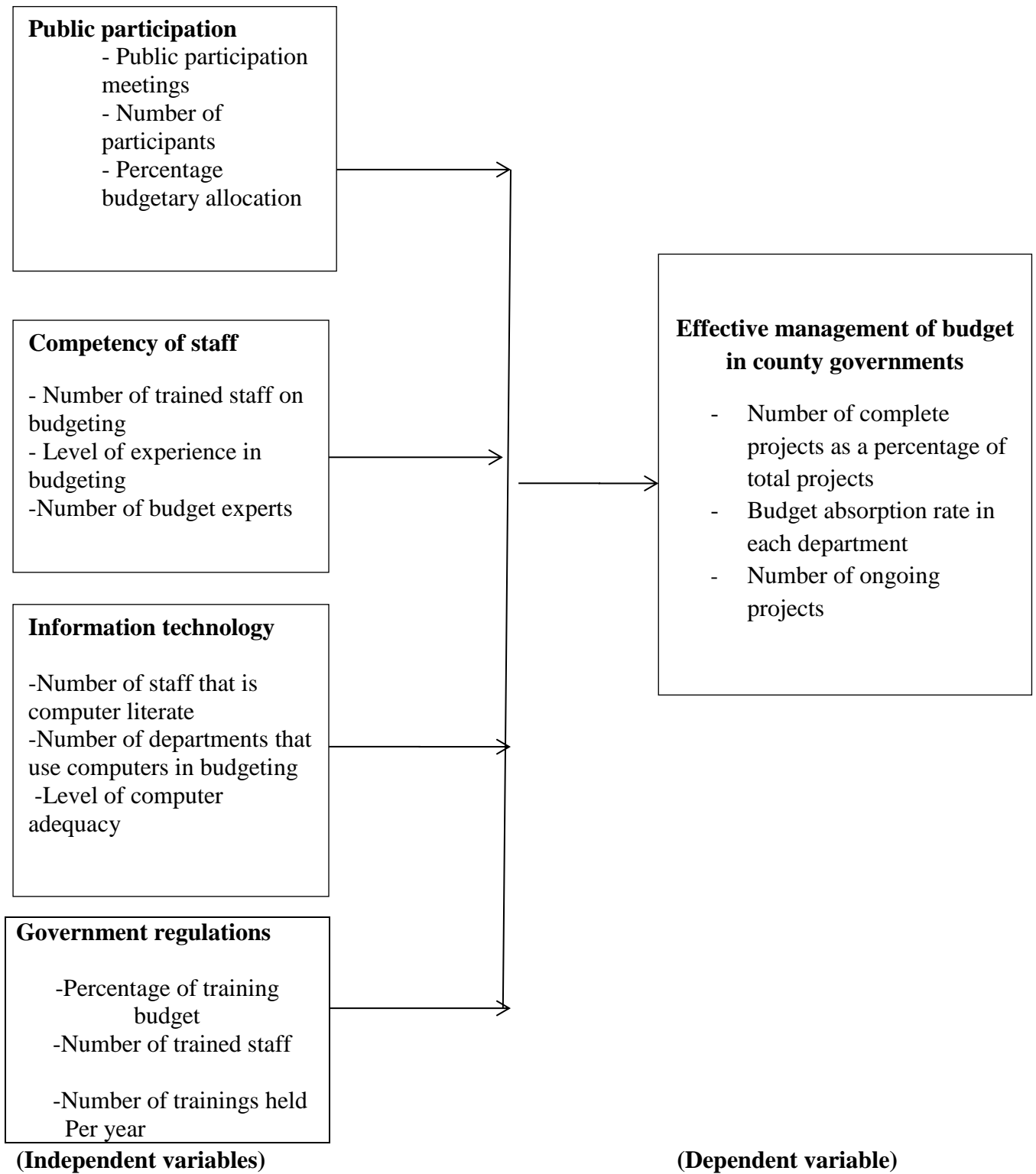
The budgeting process in the Government Ministries and county governments in Kenya continued to be with a lot of challenges therefore posing a difficulty in achieving the anticipated development. In the 2016/2017 budget and as at 18<sup>th</sup> January 2017, county governments had collectively accumulated cash balances in various CBK accounts amounting to KSH 33 billion which was equivalent to 11.8 percent of their equitable share allocation as at 31<sup>st</sup> December 2016. Such amount of funds returned affected project implementation process as well as realization of goals (National Treasury, 2017)

It was with these shortcomings in mind that the researcher sought to carry out a study that would establish the factors affecting the effective management of the budget in county governments in Kenya. This decision was also informed by the fact that budgeting in County's was at its infancy stage because it was a new concept. The study would also after establishing the factors affecting the effective management of budgets in County Governments make recommendations on how to achieve effective management on the same.

#### **2.4 Conceptual framework**

Conceptual Framework as outlined in figure 1; the independent variables included public participation, competency of staff, information technology and government regulations while dependent variable was the effective management of budgets in the County Government. It was presumed that the independent variable affected effective management of budgets in the county governments in Kenya.

**FIGURE 1**  
**Study Variables**



(Source: Researcher, 2017)

**TABLE 1****Operationalization of Variables**

<b>CATEGORY</b>	<b>VARIABLE</b>	<b>MEASUREME NT SCALE</b>	<b>MEASUREMENT</b>
Independent variable	Public participation	Ordinal	-Number of public participation meetings held per year -Number of participants per meeting  -Percentage budgetary allocation for capacity building on public participation per year
Independent variable	Staff competency	Ordinal	- Percentage of staff supported in continuous education on budgeting  -Level of employee experience on budgetary issues in years  - Level of education of staff (certificate, diploma, degree, masters, PHD)  - Percentage of the budgetary allocation for funding continuous education for staff in each department-budgeting -number of budget experts
Independent variable	Information technology	Ordinal	-level of computer adequacy -Number of staff who are computer literate - number of seminars on budget management -Number of departments aided by computers in budgeting -Percentage budgetary allocation for information technology
Independent variable	Government regulations/ laws	Ordinal	-Percentage training budget on government regulations per year -Number of trained staff -Number of trainings held in the year
Dependent variable	Effective management of the budget	Ordinal	-Number of complete projects as a percentage of the total in the year -Budget absorption rate for each department -Number of ongoing projects

**(Source: Researcher, 2017)**

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter sets out various stages and phases that were followed in conducting the study. It is a chapter that discussed the methods that were applied in carrying out the study and included the following sub-topics; research design, target population, Sample and sampling procedure, instrumentation, Instrument validity, Instrument reliability, data collection procedure and data processing and analysis.

#### **3.2 Research design**

Research design refers to the method used to carry out a research. The study used descriptive research design method. It is a process of collecting data in order to test hypothesis or to answer questions concerning the current status of the subjects in the study (Olive M. Mugenda & Abel G.Mugenda, 2003).

Olive M. Mugenda & Abel G.Mugenda (2003) points out that descriptive research methods are only restricted to fact finding but may often result in the formulation of important principles of knowledge and solutions of significant problems.

The researcher preferred this method because it allowed for in-depth study of the case that would lead to establishing a solution to the problem at hand. It is a technique that utilizes quantitative techniques to establish relationship between independent and dependent variables. It is also the best method to analyze cross sectional data.

#### **3.3 Target population**

According to Kombo et al (2006) as cited by (Apiyo and Mburu,2014) a population refers to the entire group of persons or elements that have at least one thing in common. Target population is defined as all members of a real or hypothetical set of people, events or objects to which a study wishes to generalize the results of the research study (Bryman and Bell,

2007) as cited in Apiyo and Mburu,2014). The population comprised of county government employees working in the county governments in Kenya. The target population was senior employees working in departments of Makueni, Narok, Nairobi and Kakamega County Governments where a sample of 96 was drawn and the unit of analysis was the four county governments.

**TABLE 2**  
**County Government Departments**

<b>NO</b>	<b>DEPARTMENT</b>	<b>CADRE OF EMPLOYEE ADMINISTERED WITH QUESTIONNAIRE</b>	<b>NUMBER PER COUNTY</b>	<b>TOTAL-FOUR COUNTIES</b>
1.	Water, irrigation and environmental services	Chief officer	1	4
		Director	1	4
2.	Agriculture, livestock and fisheries	Chief officer	1	4
		director	1	4
3.	Devolution and public service	Chief officer	1	4
		Director	1	4
4.	Education and ICT	Chief officer	1	4
		Director	1	4
5.	Finance and social economic planning	Chief officer	1	4
		Director - finance	1	4
		Director - procurement	1	4
		Director - Internal audit	1	4
		Director-Budget and planning	1	4
6.	Health services	Chief officer	1	4
		Director	1	4
7.	Land, mining and physical planning	Chief officer	1	4
		Director	1	4
8.	Roads, transport and infrastructure	Chief officer	1	4
		Director	1	4
9.	Trade, industry, tourism and co-operatives	Chief officer	1	4
		director	1	4
10.	Youth, gender, sports and social services	Chief officer	1	4
		Director	1	4
11	County assembly	Administrative officer	1	4
	<b>TOTAL</b>		<b>24</b>	<b>96</b>

(Source: Makueni County, 2017)

### **3.4 Sample and sampling procedure**

Sampling is a means of selecting a given number of subjects from a defined population as representative of that population. Orodho and Kombo (2002) define sampling as the procedure a researcher uses to gather people, places or things to study. Any statements made about the sample should also be true of the population. It is however agreed that the larger the sample the smaller the sampling error.

The sample consisted of 96 employees working in the departments of Makueni, Narok, Nairobi and Kakamega Counties and the study applied stratified random sampling technique to select the sample. The researcher considered the sample size to be adequate because it was selected from all the departments of the county and also in consideration of the relevant staff. This is a sampling technique that allows the researcher to select subjects in such a way that the existing groups in the population are more or less reproduced in the sample. This means the sample will consist of two or more sub-groups with respect to the objectives of the study. (Olive M. Mugenda & Abel G.Mugenda, 2003). This method was appropriate because the researcher knew the specific cadres of staff who are involved in the budgetary process.

### **3.5 Research Instrument**

Questionnaires were used for the study. Structured questionnaires are more efficient in that they require less time, they are less expensive and permits collection of data from a wide population (Orodho, 2005). The researcher used questionnaires as the main tool for collecting data. The selection of this tool was guided by the nature of the data to be collected, the time available as well as the objectives of the study.

Such information could only be best collected through the use of structured questionnaires. Questionnaires will be used since the study is concerned with variables that

would not be directly observed such as views, and opinions. The target population is also largely literate and is unlikely to have difficulties responding to questionnaires.

### **3.6 Instrument validity**

Validity is the degree to which an instrument measures what it purports to measure (Borg & Gall, 1996) as cited by (Musyoka, 2015). To determine validity of an instrument, a pretest was carried out in Machakos County which helped the researcher to evaluate the validity, clarity of the questionnaires, suitability of language used in the instrument and feasibility of study. The questionnaire was structured in such a way that it captured respondents' profile and data pertinent to study objectives. The researcher also sought for Expert advice from the supervisors who assisted in making corrections and modifications on the items in the instrument.

### **3.7 Instrument reliability**

To be reliable an instrument must be consistent in such a way that it was considered stable and can be depended on to yield similar test results under similar circumstances (Borg & Gall, 1996) as cited by (Musyoka, 2015). The researcher computed a reliability coefficient to indicate how reliable the data and questionnaire were. This was done by conducting several tests repeatedly during the pilot study to try and establish the consistency of results.

According to Field (2005) a Cronbach's  $\alpha > 0.7$  implies the instrument is relatively good measurement tool therefore reliable. After the pilot test, the results posted a Cronbach 's Alpha of (0.9343 ) on all independent variables and (0.7349) on dependent variable showing high internal consistency of the instrument and therefore considered reliable for the analysis.

### **3.8 Data collection procedure**

The study used primary data. Prior to data collection, requisite permission and consent was sought from both from the school of business and public management (KCAU) and the County Governments of Makeni, Narok, Nairobi and Kakamega from where respondents



were drawn. The questionnaires were then administered to the respondents through the respective County Departments heads and collected after approximately five working days which the researcher deemed to be adequate period for filling.

### **3.9 Data processing and analysis**

The researcher collected data through administering questionnaires to senior county government officials in each department. The collected data was first cleaned and edited as a measure of dealing with extreme outliers. Thereafter, the researcher applied descriptive statistics to establish the influence of the independent variables on effective management of the budget in county governments. The descriptive statistics here was the application of measures of central tendency (mean, mode and median), measures of variability (range, variance and standard deviation) percentages, frequency distribution tables, standard deviations and also data was presented in the form of tables, bar charts and pie charts. Correlation coefficient, chi square test, regression analysis was also calculated to establish the nature of relationships between the dependent and the independent variables. The data was also tested whether it meets the assumptions of the classical linear regression model.

Data was then analyzed using STATA Version 13 software and findings obtained were summarized in frequencies and percentages and presented in tables and charts. Both descriptive and regression analysis were performed. For background information, descriptive statistical analysis was used and analyzed to provide a profile of respondents. Quantitative analysis was done based on Pearson correlation coefficient ( $r$ ) to determine the level of significance. A correlation is significant if the probability value is below 0.05 ( $P \leq 0.05$ ). The study used multiple regression analysis to determine the impact of the independent variables on effective management of the budget in county governments in Kenya. Multiple regression analysis was applied to determine the impact of the four independent variables on the dependent variable which was guided by the following regression model:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + e$$

### **3.9.1 Diagnostic Tests**

**Test for data outliers.** The researcher ran the data in STATA and commanded for the generation of a BOX PLOT. The box plot was applied to identify if there were variables in the data set that were outside the normal range. All variables outside the normal range were removed from the analysis because they could have led to biased estimates.

**Test for the normality of the error term.** This was determined by considering the differences between the observed dependent variable and the estimated dependent variable. After the data was input in to STATA software, the researcher commanded for the generation of a histogram/density PLOT. The histogram was normally distributed demonstrating normality of errors. Shapiro Wilk test for normality was also used to test the normality of residuals. Shapiro-Wilk test is an non graphical test whereby if the test results are insignificant (above 0.05) it implies that data being used follows a normal distribution. However, when the p-value for the variables is less or equal to 0.05 (significant) then it implies that data is not good for OLS analysis.

**Test for Heteroscedasticity.** If the errors do not have a constant variance, we say that they are heteroscedastic and leads to biased Ordinary Least Square (OLS) results. To detect heteroscedasticity, visual inspection technique was applied. This was done through the generation of RVFPLOT where the residuals were plotted against the fitted values. The RVFPLOT did not demonstrate any pattern which was an indication of no heteroscedasticity. To also minimize the Heteroscedasticity problem, residuals were subjected to both graphical non-graphical Breusch-Pagan tests after regression test. The Breusch Pagan tests the null hypothesis that error variances are constant throughout the observations unless the results prove otherwise. After Conducting the Breusch-Pagan test, the result didn't demonstrate the presence of heteroscedasticity as indicated by the (P-value 0.4529) which was above 0.05

which is the rule of thumb. Based on this result, the null hypothesis was accepted and the alternative hypothesis that the variance was not homogenous was rejected.

***Test for Multycollinearity.*** This is a problem that occurs when independent variables are very highly correlated with each other. Correlation between the independent variables should be less than 0.8. The method that is usually applied to measure the extent of multycollinearity is to look at the matrix of correlations between the individual variables. According to Gujarat (2003), explanatory variables should not exhibit high correlation with each other because that may cause unrealistic results during regression. In order to avoid that problem, explanatory variables will be tested for Multycollinearity using pairwise correlation technique.

The VIF PLOT was also used to detect multycollinearity. A mean VIF of 1.36 was demonstrated which was below the rule of thumb that variance inflation Factors shouldn't exceed 10 demonstrating that there was no multycollinearity in the independent variables.

***Calculations of summary statistics.*** After importing the data in to STATA, summary statistics were generated; which included coefficients of the independent variables, standard errors, t-values, number of observations, R-squared, Adj R-squared, means and standard deviations. The figures generated were fitted in the model below as shown in chapter 4.

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + e$$

Y = Dependent variable (Effective management of budget in county governments)

X1 = Independent variable 1 (Public participation)

X2 = Independent variable 2 (Competency of staff)

X3 = Independent variable 3 (Information technology)

X4 = Independent variable 4 (Government regulations)

$\beta_0$  = Constant

$\beta_1$  = Coefficient of X1

$\beta_2$  = Coefficient of X2

$\beta_3$  = Coefficient of X3

$\beta_4$  = Coefficient of X4

e = Error term

## CHAPTER FOUR

### DATA ANALYSIS, FINDINGS AND DISCUSSIONS

#### 4.1 Introduction

This chapter demonstrated an analysis of the results obtained from the field. The results covered the general information of the respondents and the four research objectives. After the field work data was edited and coded, tested whether it contained outliers and thereafter analyzed using STATA Version 13 software. Descriptive statistics were calculated for the data collected and also Regression analysis was applied to test the relationship between variables to ascertain the predictive power of the independent variables on the dependent variable.

#### 4.2 Response rate

Ninety six questionnaires were distributed to the respondents (county government staff) in the four county governments (Makueni, Narok, Kakamega and Nairobi) and the filled questionnaires were collected after a period of two weeks. The response rate was presented in table below:

**TABLE 3**  
**Response Rate**

<b>Response</b>	<b>Respondents</b>	<b>Percentage</b>
Returned	77	80
Not Returned	19	20
Total Distributed	96	100

**Source: Researcher 2017**

Results in table 3 above reveal 80 percent response rate. The response rate was attributed to the fact that the researcher works in one of the counties and had friends working in the other counties under study therefore it wasn't hard to administer questionnaires to the respondents. This also made it possible to easily obtain answers from the majority of the respondents.

### 4.3 Demographic information

In this section, the respondents' background information was presented. It covered age, gender, education level, nature of employment and work experience in their respective county departments. While this information may not be used in the analysis, it helps the study to ascertain whether data obtained was normally distributed. The results obtained were presented in table 4 below.

**TABLE 4**  
**Demographic Information**

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Frequency</b>	<b>Percent %</b>
<b>1</b>	<b>Gender</b>	Male	53	69
		Female	24	31
		<b>Total</b>	<b>77</b>	<b>100</b>
<b>2</b>	<b>Age of Respondents</b>	20-30	10	13
		31-40	22	29
		41-50	32	42
		50 and above	13	16
		<b>Total</b>	<b>77</b>	<b>100</b>
<b>3</b>	<b>Education</b>	Diploma	1	2
		Undergraduate	51	66
		Post Graduate	25	32
		<b>Total</b>	<b>77</b>	<b>100</b>
<b>4</b>	<b>Nature of employment</b>	Permanent	33	43
		Contract	44	57
		Casual	0	0
		<b>Total</b>	<b>77</b>	<b>100</b>
<b>5</b>	<b>Experience</b>	0-5	17	22
		6-10	24	31
		11-15	21	27
		15 and above	15	19
		<b>Total</b>	<b>77</b>	<b>100</b>

**Source: Researcher 2017**

On demographic information, results in Table 4 revealed that (69%) of the respondents were male while (31%) were female which means that majority of the people employed by the counties as heads of departments were male. In addition, majority of the managers were between the age of 41-50 years bracket at (42%) followed by the 31-40 years bracket at (29%), 50 years and above at 16% whereas 13% were in the 20-30 bracket. This meant that, majority of the managers were in the middle level age bracket. With regard to their education qualification, the results showed that 66% had an undergraduate degree, 32% had a postgraduate degree whereas 2% had a diploma level qualification. This signified that majority of the respondents were well educated based on their responsibilities. On the mode of employment, 57 % were on contract while 43 % were permanent. On the respondents' level of job experience, it was revealed that (31%) of respondents had over between 6-10 years' experience (27%) were in the (11-15 years) bracket, 22 % were in (0-5) years bracket whereas 19% had over fifteen years' experience.

#### **4.4 Study variables**

This section presented the results obtained for every variable involved in the study (public participation, staff competency, government regulations/laws and information technology). The results were based on the five point Likert scale where 1= strongly disagree, 2= disagree, 3= neither agree nor disagree, 4 = agree and 5 = strongly agree.

##### ***4.4.1 Public participation***

The study sought to establish the impact of public participation on effective management of the budget in county governments in Kenya. Five statements were presented to the respondents and their views sampled based on five point Likert scale. The results obtained were summarized and presented in the table below.

**TABLE 5****Public Participation Response Analysis**

<b>Question</b>	<b>Public participation</b>		<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>	<b>T</b>
<b>1</b>	Public participation enhances local accountability systems in county governments	F	1	10	16	35	15	<b>77</b>
		%	1	13	21	46	19	<b>100</b>
<b>2</b>	Members of the public are informed about project deliverables in public participation meetings	F	0	10	18	32	17	<b>77</b>
		%	0	13	23	42	22	<b>100</b>
<b>3</b>	Citizen participation in the budgeting process has been encouraged by the top management to strengthen and empower citizens in the county	F	0	7	16	28	26	<b>77</b>
		%	0	9	21	36	34	<b>100</b>
<b>4</b>	Citizen participation has been adequately supported through funding by the county government to strengthen local planning in the county	F	0	7	18	36	16	<b>77</b>
		%	0	7	23	48	21	<b>100</b>
<b>5</b>	Citizen participation in county government has led to improved public service delivery and increased trust of citizens in government	F	3	11	16	31	16	<b>77</b>
		%	4	14	21	40	21	<b>100</b>
	<b>Total</b>	<b>F</b>	<b>4</b>	<b>45</b>	<b>84</b>	<b>162</b>	<b>90</b>	<b>385</b>
	<b>Total percentage for the 5 statements</b>	<b>%</b>	<b>1</b>	<b>12</b>	<b>22</b>	<b>42</b>	<b>23</b>	<b>100</b>

**Source: Researcher 2017**

From table 5 above, a summary of the five statements that were administered to measure the impact of public participation on effective management of budget in county governments and their responses were tabulated. The findings indicated that 42% and 23% of the respondents agreed and strongly agreed respectively that public participation had an impact on effective management of the budget in county governments in Kenya. These comprised of 65% of all the respondents who participated in the study which was a strong indicator that public participation has an impact on effective management of the budget in county governments in Kenya. An examination of statements of the variable public participation in the counties based on the mean and standard deviation are summarized in table 6 below.



**TABLE 6****Public Participation Mean and S.D analysis**

<b>Statement</b>		<b>OBS</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>1</b>	Public participation enhances local accountability systems in county governments	<b>77</b>	3.688312	0.9768335
<b>2</b>	Members of the public are informed about project deliverables in public participation meetings	<b>77</b>	3.727273	0.9547163
<b>3</b>	Citizen participation in the budgeting process has been encouraged by the top management to strengthens and empower citizens in the county	<b>77</b>	3.948052	0.9582894
<b>4</b>	Citizen participation has been adequately supported through funding by the county government to strengthen local planning in the county	<b>77</b>	3.792208	0.8786602
<b>5</b>	Citizen participation has been adequately supported through funding by the county government to strengthen local planning in the county	<b>77</b>	3.597403	1.09135

**Source: Researcher 2017**

From Table 6 above, it was demonstrated that the mean score for the five statements set to measure the impact of public participation on the effective management of the budget ranged between 3.597403 and 3.948052 with the third statement ‘Citizen participation in the budgeting process has been encouraged by the top management to strengthens and empower citizens in the county’ contributing the highest mean of (**mean score** =3.948052, **SD**=0.9582894) while ‘Citizen participation has been adequately supported through funding by the county government to strengthen local planning in the county posting the lowest score (**mean score** =3.597403, **SD**= 1.09135). This implied that public participation had been fairly embraced in the counties but policies should be put in place to improve on its application because it was demonstrated that it had a positive and significant impact on effective management of the budget.

The results obtained were similar to the findings of Kelly (2007) who came up with the following finding in his study “there were various influences of stakeholder participation on the public budgeting process. Some of these included the efficiency of the process, the effectiveness of the process and equity in the allocation of funds”

#### 4.4.2 Staff Competency

The study sought to establish the impact of staff competency on effective management of the budget in county governments in Kenya. Five statements were presented to the respondents and their views sampled based on five point Likert scale. The results obtained were summarized and presented in the table below.

**TABLE 7**  
**Staff Competency Response Analysis**

Question	Staff Competency		SD	D	N	A	SA	T
1	The budget staffs working with the county government have the requisite qualifications and experience to perform their roles in management of the budge	F	3	6	17	36	15	77
		%	4	8	22	47	20	100
2	The budget process is a technical process that requires people with expertise and experience to execute effectively	F	1	10	11	38	17	77
		%	1	13	14	49	22	100
3	The county government has invested heavily on staff training to enhance budget skills to ensure effective management of the budget	F	1	8	15	27	26	77
		%	1	10	20	35	34	100
4	The county government has put in place a policy that all staff should be capacity built through trainings to enhance their budget skills	F	1	4	17	40	15	77
		%	1	5	22	52	20	100
5	The county government has an effective system of staff recruitment and selection in place to ensure only the best applicants are selected for the job	F	0	6	14	40	17	77
		%	0	8	18	52	22	100
	<b>Total</b>	<b>F</b>	<b>5</b>	<b>34</b>	<b>74</b>	<b>181</b>	<b>90</b>	<b>385</b>
	<b>Total percentage for the 5 statements</b>	<b>%</b>	<b>1</b>	<b>9</b>	<b>19</b>	<b>47</b>	<b>23</b>	<b>100</b>

Source: Researcher 2017

From table 7 above, a summary of the five statements that were administered to measure the impact of staff competency on effective management of budget in county governments and their responses were tabulated. The findings indicated that 47% and 23% of the respondents agreed and strongly agreed respectively that staff competency had an impact on effective management of the budget in county governments in Kenya. These comprised of 70% of all the respondents who participated in the study which was a strong indicator that staff competency has an impact on effective management of the budget in county governments in Kenya. An examination of statements of the variable staff competency in the selected counties based on the mean and standard deviation were summarized in table 8 below.

**TABLE 8**  
**Staff Competency Mean and S.D analysis**

<b>Statement</b>	<b>OBS</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>1</b> The budget staffs working with the county government have the requisite qualifications and experience to perform their roles in management of the budget	<b>77</b>	3.701299	1.000854
<b>2</b> The budget process is a technical process that requires people with expertise and experience to execute effectively	<b>77</b>	3.779221	0.9817194
<b>3</b> The county government has invested heavily on staff training to enhance budget skills to ensure effective management of the budget.	<b>77</b>	3.896104	1.033446
<b>4</b> The county government has put in place a policy that all staff should be capacity built through trainings to enhance their budget skills	<b>77</b>	3.831169	0.8491884
<b>5</b> The county government has an effective system of staff recruitment and selection in place to ensure only the best applicants are selected for the job	<b>77</b>	3.883117	0.8425217

**Source: Researcher 2017**

From Table 8 above, it was demonstrated that the mean score for the five statements set to measure the impact of staff competency on effective management of the budget ranged between 3.701299 and 3.883117 with the statement ‘The county government has an effective system of staff recruitment and selection in place to ensure only the best applicants are selected for the job’ contributing the highest mean (**mean score** =3.883117, **SD**=0.8425217) while ‘The budget staffs working with the county government have the requisite qualifications and experience to perform their roles in management of the budget posting the lowest score (**mean score** =3.701299, **SD**= 1.000854). This implied that for effective management of the budget to be achieved, staff competency should be put in to consideration while hiring staff because a positive and significant relationship was demonstrated.

The findings were in line with the findings of Aketch and Karanja (2013) as cited in Apiyo and Mburu (2014) who concluded in there study that the budget process was a technical process that required people with expertise and experience to execute. It would first involve setting realistic goals, planning on how to execute the goals and also conducting budgetary review. This process required a lot of accuracy in estimations and serious accountability at execution. These states of affairs clearly demonstrated that highly trained personnel were required to execute the budget.

#### ***4.4.3 Information technology***

The study sought to establish the impact of information technology on effective management of the budget in selected five county governments in Kenya. Five statements were presented to the respondents and their views sampled based on five point Likert scale. The results obtained were summarized and presented in the table below.

**TABLE 9****Information Technology Response Analysis**

<b>Question</b>	<b>Information technology</b>		<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>	<b>T</b>
<b>1</b>	The county government has invested in computerization to be able to adopt financial management and information systems in budget formulation, execution and accounting	F	0	11	19	36	11	<b>77</b>
		%	0	14	25	47	14	<b>100</b>
<b>2</b>	County Departments have enhanced budgetary support in training staff on the application of financial management and information systems	F	2	14	19	33	9	<b>77</b>
		%	1	18	25	43	12	<b>100</b>
<b>3</b>	The county government has put in place a policy that all staff should be capacity built through trainings to enhance their IT skills	F	1	10	18	37	11	<b>77</b>
		%	1	13	23	48	14	<b>100</b>
<b>4</b>	The National Treasury, IFMIS department, provides adequate technical support to enable effective use of IFMIS system in the county	F	1	8	20	36	12	<b>77</b>
		%	1	10	26	47	15	<b>100</b>
<b>5</b>	The county government prepares and executes the budget by utilizing the IFMIS system	F	5	12	9	30	21	<b>77</b>
		%	7	16	12	39	27	<b>100</b>
	<b>Total</b>	<b>F</b>	<b>9</b>	<b>55</b>	<b>85</b>	<b>172</b>	<b>64</b>	<b>385</b>
	<b>Total percentage for the 5 statements</b>	<b>%</b>	<b>2</b>	<b>14</b>	<b>22</b>	<b>45</b>	<b>17</b>	<b>100</b>

**Source: Researcher 2017**

From table 9 above, a summary of the five statements that were administered to measure the impact of information technology on effective management of budget in county governments and their responses were tabulated. The findings indicated that 45% and 17% of the respondents agreed and strongly agreed respectively that information technology had an impact on effective management of the budget in county governments in Kenya. These comprised of 62% of all the respondents who participated in the study which was a strong indicator that information technology has an impact on effective management of the budget in county governments in Kenya. An examination of statements of the variable information

technology in the selected counties based on the mean and standard deviation were summarized in table 10.

**TABLE 10**  
**Information Technology Mean and S.D analysis**

Statement		OBS	Mean	Std. Deviation
1	The county government has invested in computerization to be able to adopt financial management and information systems in budget formulation, execution and accounting	77	3.61039	0.9054781
2	County Departments have enhanced budgetary support in training staff on the application of financial management and information systems	77	3.428571	1.005623
3	The county government has put in place a policy that all staff should be capacity built through trainings to enhance their IT skills	77	3.61039	0.934089
4	The National Treasury, IFMIS department, provides adequate technical support to enable effective use of IFMIS system in the county	77	3.649351	0.9143049
5	The county government prepares and executes the budget by utilizing the IFMIS system	77	3.649351	1.222231

**Source: Researcher 2017**

From Table 10 above, it was demonstrated that the mean score for the five statements set to measure the impact of information technology on effective management of budget ranged between 3.61039 and 3.649351 with the statement ‘The county government prepares and executes the budget by utilizing the IFMIS system’ recording the highest mean and standard deviation of (**mean** =3.649351, **SD**= 1.222231) while ‘The county government has invested in computerization to be able to adopt financial management and information systems in budget formulation, execution and accounting having the lowest score (**mean score** =3.61039, **SD**= 0.9054781). This implied that county governments have embraced

information technology in most of their functions including budgeting. However there was still room for improvement since the score according to the mean was moderate.

The findings obtained were similar to the findings of Mutuma (2016) who from his research concluded that institutional constraints, use of IFMIS and effective oversight and audit function had significant influence on budget implementation.

#### **4.4.4 Government regulations/laws**

The study sought to establish the impact of government regulations/laws on effective management of the budget in selected five county governments in Kenya. Five statements were presented to the respondents and their views sampled based on five point Likert scale.

The results obtained were summarized and presented in the table below.

**TABLE 11**  
**Government Regulations/laws Response Analysis**

<b>Question</b>	<b>Government regulations/laws</b>		<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>	<b>T</b>
<b>1</b>	The county government manages the budget according to the constitution and the supporting regulations	F	2	11	15	33	16	<b>77</b>
		%	1	14	20	43	21	<b>100</b>
<b>2</b>	The county government makes a provision in the budget for training staff on the application of the law in the budget making process.	F	1	10	14	30	22	<b>77</b>
		%	1	13	18	39	29	<b>100</b>
<b>3</b>	The county government ensures that each officer engaged in the budgeting process participates in trainings on effective management of the budget and in accordance to the law.	F	1	10	14	25	27	<b>77</b>
		%	1	13	18	33	35	<b>100</b>
<b>4</b>	The budgeting staffs understand the PFM Regulations relating to county government budgeting	F	0	6	17	35	19	<b>77</b>
		%	0	8	22	46	25	<b>100</b>
<b>5</b>	The top management in the county government supports and understands the importance of effective management of the budget and in accordance with the law	F	1	11	12	34	19	<b>77</b>
		%	1	14	16	44	25	<b>100</b>
	<b>Total</b>	<b>F</b>	<b>5</b>	<b>48</b>	<b>72</b>	<b>157</b>	<b>103</b>	<b>385</b>
	<b>Total percentage for the 5 statements</b>	<b>%</b>	<b>1</b>	<b>13</b>	<b>19</b>	<b>41</b>	<b>27</b>	<b>100</b>

**Source: Researcher 2017**

From table 11 above, a summary of the five statements that were administered to measure the impact of government regulations/laws on effective management of budget in county governments and their responses were tabulated. The findings indicated that 41% and 27% of the respondents agreed and strongly agreed respectively that government regulations/laws had an impact on effective management of the budget in county governments in Kenya. These comprised of 68% of all the respondents who participated in the study which was a strong indicator that government regulations/laws have an impact on effective management of the budget in county governments in Kenya. An examination of statements of the variable government regulations/laws in the selected counties based on the mean and standard deviation were summarized in table 12 below.

**TABLE 12**

**Government Regulations/laws Mean and S.D analysis**

<b>Statement</b>	<b>OBS</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>1</b> The county government manages the budget according to the constitution and the supporting regulations	<b>77</b>	3.649351	1.048385
<b>2</b> The county government makes a provision in the budget for training staff on the application of the law in the budget making process.	<b>77</b>	3.805195	1.039217
<b>3</b> The county government ensures that each officer engaged in the budgeting process participates in trainings on effective management of the budget and in accordance to the law.	<b>77</b>	3.87013	1.080334
<b>4</b> The budgeting staffs understand the PFM Regulations relating to county government budgeting	<b>77</b>	3.87013	0.8788547
<b>5</b> The top management in the county government supports and understands the importance of effective management of the budget and in accordance with the law	<b>77</b>	3.766234	1.024645

**Source: Researcher 2017**



From Table 12 above, it was demonstrated that the mean score for the five statements set to measure the impact of government regulations on effective management of the budget ranged between 3.649351 and 3.87013 with the statement ‘The county government ensures that each officer engaged in the budgeting process participates in trainings on effective management of the budget and in accordance to the law. ’ contributing the highest mean (**mean score** =3.87013, **SD**=1.080334 while ‘the county government manages the budget according to the constitution and the supporting regulations recording the lowest score (**mean score** =3.649351, **SD** = 1.048385). This Implies that majority of the staff are conversant and adhere to government regulations with regard to budgeting and the budgeting process and also other financial management matters.

The results obtained were in line with the findings of the International budget Partnerships (2016) who after realizing from there study the importance of government regulations came up with an Act to guide budgeting. The Act stated that counties shall create forums in order to “provide a means for consultation by the county government on: preparation of county plans, the County Fiscal Strategy Paper, and the Budget Review and Outlook Paper for the county; and matters relating to budgeting, the economy and financial management at the county level.

#### ***4.4.5 Effective management of the budget***

The study sought to measure effective management of the budget in county governments in Kenya. Five statements were presented to the respondents based five point Likert scale and results obtained were presented in the table below.

**TABLE 13****Effective Management Response Analysis**

<b>Question</b>	<b>Effective management of the budget</b>		<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>	<b>T</b>
<b>1</b>	The county government has been attaining the highest budget absorption rate	F	1	9	17	32	18	<b>77</b>
		%	1	12	22	42	23	<b>100</b>
<b>2</b>	The county government attains completion of all projects planned in each financial year within the stipulated time frame.	F	0	6	16	41	14	<b>77</b>
		%	0	8	21	53	18	<b>100</b>
<b>3</b>	The county government makes a follow up on the incomplete projects at the end of the financial year	F	0	6	15	24	32	<b>77</b>
		%	0	8	20	31	42	<b>100</b>
<b>4</b>	The top management in the county fully supports the adoption of an effective budget management policy	F	2	4	16	37	18	<b>77</b>
		%	1	5	21	48	23	<b>100</b>
<b>5</b>	Effective budget management has been fully achieved and has led to improved development in the county	F	2	10	12	33	20	<b>77</b>
		%	1	13	16	43	26	<b>100</b>
	<b>Total</b>	<b>F</b>	<b>5</b>	<b>35</b>	<b>76</b>	<b>167</b>	<b>102</b>	<b>385</b>
	<b>Total percentage for the 5 statements</b>	<b>%</b>	<b>1</b>	<b>9</b>	<b>20</b>	<b>43</b>	<b>27</b>	<b>100</b>

**Source: Researcher 2017**

From table 13 above, a summary of the five statements that were administered to measure effective management of budget in county governments and their responses were tabulated. The findings indicated that 43% and 27% of the respondents agreed and strongly agreed respectively that effective management of the budget in county governments in Kenya was achieved to a reasonable level. These comprised of 70% of all the respondents who participated in the study which was a strong indicator that effective management of the budget in county governments was impacted by the independent variables as demonstrated above. An examination of statements of the variable effective management of budget in the selected counties based on the mean and standard deviation were summarized in table 14 below.

**TABLE 14****Effective Management of the Budget Mean and S.D analysis**

<b>Statement</b>		<b>OBS</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>1</b>	The county government has been attaining the highest budget absorption rate	<b>77</b>	3.74026	0.9921083
<b>2</b>	The county government attains completion of all projects planned in each financial year within the stipulated time frame.	<b>77</b>	3.818182	0.8228204
<b>3</b>	The county government makes a follow up on the incomplete projects at the end of the financial year	<b>77</b>	4.064935	0.9643332
<b>4</b>	The top management in the county fully supports the adoption of an effective budget management policy	<b>77</b>	3.844156	0.9328075
<b>5</b>	Effective budget management has been fully achieved and has led to improved development in the county	<b>77</b>	3.766234	1.062471

**Source: Researcher 2017**

From Table 14 above, it was demonstrated that the mean score for the five statements set to measure effective management of the budget ranged between 3.74026 and 4.064935 with the statement ‘The county government makes a follow up on the incomplete projects at the end of the financial year’ contributing the highest mean (**mean score** =4.064935, **SD**=0.9643332) while ‘The county government has been attaining the highest budget absorption rate recording the lowest score (**mean score** =3.74026, **SD**= 0.9921083). This implied that effective management of the budget had been fairly achieved.

## 4.5 Diagnostic tests

### 4.5.1 Instrument Reliability and Validity Analysis

In order to establish the reliability and validity of the research instruments, the questionnaire was tested on the selected sample in Machakos County which was not among the counties under study. The results obtained are presented and discussed below.

### 4.5.2 Instrument validity

Validity is the degree to which an instrument measures what it purports to measure (Borg & Gall, 1996) as cited by (Musyoka, 2015). The questionnaire was structured in such a way that it captured the respondents' profile and data pertinent to study objectives. The researcher also sought Expert advice from the supervisors who assisted in making corrections and modifications on the items in the instrument.

### 4.5.3 Instrument reliability

To be reliable an instrument must be consistent in such a way that it was considered stable and can be depended on to yield similar test results under similar circumstances (Borg & Gall, 1996) as cited by (Musyoka, 2015).

According to Field (2005) a Cronbach's  $\alpha > 0.7$  implies the instrument is relatively good measurement tool therefore reliable. Cronbach's test was run on the five variables (public participation, staff competency, information technology and government regulations/laws).

The results obtained were summarized and presented in the table below.

**TABLE 15**

#### **Reliability Test**

<b>Variable</b>	<b>Number of items</b>	<b>Coefficient (Alpha)</b>
Public participation	5	0.7722
Staff competency	5	0.7108
Information technology	5	0.7074
Government regulations/laws	5	0.7632
Effective management of budget	5	0.7349

**Source: Stata output**

Based on the results in table 15 above, all the five variables posted an Alpha of above 0.7 which implied that the instrument posted consistent results and therefore was acceptable.

Before carrying out regression analysis using Ordinary Least Square (OLS) method, the researcher checked that data conforms to the Classical Linear Regression assumptions.

#### ***4.5.4 Descriptive statistics***

These tests include the generation of number of observations, means, standard deviations, the lowest and the highest figures in each variable. The use of this output is to primarily find out if the data need any transformation to reduce variance; and if the data has any outliers or mistakes. This is conducted by running the data on STATA

**TABLE 16**  
**Descriptive Statistics**

<b>VARIABLE</b>	<b>OBS</b>	<b>MEAN</b>	<b>STD. DEV</b>	<b>MIN</b>	<b>MAX</b>
PUBLIC PARTICIPATION	77	3.750649	0.593966	2.6	4.8
STAFF COMPETENCY	77	3.818182	0.5759951	2.4	5
INFORMATION TECHNOLOGY	77	3.58961	0.5646574	2.4	4.8
GOVERNMENT REGULATIONS	77	3.792208	0.6116772	2.4	5
EFFECTIVE BUDGET MANAGEMENT	77	3.846753	0.5128826	2.8	5

**Source: stata output**

The output in table 16 above demonstrated the combined means and standard deviations for each variable. Staff competency shows the highest mean of 3.818182 while information technology shows the lowest mean of 3.58961. The interpretation was that most of the respondents felt that staff competency had a higher impact on effective management of the budget followed by government regulations and public participation respectively.

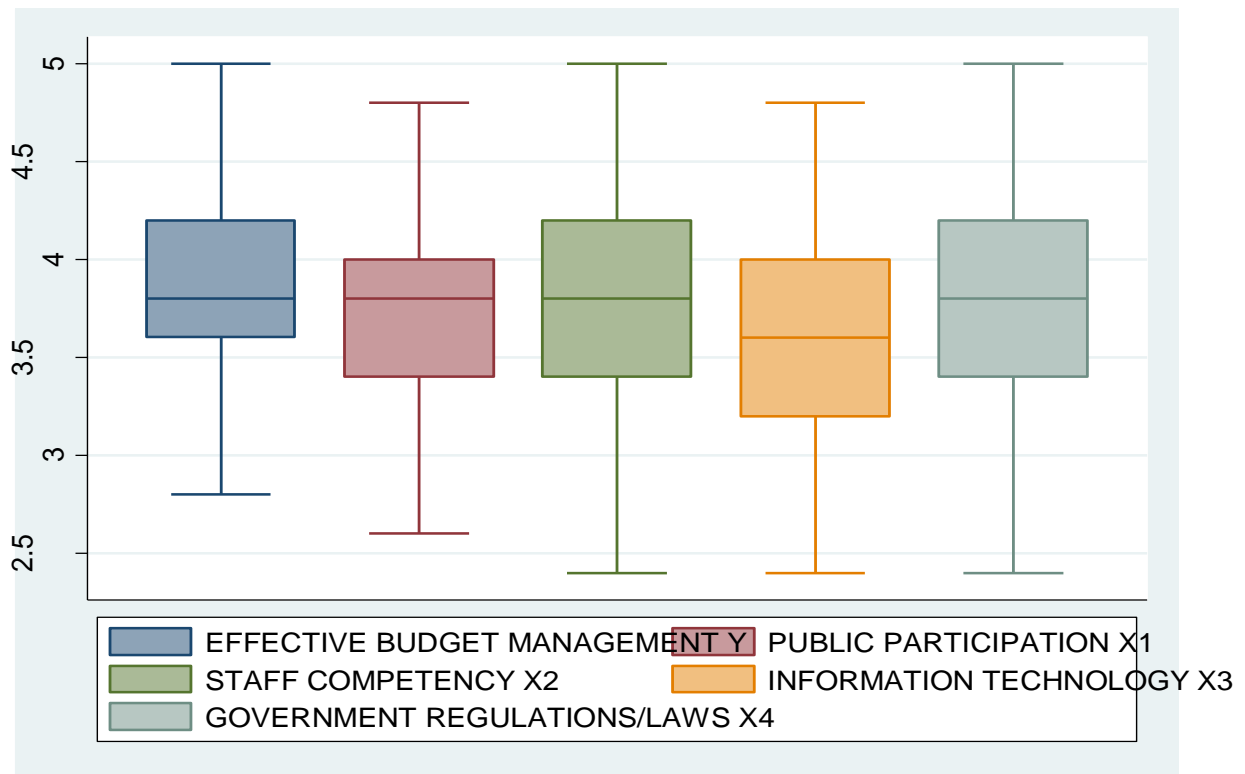
#### ***4.5.5 Test for outliers using the box plot***

This test entails running the data on STATA for all the variables and then issue command for the generation of box plot. Only drop extreme outliers and change the functional form of the

variable – dropping all outliers may reduce data points which has negative effects to final output

**FIGURE 2**

**Box Plot**



**Source: Stata output**

From the box plot above, it was demonstrated that all the variables (public participation, staff competency, information technology and government regulations) were within the acceptable range leading to the conclusion that there were no outliers in the data set.

#### ***4.5.6 Shapiro Wilk Test for Normal Data***

Shapiro-Wilk test is a non-graphical test whereby if the test results are insignificant (above 0.05) it implies that data being used follows a normal distribution. However, when the p-value for the variables is less or equal to 0.05 (significant) then it implies that data is not good for OLS analysis. The results obtained from the Shapiro Wilk test are presented in the table 17 below.

**TABLE 17:****Shapiro Wilk Test for Normal Data**

<b>Variable</b>	<b>OBS</b>	<b>W</b>	<b>V</b>	<b>Z</b>	<b>Prob &gt; Z</b>
Effective management of budget	77	0.98862	0.757	- 0.609	0.72876
Public participation	77	0.98339	1.105	0.219	0.41341
Staff competency	77	0.98413	1.056	0.118	0.45296
Information technology	77	0.98017	1.319	0.606	0.27241
Government regulations/laws	77	0.97656	1.559	0.971	0.16566

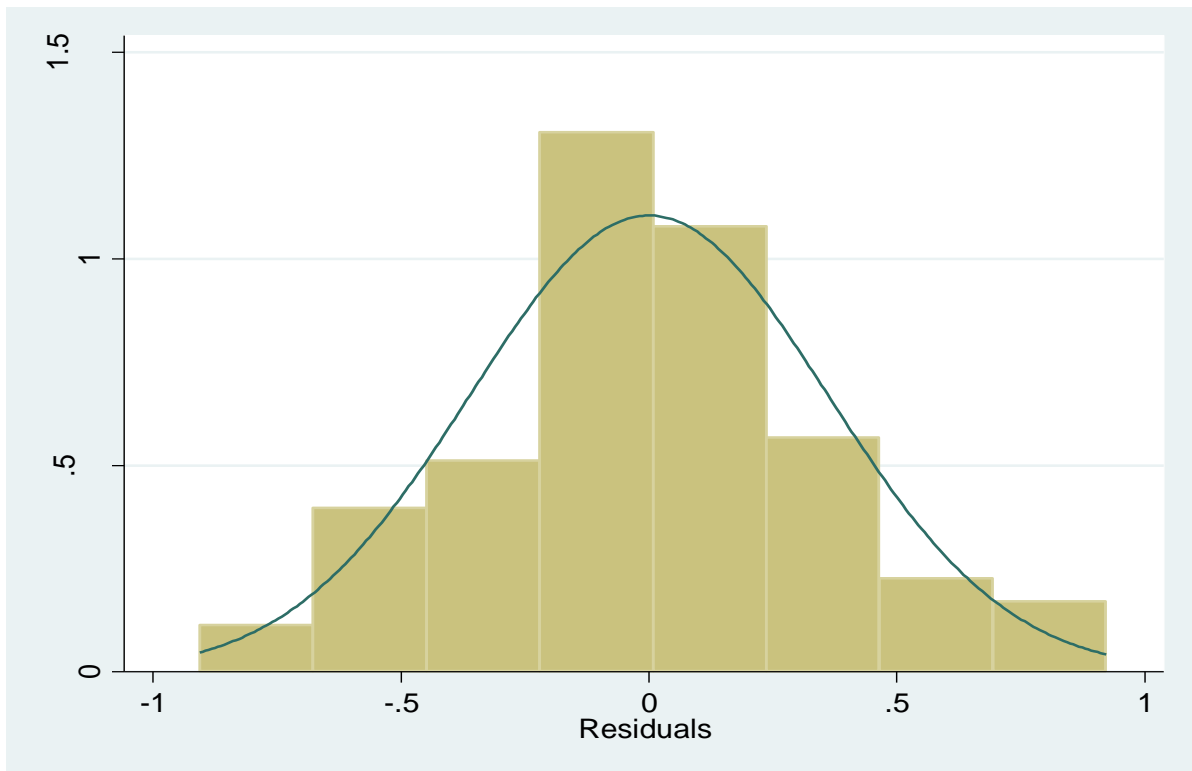
**Source: Stata output**

From Table 17 above, results indicate that that all the variables had a p-value greater than (0.05) meaning that the variables (public participation, staff competency, information technology and government regulations) involved in the study followed a normal distribution and therefore OLS method was suitable to be applied for further analysis.

**4.5.7 Histogram Test for Normality**

The study also checked for non-normality of residuals based on the graphical technique whereby normality is confirmed when the super imposed curve is bell shaped covering all the bars. The results obtained are presented in figure 3 below.

**FIGURE 3**  
**Histogram Test for Normality**



**Source: Stata output**

The histogram in figure 3 above revealed that the bell shaped imposed curve covered all the bars of the histogram and therefore further confirmed the Shapiro Wilk test in the pre-test that data used in the study was normally distributed and therefore considered fit to apply OLS technique in the entire analysis. The analysis entails determining the impact of public participation, staff competency, information technology and the application of government regulations/laws on effective management of budget in county governments in Kenya.

#### ***4.5.8 Pairwise Correlation Test for Multycollinearity***

According to Gujarat (2003), explanatory variables should not exhibit high correlation with each other because that may cause unrealistic results during regression. In order to avoid that problem, explanatory variables were tested for Multycollinearity using pairwise correlation technique and the results are presented in the table below



**TABLE 18****Pairwise Correlations Test**

<b>Variable</b>	Effective management of budget	Public participation	Staff competency	Information technology	Government regulations/laws
Effective management of budget	1.0000				
Public participation	0.5916	1.0000			
Staff competency	0.1717	- 0.0973	1.0000		
Information technology	0.0399	0.1711	- 0.1515	1.0000	
Government regulations/laws	0.6035	0.5958	0.0034	0.3137	1.0000

**Source: Stata output**

Results from Table 18 above indicated that the four explanatory variables (public participation, staff competency, information technology and government regulations) were moderately correlated with each other and none of them had surpassed the rule of the thumb where correlations above 0.8 may lead to spurious results. Therefore OLS technique was appropriate in determining the effect of the independent variables on effective management of budget in county governments in Kenya.

#### ***4.5.9 VIF Test for multicollinearity***

While the pairwise correlation carried earlier indicated that the explanatory variables were not highly correlated, the VIF test was carried out immediately after regression to confirm the authenticity of the pre-test indicated in (table18) and the results are presented in Table 19 below.

**TABLE 19**  
**VIF Test for Multycollinearity**

<b>Variable</b>	<b>VIF</b>	<b>1/VIF</b>
Government regulations/laws	1.69	0.590381
Public participation	1.58	0.634093
Information technology	1.14	0.876815
Staff competency	1.04	0.958016
<b>Mean VIF</b>	1.36	

**Source: Stata output**

Results in Table 19 above demonstrated a mean VIF of 1.36 which was less than the set threshold of 10 when variables are perfectly collinear hence confirms the pre-test done on the data that there was no multycollinearity problem in the data used. Tolerances (1/VIF) were between 0.59 and 0.96. This meant that for government regulations/laws, 59% of the variance was not explained by the other independent variables. For public participation, 63% of the variance was not explained by the other independent variables. For information technology, 88% of the variance was not explained by the other independent variables and finally for staff competency, 96% of the variance was not explained by the other independent variables. All the variables demonstrated a high tolerance and a low VIF value indicating a low degree of multycollinearity, if any.

#### ***4.5.10 Breusch pagan test for heteroscedasticity***

Typically, a formal test is designed to test the null hypothesis of homoscedasticity (equal error variance between parameters) versus an alternative hypothesis of heteroscedasticity.

Breusch pagan test was applied to detect heteroscedasticity. According to Kelly, (2007) the common test for heteroscedasticity is the Breusch pagan test. The results demonstrated below posted a p-value of 0.4529 at 95% confidence level hence the study failed to reject the null hypothesis that errors are homogeneous and therefore concluded that there was no possible presence of Heteroscedasticity in the model.

Table 20 below demonstrates the result after the data was ran on the stata software.

**TABLE 20**  
**Breusch Pagan Test for Heteroscedasticity**

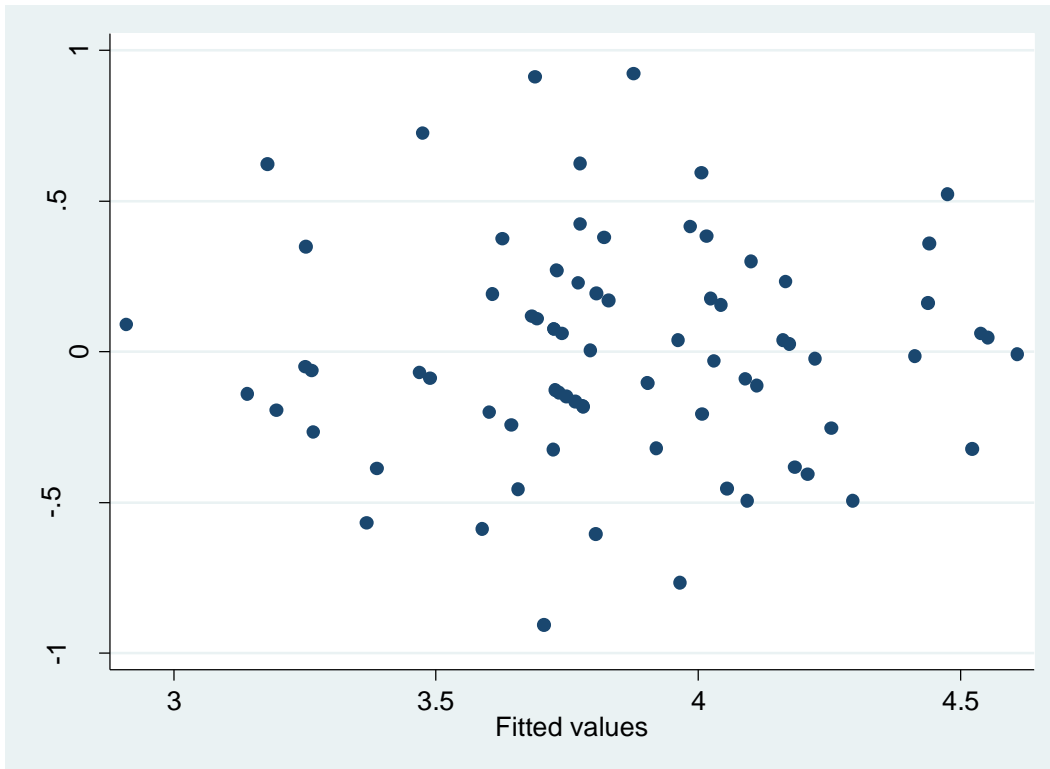
```
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of EFFECTIVEBUDGETMANAGEMENTY

      chi2(1)    =    0.56
      Prob > chi2 =    0.4529
```

**Source: Stata output**

After Conducting the Breusch-Pagan test, the result didn't demonstrate the presence of heteroscedasticity as indicated by the (P-value 0.4529) which was above 0.05 which is the rule of thumb. Based on this result, the null hypothesis was accepted and the alternative hypothesis that the variance was not homogenous was rejected.

**FIGURE 4**  
**Visual Test for Heteroscedasticity - RVF PLOT**



**Source: Stata output**

From Figure 5 above, the graph shows the residual by fitted (predicted) value. The RVFPLOT did not demonstrate any pattern suggesting that the data set was okay to apply CLR technique. The variability of the residuals for fitted values did not demonstrate any pattern. This observation indicated that there was no heteroscedasticity. It was therefore concluded that the independent variables (public participation, staff competency, information technology and government regulations) can be relied upon to determine their impact on effective management of budget by applying regression analysis.

#### **4.6 Model fitting**

To determine the relationship between the independent and dependent variable, multiple linear regressions was performed based on the model below.

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + e$$

Table 21 below presented the multiple linear regression results that were obtained on data and the subsequent analysis covering the coefficient of determination, regression coefficients and the overall significance of the model.

**TABLE 21**

**Multiple Regression Analysis**

Source	SS	df	MS	Number of obs = 77		
Model	10.089352	4	2.52233799	F( 4, 72) =	18.34	
Residual	9.90233636	72	.137532449	Prob > F =	0.0000	
				R-squared =	0.5047	
				Adj R-squared =	0.4772	
Total	19.9916883	76	.26304853	Root MSE =	.37085	

EFFECTIVEBUDGETMANAGEMENTY	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
PUBLICPARTICIPATIONX1	.3331026	.089941	3.70	0.000	.1538086	.5123966
STAFFCOMPETENCYX2	.1679145	.0754554	2.23	0.029	.0174969	.3183322
INFORMATIONTECHNOLOGYX3	-.1154037	.0804557	-1.43	0.156	-.2757892	.0449818
GOVERNMENTREGULATIONSLAWSX4	.3461654	.0905122	3.82	0.000	.1657326	.5265983
_cons	1.057797	.4952134	2.14	0.036	.0706072	2.044987

**Source: Stata output**

**4.6.1 Coefficient of Determination**

The coefficient of determination indicated that the proportion of variance in the dependent variable (effective management of budget) that is explained by the explanatory variables (public participation, staff competency, information technology and government regulations) in the study. Based on the regression output in Table 21 above, the coefficient of determination is given by R-squared which is **50.47%**. This implied that 50.47% of the change in effective management of budget was explained by the four independent variables: public participation, staff competency, information technology and government regulations. However, **49.53%** of the change could be explained by other factors not covered in the study.

**4.6.2 Regression Coefficients**

The findings on the individual coefficients shown in Table 21 above revealed that three independent variables (public participation, staff competency and application of government regulations) had a positive and significant impact on effective management of budget in

county governments while information technology had a fairly small negative impact on effective management of budget in county governments which was not significant.

The results obtained on individual coefficients indicated that public participation had a positive and significant relationship on effective management of the budget in county governments in Kenya with a coefficient of correlation (0.3331, P= 0.000) at 5% significance level. This implied that public participation contributed about 33.3% towards effective management of the budget in the four counties under study. Staff competency had a positive and significant relationship on effective management of the budget in county governments in Kenya with a coefficient of correlation (0.1679, PV=0.029) at 5% significance level. This implied that staff competency contributed about 16.7% towards effective management of the budget in the four counties under study.

Application of information technology had a fairly low negative relationship on effective management of the budget in county governments in Kenya with a coefficient correlation of (- 0.1154, PV=0.156) at 5% significance level. This implied that application of information technology contributed negatively to about -11.5% towards effective management of the budget in the four counties under study. While the application of government regulations/laws had a positive and significant relationship on effective management of the budget in county governments in Kenya with a coefficient of correlation (0.3462, PV=0.000) at 5% significance level. This implied that staff competency contributed about 34.6% towards effective management of the budget in the four counties under study.

#### ***4.6.3 Overall Significance of the Model.***

The results in Table 21 above further revealed that the overall model had a p-value of 0.000 (significant) implied that the model was a good fit that was significant and can be used to

predict the dependent variable which was effective management of the budget in county governments' in Kenya.

#### ***4.6.4 Interpretation and Discussion of Results***

Based on the results demonstrated in table 21 above, the following model was derived to explain the relationship between the independent variables demonstrated in the study and the dependent variable which was effective management of the budget in county governments in Kenya.

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + e$$

$$Y = 1.0578 + 0.3331 X_1 + 0.1679 X_2 - 0.1154 X_3 + 0.3462 X_4 + e$$

Where:-

Y = Dependent variable (Effective management of budget in county governments)

X1 = Independent variable 1 (Public participation)

X2 = Independent variable 2 (Competency of staff)

X3 = Independent variable 3 (Information technology)

X4 = Independent variable 4 (Government regulations)

$\beta_0$  = Constant

$\beta_1$  = Coefficient of X1

$\beta_2$  = Coefficient of X1

$\beta_3$  = Coefficient of X1

e = Error term

The findings from the result indicated that government regulations/laws had the highest impact on effective management of the budget in county governments in Kenya. The result implied that a unit increase in government regulations/laws led to 35% improvement in effective management of the budget in county governments, a unit increase in public participation led to 33% improvement in effective management of the budget, a unit increase in staff competency led to 17% improvement in effective management of the budget

respectively. The results indicated information technology as having a negative impact on effective management of the budget.



## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

The main objective of the study was to establish the factors affecting effective management of the budget in County Governments in Kenya. This chapter presents the summary of findings, conclusion, recommendations, and recommendations for further research.

#### 5.2 Summary

From the general objective of the study, the study aimed at establishing the factors affecting effective management of the budget in county governments in Kenya. The study established that there was a significant positive relationship between the factors identified (independent variables) that were public participation, staff competency, application of information technology, government regulations and the dependent variable.

Based on the regression output in Table 21, the coefficient of determination as demonstrated by R-squared was 50.47%. This implied that 50.47% of the change in effective management of budget was explained by the four independent variables: public participation, staff competency, application of information technology and government regulations. However, 49.53% of the change could be explained by other factors not covered in the study. Findings on each of the four objectives forming the independent variables are briefly discussed below.

##### *5.2.1 Impact of public participation on effective management of budget*

The study sought to establish the impact of public participation on effective management of budgets in County Governments in Kenya. From the analysis in Table 6, it was demonstrated that the mean score for the five statements set to measure the impact of public participation on the effective management of the budget ranged between 3.597403 and 3.948052. This was an indication that citizen participation had an impact on effective management of budget in

county governments in Kenya with the third statement ‘participation of Citizen budgeting process has been encouraged by the top management to strengthens and empower citizens in the county’ contributing the highest mean; while ‘Citizen participation has been adequately supported through funding by the county government to strengthen local planning in the county’ posting the lowest mean score.

From the analysis in table 5, a summary of the five statements that were administered to measure the impact of public participation on effective management of budget in county governments and their responses were tabulated. The findings indicated that majority of the respondents agreed and strongly agreed that public participation had an impact on effective management of the budget in county governments in Kenya. The results obtained on individual coefficients indicated that public participation had a positive and significant relationship on effective management of the budget in county governments in Kenya.

### ***5.2.2 Impact of staff competency on effective management of budget***

The study sought to establish the impact of staff competency on effective management of budget in County Governments in Kenya. From the analysis in Table 8, it was demonstrated that the mean score for the five statements set to measure the impact of staff competency on the effective management of the budget was on the higher side. This was an indication that staff competency had an impact on effective management of budget in county governments in Kenya with the third statement ‘The county government has an effective system of staff recruitment and selection in place to ensure only the best applicants are selected for the job’ contributing the highest mean; while ‘The budget staffs working with the county government have the requisite qualifications and experience to perform their roles in management of the budget’ posting the lowest mean score.

From the analysis in table 7, a summary of the five statements that were administered to measure the impact of staff competence on effective management of budget in county

governments and their responses were tabulated. The findings indicated that majority of the respondents agreed and strongly agreed that staff competency had an impact on effective management of the budget in county governments in Kenya. The results obtained on individual coefficients indicated that staff competency had a positive and significant relationship on effective management of the budget in county governments in Kenya.

### ***5.2.3 Impact of information technology on effective management of budget***

The study sought to establish the impact of the application of information technology on the effective management of budget in County Governments in Kenya. From the analysis in Table 10, it was demonstrated that the mean score for the five statements set to measure the impact of the application of information technology on the effective management of the budget was on the higher side. This was an indication that the application of information technology had an impact on effective management of budget in county governments in Kenya with the third statement ‘The county government prepares and executes the budget by utilizing the IFMIS system’ contributing the highest mean; while ‘The county government has invested in computerization to be able to adopt financial management and information systems in budget formulation, execution and accounting’ posting the lowest mean score.

From the analysis in table 9, a summary of the five statements that were administered to measure the impact of the application of information technology on effective management of budget in county governments and their responses were tabulated. The findings indicated that majority of the respondents agreed and strongly agreed that the application of information technology had an impact on effective management of the budget in county governments in Kenya. The results obtained on individual coefficients indicated that the application of information technology had a negative and insignificant relationship on effective management of the budget in county governments in Kenya.

#### ***5.2.4 Impact of government regulations/laws on effective management of budget***

The study sought to establish the impact of government regulations/laws on effective management of budget in County Governments in Kenya. From the analysis in Table 12, it was demonstrated that the mean scores for the five statements that were set to measure the impact of government regulations/laws on the effective management of the budget was on the higher side. This was an indication that government regulations had an impact on effective management of budget in county governments in Kenya with the statement ‘The county government ensures that each officer engaged in the budgeting process participates in trainings on effective management of the budget and in accordance to the law’ contributing the highest mean; while ‘the county government manages the budget according to the constitution and the supporting regulations’ posting the lowest mean score.

From the analysis in table 11, a summary of the five statements that were administered to measure the impact of government regulations/laws on effective management of budget in county governments and their responses were tabulated. The findings indicated that majority of the respondents agreed and strongly agreed that government regulations/laws had an impact on effective management of the budget in county governments in Kenya. The results obtained on individual coefficients indicated that application of government regulations/laws had a positive and significant relationship on effective management of the budget in county governments in Kenya with.

### **5.3 Conclusions**

Based on the findings above, the researcher concluded that there exists a positive and significant relationship between three of the independent variables, public participation, staff competency and the application of government regulations/laws on effective management of the budget in county governments in Kenya. The application of government regulations/laws contributed the highest percentage, followed by public participation and staff competency

respectively. Information technology demonstrated a fairly low negative and insignificant relationship which did not affect the study. Further, the study demonstrated that the overall model was statistically significant in the prediction of the dependent variable and therefore the researcher recommends to county governments to give the three factors priority when developing their operational policies. These findings agree with the findings of earlier researchers in the area of study such as (Muammar et al 2015, Oketa, 2013, Mutuma, 2016) who obtained similar results in their studies.

From the result analyzed in this study, it was demonstrated that the factors considered in the research have a moderate influence of 50.47% on effective management of the budget in county governments in Kenya. Effective management of the budget in a country is a key component in realizing economic growth that would eventually transform the lives of people. Many developing countries have challenges in achieving effectiveness in the management of budget due to lack of accountability, transparency and lack of qualified personnel in the public sector. Based on this study, it was concluded that staff competency, adoption of public participation and strict adherence to government laws and regulations would ensure success in county governments in Kenya only if it's fully adopted.

According to the findings in this study, the variables considered had a moderate positive impact on effective management of the budget. However to achieve success in effective management of budget in county governments in Kenya; county management should be advised to enhance the application of the variables under this study.

#### **5.4 Recommendations**

1. The study recommends that the government should carry out civic education to promote the participation of citizens in the county budgeting process. This is because the study has demonstrated a significant positive relationship between public participation and effective management of the budget

2. The study also recommends that there is need for the county government to follow up on the enforcement of the regulations of stakeholder participation in the county budgeting process since this will ensure better management of county funds and successful implementation of various projects. This is because the study has demonstrated a significant positive relationship between application of government regulations and effective management of the budget
3. The study also recommends that stakeholders should make it their responsibility to participate in the county budgeting process since it is their democratic right provided for by the constitution.
4. The study also recommends that county governments should adopt a policy of hiring competent staff. This is because the study demonstrated a significant positive relationship between staff competency and effective management of the budget

### **5.5 Recommendations for Future Research**

This study recommends that there is need to carry out further studies using regression analysis in order to establish other variables that could have an impact on effective management of the budget in county governments in Kenya.

The study also recommended that this study should be replicated on a wider geographical scope to cover the whole country as this will help understand the issues affecting each county.

### **5.6 Limitations of the Study**

Some respondents due to their busy schedules were not able to participate in the study making it difficult to achieve a 100% response rate

Time and resources that were available to conduct the research were limited hence making it difficult to conduct a comprehensive and thorough research.

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## **APPENDIX A: QUESTIONNAIRE**

Dear respondent,

I am a researcher from K.C.A University focusing to establish the factors affecting the effective management of the budget in selected county governments in Kenya. The research is meant for academic purposes only; therefore you are kindly requested to participate in the study by providing all appropriate information in the spaces provided honestly and precisely. Responses to these questions will be treated as confidential.

**The Questionnaire will be based on the following Specific objectives.**

- 1 To establish the impact of public participation on the effective management of budget in County Governments in Kenya
- 2 To establish the impact of staff competency in County Government Departments on the effective management of budget in County Governments in Kenya
- 3 To investigate how the application of information technology impacts on the effective management of budget in County Governments in Kenya
- 4 What effect does the application of government regulations/laws have on the effective management of budget in County Governments?

### **TOPIC OF THE STUDY**

**Factors affecting the effective management of budget in selected county governments in Kenya. (Makueni, Nairobi, Narok and Kakamega Counties)**

Please note that the required information is for the financial year 2016/2017

**QUESTIONNAIRE**

**SECTION A: BACKDROUND INFORMATION**

This section is concerned with individual information as shown below. You are therefore kindly requested to fill by putting an appropriate tick based on the choices provided.

**NAME** \_\_\_\_\_ **OF** \_\_\_\_\_ **YOUR**  
**COUNTY**.....

<b>1. Gender:</b> Male <input type="checkbox"/>	Female <input type="checkbox"/>		
<b>2. Your Age :</b> <input type="checkbox"/> 20 - 30	<input type="checkbox"/> - 40	<input type="checkbox"/> 50	<input type="checkbox"/> 50
<b>3. Your level of education:</b> College Diploma <input type="checkbox"/>	Undergraduate <input type="checkbox"/>	Post Graduate <input type="checkbox"/>	<input type="checkbox"/>
<b>4. Nature of employment</b> <input type="checkbox"/> Permanent	<input type="checkbox"/> Contract	<input type="checkbox"/> Casual	
<b>5. Employment Experience (years)</b> 0 - 5 <input type="checkbox"/>	06 -10 <input type="checkbox"/>	11-15 <input type="checkbox"/>	Over 15 Years <input type="checkbox"/>

**SECTION B: PUBLIC PARTICIPATION AND EFFECTIVE MANAGEMENT OF THE BUDGET**

Please indicate to what extent you agree or disagree with the following statements on the impact of public participation on effective management of the budget in your department by putting a tick against the options provided below.

**1 = strongly disagree (SD) 2 = Disagree (D) 3 = Neutral (N) 4 = Agree (A) 5 = Strongly Agree (SA)**

<b>PUBLIC PARTICIPATION</b>		<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>
<b>NO</b>	<b>STATEMENT</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>6.</b>	Public participation enhances local accountability systems in county governments					
<b>7.</b>	Members of the public are informed about project deliverables in public participation meetings					
<b>8.</b>	participation of Citizens in the budgeting process has been encouraged by the top management to strengthens and empower citizens in the county					
<b>9.</b>	Citizen participation has been adequately supported through funding by the county government to strengthen local planning in the county					
<b>10.</b>	Citizen participation in county government has led to improved public service delivery and increased trust of citizens in government					

**SECTION C: COMPETENCY OF STAFF IN AND EFFECTIVE MANAGEMENT OF THE BUDGET**

Indicate to what extent you agree or disagree with the following statements on the impact of staff competency on effective management of the budget in your department by putting a tick against the options provided below.

**1 = strongly disagree (SD) 2 = Disagree (D) 3 = Neural (N) 4 = Agree (A) 5 = Strongly Agree (SA)**

<b>COMPETENCY OF STAFF</b>		<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>
<b>NO</b>	<b>STATEMENT</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>11.</b>	The budget staffs working with the county government have the requisite qualifications and experience to perform their roles in management of the budget					
<b>12.</b>	The budget process is a technical process that requires people with expertise and experience to execute effectively					
<b>13.</b>	The county government has invested heavily on staff training to enhance budget skills to ensure effective management of the budget.					
<b>14.</b>	The county government has put in place a policy that all staff should be capacity built through trainings to enhance their budget skills					
<b>15.</b>	The county government has an effective system of staff recruitment and selection in place to ensure only the best applicants are selected for the job					

**SECTION D: INFORMATION TECHNOLOGY AND EFFECTIVE MANAGEMENT OF THE BUDGET**

Please indicate to what extent you agree or disagree with the statements provided on the impact of information technology on effective management of the budget by putting a tick against the options provided:

**1 = strongly disagree (SD) 2 = Disagree (D) 3 = Neutral (N) 4 = Agree (A) 5 = Strongly Agree (SA)**

<b>INFORMATION TECHNOLOGY</b>		<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>
<b>NO</b>	<b>STATEMENT</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>16</b>	The county government has invested in computerization to be able to adopt financial management and information systems in budget formulation, execution and accounting					
<b>17</b>	County Departments have enhanced budgetary support in training staff on the application of financial management and information systems					
<b>18</b>	The county government has put in place a policy that all staff should be capacity built through trainings to enhance their IT					

	skills					
19	The National Treasury, IFMIS department, provides adequate technical support to enable effective use of IFMIS system in the county					
20	The county government prepares and executes the budget by utilizing the IFMIS system					

**SECTION E: GOVERNMENT REGULATIONS/LAWS AND EFFECTIVE MANAGEMENT OF THE BUDGET**

Please indicate to what extent you agree or disagree with the statements provided on the impact of government regulations/laws on effective management of the budget by putting a tick against the options provided below.

**1 = strongly disagree (SD) 2 = Disagree (D) 3 = Neutral (N) 4 = Agree (A) 5= Strongly Agree (SA)**

GOVERNMENT REGULATIONS/LAWS		SD	D	N	A	SA
NO	STATEMENT	1	2	3	4	5
21	The county government manages the budget according to the constitution and the supporting regulations					
22	The county government makes a provision in the budget for training staff on the application of the law in the budget making process.					
23	The county government ensures that each officer engaged in the budgeting process participates in trainings on effective management of the budget and in accordance to the law.					
24	The budgeting staffs understand the PFM Regulations relating to county government budgeting					
25	The top management in the county government supports and understands the importance of effective management of the budget and in accordance with the law					

**SECTION E: EFFECTIVE MANAGEMENT OF THE BUDGET**

Please indicate to what extent you agree or disagree with the statements provided on effective management of the budget by putting a tick against the options provided below.

**1 = strongly disagree (SD) 2 = Disagree (D) 3 = Neutral (N) 4 = Agree (A) 5 = Strongly Agree (SA)**

EFFECTIVE MANAGEMENT OF THE BUDGET		SD	D	N	A	SA
NO	STATEMENT	1	2	3	4	5
26	The county government has been attaining the highest budget absorption rate					
27	The county government attains completion of all projects planned in each financial year within the stipulated time frame.					

<b>28</b>	The county government makes a follow up on the incomplete projects at the end of the financial year					
<b>29</b>	The top management in the county fully supports the adoption of an effective budget management policy					
<b>30</b>	Effective budget management has been fully achieved and has led to improved development in the county					

**End of questionnaire and thank you for participating in the exercise**

## APPENDIX B: TIME SCHEDULE FOR RESEARCH

The project schedule will cover the following activities.

NO	ACTIVITY	DURATION IN WEEKS
1.	Development of the project	2
2.	Definition of project objectives and stating the research questions.	2
3.	Identification of the research population and determination of the sample.	2
4.	Conducting literature review	4
5.	Development of data collection tools	2
6.	Data collection	6
7.	Data analyses, interpretation and presentation.	2
8.	Report writing, highlighting conclusions and recommendations	4
	<b>TOTAL TIME PERIOD</b>	<b>24</b>

### APPENDIX C: BUDGET

<b>NO</b>	<b>EXPENDITURE ITEM</b>	<b>COST (KES)</b>
1.	Transport	8,000
2.	Data collection	6,000
3.	Typing, printing and binding	6,000
		<b>20,000</b>