

Effect of Automation of Financial Management Systems on Financial Performance of County Government of Trans-Nzoia

Hezron Kiplagat Kemboi¹, Dr. Willy Muturi²

¹Master in Business Administration student

²Senior Lecturer – Jomo Kenyatta University of Agriculture & Technology

Abstract: This study investigates the effect of automation of financial management processes using information communication technology (ICT) on the financial management of the county treasury, county government of Trans-Nzoia. The recognition of the noble role of automating the financial management cannot be gainsaid. In the Last decade, the Kenyan government has increased spending in developing the ICT sector compared to other countries in the sub-saharan Africa with similar GDP per capita. Kenya spends a significant amount on ICT based financial management systems such as LAIFOM and IFMIS. ICT cuts across all sectors of the economy. Specifically, this study seeks to establish the effect of automation of financial processes using ICT tools such as IFMIS on the financial performance through improved budgeting processes, revenue management, financial records and information handling, procurement to payment process. The county governments of Trans-Nzoia treasury employees who interact with the system were the target population where all the 50 employees were included through a census where purposive sampling technique was applied. Questionnaires and interviews schedules were the major data collection instruments. Collected data was analyzed using descriptive (frequency and percentage) method. Having analyzed the data and the findings the researcher came up with the following conclusions as possible remedial measures to be taken in the organization. The study concluded that: County Treasury use Internet to support financial Management. It also concluded that ICT/LAIFOMS enables tracking the performance of the revenue collection process. Furthermore it concluded that the use of IFMIS and LAIFOMS ensures timely financial reporting e.g quarterly. Finally the study recommends that use of ICT facilities. E.g., e-mails, SMS, for communication has resorted into quick decisions making at the county government hence enhancing a quicker budget making and the use of ICT for correspondent by the County government has led to an increase in public participation in the activities and programs of the county government especially during the budget making process. From the findings the researcher recommends that the organization should improve on ICT system and Databases to be used in budgeting and procurement processes. It also recommends that automation of the revenue management process should be improved to enhance efficiency in the revenue collection process. It also recommends that the organization to maximize employee's multi-dimensional abilities for better performance. Finally, It recommends that the automation of the budget making process should enabled the use of a single chart of accounts (SCOA) hence making and automation of the procurement process through the use of e-procurement platform should achieved an end to end process from requisition to Payments. The study suggested that further study be done on effect of automation of financial management systems on financial performance of County Governments in Trans-Nzoia County Government.

Keywords: Automation, Financial Management Systems, Financial Performance & Information Communication Technology.

1. INTRODUCTION

Information Communication Technology (ICT) as an industry is an integral and critical component of modernization. It is one of the key pillars of civilization. ICT is so wide that in its nature it brings on board diverse players who in their concerted efforts make the world go round. Information is power, so the adage goes. Communication has several segments for example postal, telephony, internet and general telecommunication which includes a word of mouth. Technology is the advancement in inventions whose accrued benefit is civilization. World over there is a common agreement that ICT has accelerated economic growth hence more wealth has been created. ICT has created opportunities for generating income, made work easy and fast among the world population. But why has ICT taken the world by storm? World Bank in its report of 2010 out of a survey conducted in 2008-2009 states that many countries now regard understanding ICT and mastering the basic skills and concepts of ICT as part of the core of education. It goes further to state that ICT has the potential to innovate, enrich and deepen skills, to motivate and engage students, create economic opportunities for entrepreneurs and above all move the masses towards realizing a global village. Since the 1990s when the computer communications and information access and internet-based services i.e. E-mail (electronic-mail) via World Wide Web (www) took off to the amazement and excitement of masses, ICT has grown in leaps and bounds. The CD-Rom replaced the floppy disk and today we have the flash disk, iPad and life seems to be moving fast. Earlier studies found a positive and significant impact of automation of financial processes using ICT on an organizations financial management process. Anand Bethabudi (2013) carried out a research on the role of ICT in the Tourism industry in India. He sort to determine its impact on business development, revenue generation, reaching of customers and how to minimize costs. A sample of 112 managers of tourism, travel and hospitality enterprises in India where surveyed with a questionnaire. He found out that increasing ICT plays a crucial role for the competitiveness of tourism organizations and destinations. ICT empowered consumers to identify, customize and purchase tourism products and support the globalization of the industry by providing tools for developing managing and distributing products and services worldwide. Ahmad Sobhani (2008) carried out a research titled: 'impact of information Technology on productivity: a case of telecommunication industry of Iran'. The purpose of the research was to investigate the impact of IT on productivity at Telecommunication Company of Tehran. The target populations in the research were the experts and the employees of TCT who worked at the head office of communication zones. Data analysis was done in two phases first phase analysis not only indicated the positive relationship between IT investment and productivity at TCT but also exposed that the positive return of IT investment is higher than non IT investment . In the second phase, BPR factors were tested by the experts and employees of TCT, meaning difference between the present situation and the desired situation of TCT were found based on BPR Approach. Abdallah Zibara (2009) in his research : 'the role of information technology in the management of selected secondary schools in central Uganda' sort to establish the role of ICT in enhancing effective financial management, the effect of ICT on examination management and in enhancing effective communication in selected secondary schools in central Uganda. The research found out that on examination management, ICT was most significant in record keeping and least in testing of students. He found out that ICT had contributed on the improvement of efficiency in tracking student academic progress and student performance. However the research found out that the use of ICT in examination management was limited by inaccessibility to computer and other ICT facilities in schools and inadequate computer skills.. Local authorities more so, the County Governments treasuries encounter challenges when it comes to financial management mainly due to manual operations of their financial activities. How can automation of financial management systems be used to remove communication barriers, space requirements, accuracy and financial management and timely financial reporting and use digital resources to help keep pace with the latest development?

2. RESEARCH OBJECTIVES

General Objective:

Effect of Automation of Financial Management Systems on Financial Performance of County Government of Trans-Nzoia

Specific Objective:

The specific objectives of this study were:

- i. To find out the effect of automation of the budgeting process on the financial performance of the county government of Trans-Nzoia.

- ii. To establish the effect of revenue management automation to the financial performance of the County Government of Trans-Nzoia.
- iii. To determine how automation of financial record management impact on the financial performance of Trans-Nzoia County Government.
- iv. To establish the effect of automation of procurement processes on the financial performance of Trans-Nzoia County Government.

Research questions:

This research was guided by the following questions:-

1. How does the automation of the budgeting process affect financial performance of the county government of Trans-Nzoia?
2. What is the effect of revenue management automation to the financial performance of the County Government of Trans-Nzoia?
3. How does the automation of financial records management impact on the financial performance of Trans-Nzoia County Government?
4. What is the effect of automation of procurement processes on the financial performance of the County Government of Trans-Nzoia?

5. JUSTIFICATION OF STUDY

ICT in its nature can help resolve critical issues pertaining to and wide the way finances are managed at the local level. Automation through the use of ICT has some platforms where by tailor made programs can be generated to help establish systems in this case finance-based-systems which put to rest some of the challenges once and for all. The aim of this study was to help county governments embrace ICT components that automate financial processes in order to guarantee prudent financial management, aspire to be competitive, give quality services and prosper economically while competing favorably globally

6. LITERATURE REVIEW

This study is based on the following theories;

System Theory:

System theory was originally produced by biologist Ludwig Von Bertalanffy (1923). He asserted that a system is an interrelated and interdependent set of elements functioning as a whole. Hence, the county government of Trans-Nzoia is a system that has different components in form of departments. In the management of the County government, different departments work together for a common goal which is excellence in service delivery to the residence of Trans-Nzoia. The components include Agriculture and Livestock department, County Treasury (finance), Trade and Economic Planning Department, Gender, Youth and Sports Department, Water Department, Health Department, Roads and Public works department, Public Service Department (Staff): none of these departments can work independently of the other if the county is to be considered as functioning. A system can either be controlled or uncontrolled, Kuhn (1974). In a controlled system, information is sensed and changes are effected in response to the information. Kuhn refer to these type of information as the detector and effect or functions of the system. For instance information relating to review of rates as contained in a finance bill prepared by the County Treasury, will result in changes in response to that particular information, this is referred to as the effect or function of information. The detector function of information according to Kuhn is concerned with the communication of information between systems. This information can be enhanced by use of emails, chart room, e-conferencing etc. The system theory suggests the functionalist approach as the best way of examining the role of a subsystem in a larger system (Walonick, 1993). This idea will be used to examine the role of the departments as a subsystem in the County Government being the larger System.

Prospect theory:

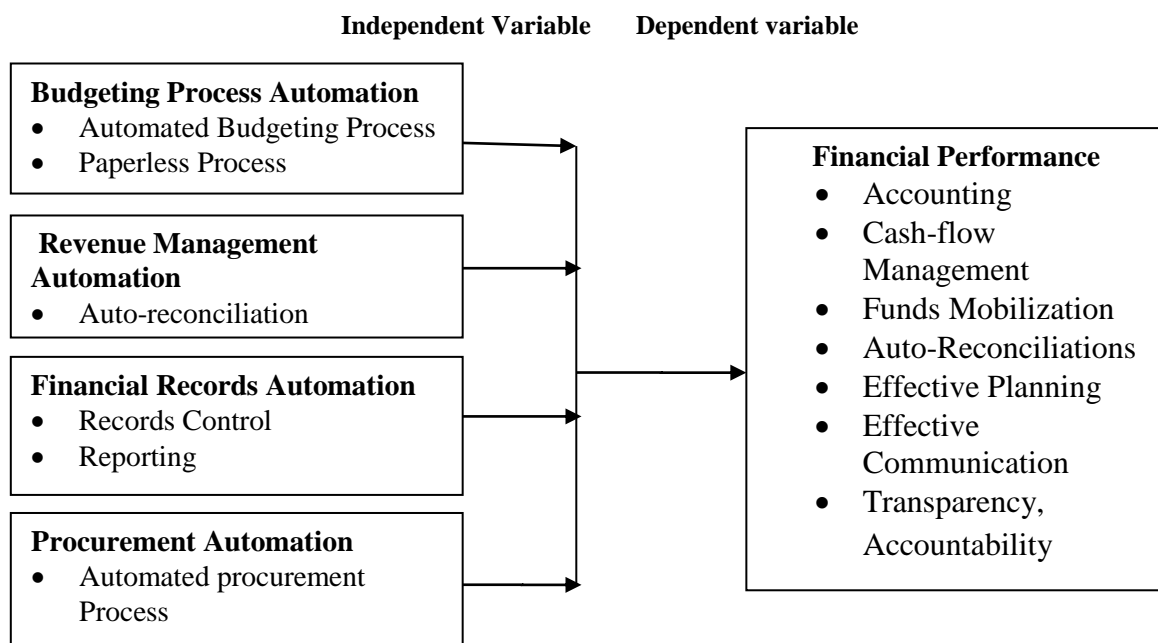
Prospect theory is a behavioral economic theory that describes the way people choose between probabilistic alternatives that involve risk, where the probabilities of outcomes are known. The theory states that people make decisions based on

the potential value of losses and gains rather than the final outcome, and that people evaluate these losses and gains using certain heuristics. The model is descriptive: it tries to model real-life choices, rather than optimal decisions, as normative models do. The theory was created in 1979 and developed in 1992 by Daniel Kahneman and Amos Tversky as a psychologically more accurate description of decision making, compared to the expected utility theory. This theory will help to understand the individual decision making process and the extent to which they choose alternatives based on expected outcomes and risks involved in each.

Agency Theory:

Agency theory is often described in terms of the relationships between the various interested parties in the firm. The agency theory examines the duties and conflicts that occur between parties who have an agency relationship. Agency relationships occur when one party, the principal, employs another party, called the agent, to perform a task on their behalf. Agency theory is helpful in explaining the actions of the various interest groups in the corporate governance debate. In the study the county government of Trans-Nzoia acts as an agent for the principal who are the residence having voted the office bearers to act on their behalf in regard to management of public resources . In most of these principal-agent relationships conflicts of interest is seen to exist. The agency relationship arising from the separation of ownership from management is sometimes characterized as the agency problem. Agency theory suggests that, in imperfect labor and capital markets, managers will seek to maximize their own utility at the expense of corporate shareholders. Agents have the ability to operate in their own self-interest rather than in the best interests of the firm because of asymmetric information. Evidence of self-interested managerial behaviour includes the consumption of some corporate resources in the form of perquisites and the avoidance of optimal risk positions, whereby risk-averse managers bypass profitable opportunities in which the firm’s shareholders would prefer they invest.

CONCEPTUAL FRAMEWORK:



7. REVIEW OF VARIABLES

Budgeting Process Automation:

This Component encompasses all the activities related to annual planning and budgeting that is revenue, costs, profit, cash flow and capital investment. It further deals with how resources are allocated to meet these plans, and the provision for revision of the estimates. Theses component is expected to deliver a fully integrated planning to budgeting process, document automation requirements for the planning to budget cycle, provide a plat form for programme based budget, an automated system for commitment ceilings, provide a common chart of accounts for the budgeting purposes and enhancing reporting capabilities to support budget planning process. Task Uncertainty and its Interaction With Budgetary Participation and Budget Emphasis: Some Methodological Issues and Empirical Investigation’ paper reports the results of a study which re-examines Brownell & Hirst ,Journal of Accounting Research, Autumn (1986). In that study, it was

hypothesized that Brownell's result Journal of Accounting Research, Spring (1982), showing that budget participation and budget emphasis in evaluation should be aligned, would hold only where task uncertainty was low. With managerial performance as the criterion, Brownell & Hirst were unable to find support for the hypothesis. Reliance on Budgetary Control, Manufacturing Process Automation and Production Subunit Performance: A Research Note(1992). While budget-based control systems are extensively employed in organizations, such usage does not provide clear evidence of their utility as performance enhancement vehicles as advances are made in the automation of manufacturing processes and that manufacturing process automation moderates the relation between reliance on budgetary control and departmental performance

Revenue Management Automation:

The component provides functionalities for all the activities related to revenue and cash management for generation, collection and recording of revenue to distribution of funds to the departments. Key improvements that it seeks to deliver are automation of revenue collection process, automate generation of EFT files and Invoicing and receipting, encryption, authentication and secure transmission of data and enable cash-flow forecasting. Strategic levers of Revenue Management, including customer segmentation, forecasting, pricing and duration control, have also been adopted by related service industries such as cruise lines, restaurants and golf courses (Kimes, 2003).A natural extension of hotel Revenue Management was to rental car firms, which had similar issues of discount availability and duration control. Revenue Management famously saved National Car Rental from bankruptcy, simultaneously saving 7500 jobs (Geraghty and Johnson, 1997).US network ad sales at American Broadcasting Company (ABC) (Mandese, 1998) and National Broadcasting Company (NBC) (Bollapragada *et al*, 2002)revenue management systems automated the placement of ads in proposals based on total forecasted demand and forecasted ratings by program.

Financial Records and Information Automation:

This component seeks to provide a structure for effective recording of financial transactional data for all the processes and processing that data right through to the production of regulatory, financial management report. Key improvement to be delivered include electronic transmission of Bank statements, Provide an interface for instructions and statements, automatic bank reconciliation, online maintenance of banking details and provision of accurate and up to date financial information. Using automated medical records for rapid identification of illness syndromes (syndromic surveillance): the example of lower respiratory infection, Lazarus *et al* (2001) knowledge of disease patterns in real time help clinicians to manage patients, and assist health plan administrators in allocating resources efficiently. Gibson, Robin (2006), Information Sharing and extensible Markup Language (XML),social and political environment places ever increasing demands on courts to share information with other courts and various law-enforcement agencies, technologies that facilitate information sharing is Extensible Markup Language, commonly referred to as XML. Marcus, Hon. Michael H(2006), Smart Sentencing: Public Safety, Public Trust and Confidence Through Evidence-Based Dispositions. Smart-sentencing trends embrace that responsibility and enlist a wide range of strategies in pursuit of evidence-based decisions that earn public trust and confidence through accountability for public safety.

Procurement Automation:

This component is expected to address the end to end process that starts from procurement of goods and services to payment of the suppliers. This would provide an automated procurement process from requisition to generation of system PO's, Payment initiation, online approvals, system generated payment vouchers to payment, online tendering to award of contracts and enforcement of budgetary controls. Robert Handfield (2003),*E-Procurement and the Purchasing Process*. Benefits of electronically generating and transmitting purchasing-related documents include, virtual elimination of paperwork and paperwork handling, reduction in the time between need recognition and the release and receipt of an order, improved communication both within the company and with suppliers, reduction in errors, lower overhead costs in the purchasing area, purchasing personnel spend less time on processing of purchase orders and invoices, and more time on strategic value-added purchasing activities .Kishor Vaidya, A. S. M. Sajeev and Guy Callender (2006),*Critical factors that influence e-procurement implementation success in the public sector*. Literature survey developed to support a proposed model of the Critical Success Factors (CSFs) likely to impact the success of e-Procurement initiatives in the public sector and the relative importance of different CSFs. Organization and management factors are the most important category for success of e-Procurement initiatives.H.LI and A. Gunasekharah(1999),to improve the effectiveness and efficiency of procurement process, improve the timeliness of information flow between and among project participants by condensing sequential process into concurrent processes that are synchronized..Zulfiqar Ali. Qureshi and Waguih H. Elmaraghy (2014) research concludes that procurement of reconfigurable manufacturing are essential for having effective and fast production.

Financial Performance:

Financial performance will be enhanced through provision of timely, accurate and quality financial information that would facilitate effective planning, budgeting, procurement, accounting, cash-flow management, auto-reconciliation, asset management, debt management, funds mobilization and ultimately value-based economic growth. Kazeem Olabode Faleti, Hakeem Olajide Faleti and Reuben Olabayo Ojeleke(2014), Nigerian budgetary reform is seen as set of actions and measures involving evaluation of current process to identify what reforms are needed, approval, and carrying out the budget project, finalizing, control and approval of the budgetary execution. The principles of budgetary procedure are as assemble of budgetary rules which orders the public finance resources of the allocation process for government owned sectors and government owned corporations. Lori Wizdo(2013), the need to calibrate marketing spend to revenue generation was the seminal driver of lead-to-revenue management (L2RM) to inspire an L2R vision that will achieve optimal results and provide a basis for continuous financial performance improvement. Ayat, Masrom, & Sahibuddin, (2011) asserts that in the global context of rapid changes and fast communication, information has become a strategic asset, and information technology (IT) is an important contributor to the success of the economy. According to Khadra et al. (2009), enterprises understand the growing importance of IT and consider it a treasure in enhancing their competitive position and adding value to their business. In addition, IT usage provides benefits at several levels of businesses, government and society. Paul M. Healy, Krishna G. Palepu(2001) assert that financial reporting and disclosure are potentially important means for management to communicate firm performance and governance to outside investor(s). Viljami Vanjoki(2015), efficient invoice processing in an automated procurement process have an impact on organizations working capital management and thus provide companies with better readiness to face the challenges related to cash management

8. RESEARCH METHODOLOGY

Research Design:

Cross sectional census design was used since data was collected at once from the sample population of Head of departments, Finance officers, Directors, Finance and Accounting Department staff members. For cross Sectional survey, data was collected at one point in time for a sample selected to represent a larger population. Data was collected at once. This design helped to verify the effects of automation of financial systems and processes using ICT in financial management performance at Trans-Nzoia County government. In inductive research approach, the conclusions come from the particular fact Zikmond,(2000). Literature are reviewed and correlated and interrelated aspects are specified and the final conclusions are concluded based on the results, which are found during the research and at the specific environment. A qualitative research implies the research for the knowledge that measured, describe and explain the phenomenon of our reality. Quantitative is about amount and how much or many of something. Data from quantitative research are obtained from samples and observations seeking for relationship and patterns that can be expressed in numbers than words Johansson and Sparredal, (2005). This Study was a quantitative research since questionnaires was used to collect quantitative data and the information was analyzed as the numerical findings.

Target Population:

The study utilized HOD's and staff in selected departments at the county Government of Trans-Nzoia using ICT in financial management. This population was preferred because of their hands on usage of ICT in financial management.

Sample Size and Sampling Technique:

According to Gay (1992) Sampling is the process of selecting a number of individuals for a study in such a way that the individuals represent the larger group from which they were selected. They study will use purposive sampling technique. According to Mugenda and Mugenda (2003) purposive sampling allows a researcher to use cases that have the required information with respect to the objectives of the study. Therefore the study only focuses on the senior accounting officers drawn from each of the ten departments of the County government.

Category	Target Population (N)	Sample Size(S)
Head of Departments/Directors	9	9
Finance Department Staff	41	41
TOTAL	50	50

Data Collection Methods:

To increase the quality of research and to ensure the reliability and validity of the data collection through the defined research tools, a pilot study was carried out in the Kiminini Sub-county headquarters in order to reveal the weaknesses of the instruments. Validity as defined by Gay (2005) is the degree to which a research instrument(s) are accurate and credible. The pilot study was necessary to in correcting the instruments before they are administered. Split-half procedure was used to test the reliability of the questionnaire as the instrument of choice in the research. Structured interview guide and questionnaires was used in data collection. Interview guide was used and the responses recorded down and later transcribed. Interviews help in getting a clearer view of the effect of automation of processes in financial management. Questionnaires were also effective in evaluating the respondent's knowledge about the study and can easily be administered.

PILOT TEST:

A pilot study will be conducted to test the validity and reliability of the questionnaires in gathering the data required for purposes of the study in Bungoma County. There are different types of validity that can take place and they are content, construct and criterion validity. Validity is concerned with the truthfulness or accuracy of the results and refers to the extent to which it measures what it was intended to measure. Sekaran (2010) aver that validity is the degree to which a statistical instrument measures what it is intended to measure and it emphasis the accuracy of those instruments and the two types of validity are internal and external. External validity refers to the extent to which the findings and results of a study could be generalized to other particular research samples. In the context of internal validity, there are two kinds of validity of face validity and criterion validity. Face validity is the extent to which a logical relationship exists between the variables and the proposed measure in the study. It does not provide enough proof of validity since it is subjective. Content validity is the extent to which research instruments adequately cover the constructs being studied. It is usually achieved by seeking opinion of other experts. Construct validity is testifies to how well the results obtained from the use of the measures fit the theories around which the test is designed. This can be attested using convergent validity, which is established when using scores obtained with two different instruments measuring the same concept that are highly correlated, and discriminant validity, which is established when it is based on a theory. Reliability refers to the extent to which a statistic is without bias and hence ensures consistent measurement across time and the various items in the instrument (Sekaran, 2010). Rapp (2012) posit that internal consistency of a set of measurement items refers to the degree to which the items are homogeneous and can be estimated using a reliability coefficient such as Cronbach's alpha. Cronbach's alpha correlates each item with each other item, and the total score. Items with weaker correlations or low scores can be removed to leave an instrument with a high degree of homogeneity. Cronbach's alpha for each construct of which a reliability co-efficients of 0.9 is excellent, 0.80 and above is considered good, 0.7 and above is acceptable, 0.6 and above is poor, and 0.5 above and below is unacceptable

9. CONCLUSION

The finding shows that majority of the respondent 31(62%) strongly agreed that ICT use facilities such as EFS, Computers, Internet, Intranet and Databases in Financial Management at the County Treasury, 15(30%) agreed, 1(2%) were undecided, 1(2%) disagreed and the remaining 3(4%) strongly disagreed. Furthermore, 25(50%) of the respondent strongly agreed that ICT/IFMIS Enhances effective financial management at County Government, 16(32%) agreed, 3(6%) were undecided, 2(4%) disagreed and the remaining 4(8%) strongly disagreed. Form the research findings majority of the respondents were in agreement that County Treasury use Internet to support financial Management. This is in agreement with Kazeem Olabode Faleti who states that financial information that would facilitate effective planning, budgeting, procurement, accounting, cash-flow management, auto-reconciliation, asset management, debt management, funds mobilization and ultimately value-based economic growth. The finding shows that 52% of the respondents use IFMIS,10% use LAIFOM, 28% use Email and the remaining 10% use SMS. From the study findings majority of the respondents use IFMIS as ICT structure. The finding shows that 57% of the respondents agreed that ICT Databases are used to track the revenue collectors target record, 42% disagreed and the remaining 1% don't know. Majority of the respondents agreed that ICT Databases are used to track the revenue collectors target record. The finding shows that 64% of the respondents agreed that automation of the Payroll through the use of (IPPD) ensures availability of accurate and timely staff payroll details and records, 21% disagreed and the remaining 15% don't know. Majority of the respondents agreed that automation of the Payroll through the use of (IPPD) ensures availability of accurate and timely staff payroll details and records. From the research findings 19(38%) of the respondents strongly agreed that the county Government

has a fully integrated process and system that links planning, policy objectives and budget allocation, 9(18%) agreed, 5(10%) were undecided 5(10%) disagreed and the remaining 5(10%) strongly disagreed. This in agreement with Gunasekarah (1999) who improve the effectiveness and efficiency of procurement process, improve the timeliness of information flow between and among project participants by condensing sequential process into concurrent processes that are synchronized. From the findings the researcher recommends that the organization should improve on ICT system and Databases to be used in budgeting and procurement processes. It also recommends that automation of the revenue management process should be improved to enhance efficiency in the revenue collection process. It also recommends that the organization to maximize employee's multi-dimensional abilities for better performance. Finally, It recommends that the automation of the budget making process should enabled the use of a single chart of accounts (SCOA) hence achieving an efficient process and automation of the procurement process through the use of e-procurement platform should achieved an end to end process from requisition to Payments.

REFERENCES

- [1] Baldrige, J. V., Curtis, D. V., Ecker, G. and Riley, G. L. (1978). *Policy-making and effective leadership*. San Francisco: Jossey Bass.
- [2] Bass, B. M. (1985) *Leadership and Performance beyond Expectation*, New York: Free Press.
- [3] Bass, B. M. (1990) *Theory, research & management applications*, Bass & Stogdill's handbook of leadership (3rd ed.). New York: Free Press.
- [4] Central Bureau of Statistics.(2006) Ministry of Planning and Natural Resources, Republic of Kenya, <http://www.cbs.go.ke>
- [5] Clark S. (1987) *Management Models and Participative Management: A Theory for the Future* Volume 3 Number 2, An Aspen Publications
- [6] Gbenga S (2003) *African Youth and the Information Society: What role does ICT play in the business?*
- [7] Samer F and Sambamurthy. V. (2006) *Leadership of Information Systems Development Projects*, IEEE Transactions on Engineering Management, vol. 53, no. 2,
- [8] Kenya Government (2004) National ICT Policy (Draft), Ministry of Information & Communication, Nairobi: <http://www.information.go.ke/policy/>
- [9] Langma,K.(2006) 'The role of ICT in the economic development of Africa: The case of South Africa', in international journal of Education and Development using CT Vol 2,No 4,2006
- [10] Nulens, G, Hafkin, N,(2011),*The digital Divide in Developing Countries: Towards an information Society in Africa*, Brussel: VUB University Press.
- [11] University of Birmingham, Scrimshaw, P. (1997) *Preparing for the Information Age: Synoptic Report of the Education Departments' Superhighways Initiative*. Cardiff, Belfast, Edinburgh, London:
- [12] Suzanne, B & Priscilla M. D. (2004). *Detangling Data Collection: Methods for Gathering Data*, Harvard Family Research Project.
- [13] Von Bertalanffy, L. 1968. *General System Theory: Foundations, Developments, Applications*. New York: Braziller
- [14] Walonick D. S (1993) *General Systems Theory*
- [15] Wright, P. (1996) *Managerial Leadership*, London: Routledge 69.