# AN EVALUATION OF THE INTERNAL CONTROL FUNCTION: THE CASE OF KENYA POLYTECHNIC UNIVERSITY COLLEGE

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# **DECLARATION**

This research project is my original work and has not been presented for a degree in any

other university.
Signed
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This project has been submitted for examination with my approval as university supervisor.
Signed
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# **DEDICATION**

This project proposal is dedicated to my family; Ruth, Ricky and Titus, for their patience, understanding and encouragement during the period I was away from home. Their combined support and constant prayers gave me the much needed energy and encouragement, to continue working hard, up to the completion of the course.

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## **ABBREVIATIONS**

ICS – Internal Control System

COSO – Committee of Sponsoring Organizations

KPUC – Kenya Polytechnic University College

ICPAK – Institute of Certified Accountants of Kenya

AICPA – American Institute of Certified Public Accountants

IASC - International Accounting Standards Committee

SEC – Securities Exchange Commission

GAAP – Generally Accepted Accounting Principles

CPA - Certified Public Accountants

CPI - Corruption Perception Index

#### CHAPTER ONE

### INTRODUCTION

#### 1.0 Introduction

As a substitute of its presence on the scene of operations, management must rely on internal control techniques to implement its decisions and to regulate the activities for which she would ultimately be responsible for. It is in this light that use of effective ICS's is deemed crucial in the management of business resources.

In the endeavor to ensure efficient and effective operation of her activities, the management of any organization designs internal control procedures to allocate, control and ensure efficient utilization of resources, in order to achieve the overall corporate goals ISA 400 (2002). Such procedures include among others, the Internal Control Systems (ICS's). ICS's have long been advocated as a mechanism for establishing high quality financial reporting, and firms have voluntarily used them for this purpose, as they give attestation on the reliability of the accounting and financial statements besides safeguarding assets of the firm.

In accounting and auditing, internal control is defined as a process affected by an organization's structure, work and authority flows, people and management information systems, designed to help the organization accomplish specific goals or objectives. It plays an important role in preventing and detecting fraud and protecting the organization's resources, both physical (e.g., machinery and property) and intangible (e.g., reputation or intellectual property such as trademarks). This is achieved through proper authorization controls and documentation. At the organizational level, internal

control objectives relate to the reliability of financial reporting, timely feedback on the achievement of operational or strategic goals, and compliance with laws and regulations (COSO, 2011). At the specific transaction level, internal control refers to the actions taken to achieve a specific objective (e.g. how to ensure the organization's payments to third parties are for valid services rendered) (Cook, 1979).

A system of internal control recognizes the basic principle that it should be as difficult as is practical and feasible, for individuals to be dishonest or careless. Such a premise is indeed not based on a cynical view of human nature in general, but rather on the realistic assumption that there could be a few persons who would be dishonest or careless if it is easy for them to be so. Further, apart from the prevention and detection of fraud, internal controls should reflect the strength of the overall accounting environment in an organization as also the accuracy of its financial and operational records.

#### 1.1 Background of the Study

In spite of the use of ICS's, which advocate for modern accounting systems and methods, the size of modern business, its complexity and widespread structural organization combined with human weaknesses, exposes organizations to financial losses (Ashton & Hylas, 1982). A great amount of money and goods can be lost through fraudulent actions of dishonest employees, and unintentional errors in the transformation and transfer of financial information used for appropriate decision making.

The findings of the Treadway Commission Report of 1987 in the United States (USA) confirmed absence of, or weak, internal controls as the primary cause of many cases of

fraudulent company financial reporting. In response to several high-profile financial frauds COSO (1992) issued a report providing a foundation for assessing internal control effectiveness. Ever since, several waves of accounting scandals have led to regulatory requirements for managers and auditors to report on internal control effectiveness. Most recently, the Sarbanes Oxley Act (SOX) internal control provisions have fueled the ongoing debate among regulators and practitioners about the effectiveness of this type of regulation in improving financial reporting quality given the subsequent financial crisis. In a speech delivered at the U.S. Chamber of Commerce Global Capital Markets Summit, James Turley (2008), Chairman and CEO of Ernst & Young, called for "a global debate about what management should be saying about its controls, (and) what auditors should be saying about them, if anything."

The widespread global corporate accounting scandals that assume near epidemic proportions in recent years inform this study. Notable cases include Enron and WorldCom in the USA, Parmalat in Europe and Chuo/Aoyama in Asia, and Tyco. In South Africa, cases of accounting scandals have been recorded in JCI and Randgold and Exploration companies. These scandals emphasize the need to evaluate, scrutinize and formulate systems of checks and balances to guide corporate executives in decision making and preparing accurate financial statements.

On the local scene, issues were raised in parliament on the non liquidation of non performing parastatals which had gone down, or were under receivership. Muthama (2001) decried the non disclosure of proceeds therefrom to Treasury, in parliament.

Defective and/or inoperative ICS's occasioned the collapse of parastatals like Dawa Phamaceuticals, East Africa Fine Spinners, Kenya National Assurance Company, Kenya Meat Commision, Muhoroni Sugar Co etc. Others like the National Bank of Kenya and Uchumi Supermarkets were saved from total collapse by funds revamped by the Government. Fraud, unsustainable expansion policy besides poor management are the main reasons behind failure of public institutions.

The KPUC was to absorb all rights, liabilities and assets of the Kenya Polytechnic, at the commencement of the order that created KPUC. The researcher desires to establish the effectiveness of the existing ICS's, in this transition period, for the benefit of stakeholders, who include the government, taxpayers, management, employees and students. This institution operates in an environment where ICS disclosure is not a statutory requirement, unlike countries like Germany and France, and so, the ICS's in use are designed and implemented to suit the particular environment. Options available to management and choices made by them might not be clear to superiors, for purposes of good corporate governance. In the absence of standard ICS's in public universities, control can only be pegged on financial and operational proxies.

Poor performance of parastatals in Kenya, attributed to poor management, for lack of adequate controls, preempted this study. Poor service delivery in public universities, leading to students strikes, can be attributed largely to poor governance, owing to weak ICS's, as has been the case with various local universities.

#### 1.1.1 The Kenya Polytechnic University College

A constituent college of the University of Nairobi, it was established with the purpose of offering multi level system of post secondary school education and training programs that are market driven, through to degree level, by legal notice No 159, which co opted it under the University of Nairobi Act, cap 210. Prior to its elevation to a University College, it was a middle level college, The Kenya Polytechnic, offering technical and business courses. The institution was then run under the Education Act but has been subsequently subjected to UON Act, cap 210, upon its upgrading to a University College.

As a public institution, it is also to comply with the Financial Regulations and procedures as provided for in the Constitution of Kenya under sections 48, 99-105, the Exchequer and Audit Act (Cap 413), and Kenya National Audit Office (KENAO), which give provisions regarding the management of Government finances.

KPUC is also expected to administer her finances in line with the guidelines as stipulated in The Statutes on the Borrowing, Investment of Funds, Annual Estimates and Taxation, which outlines and defines a system, ICS, of administering Government finances, covering areas such as the generating and collection of revenue, appropriations, accountability and auditing.

Part iv of sec 21(1) on Accounting and Audit, the University College Council is to keep proper books of Accounts, prepare statement of Income and Expenditure, and the Statement of Assets and Liabilities. These are to be submitted to the Controller and

Auditor General for audit, within three months after the close of the financial year in June.

The change in legal status demands that KPUC not only comply with the Education Act, and the University of Nairobi Act, but also the KENAO requirements. There is therefore need to institute strong ICS's, in order to meet the above legal requirements, especially in this period of transition from a polytechnic to a university college.

### 1.1.2 ICS's in the Kenya Public Sector

Though general guidelines are instituted in the public sector for the control of various institutions, regarding control of cash, there is outright non compliance with these guidelines (Komora, 2007). This indicates the possible and specifically, the real sources of malpractices ie inefficient ICS's. Besides, Komora also raises concern over the failure of his superiors, to take action on the findings of her reports, on matters touching on breach of ICS's. This creates doubt on the extent to which such findings should be relied upon; when those reported to, put no weight on the findings.

In the light of the above, with the office of the Auditor General conceding that public institutions breach ICS's immensely, and that action on his recommendations is never taken, there is need to ascertain the adequacy of the ICS's used in KPUC, a public institution, and audited by the Auditor General.

#### 1.2 Statement of the Problem

The control function in organizations includes systems and procedures for establishing performance goals and ensuring that all organization members work toward those goals.

An effective control system must establish decision rights (authority) for managers, set performance expectations, and measure outcomes in comparison with expectations.

The ever growing need for university education has pushed the government of Kenya to upgrade and even convert other public institutions, to university colleges or fully fledged universities. The legal orders that upgrade these institutions transfer all the rights, liabilities and assets held by or by anybody on behalf of the existing institution to automatically and fully be transferred to the new entity.

Reactive studies on evaluation of ICS's have been conducted majorly in profit making institutions, and only after the occurrence of financial scandals. Such led to enactment of the SOX, in the USA, to curb such fraud in future. Pursuant to SOX act, COSO (2004) designed a framework for ICS's, as their effectiveness or otherwise was considered to be deterrents and early indicators of malpractices.

There has been little empirical exploration of how public universities are affected by ICS's. Studies conducted on IC and compliance monitoring, have zeroed on specific elements of ICS's. The few that have evaluated ICS as being pivotal to the success of the organization, have dealt on profit making organizations, leaving the effect of ICS on public, nonprofit making organizations unexplored.

Other studies have isolated certain elements of ICS's, evaluating their effect on the organization' profitability and good corporate governance. Generally, such studies have built on the agency, stewardship and social theories, world over.

Beretta et al (2008) conducted a research on the effect of board monitoring and ICS. He established that the effectiveness of this control element on the strength of the ICS depends on regulatory environment that would demand disclosure of ICS's for proper governance. COSO (1992; 2004), stated the centrality of internal control systems in achieving organization goals. Amundo (2006) evaluated the ICS of the African Development Bank, Uganda branch, and established that the internal control systems were ineffective in the projects, as they lacked some elements.

Locally, Salih (1983) evaluated the ICS of the Ethiopian airlines, Kenya branch, a profit making organization. He established there was no segregation of duties in the purchasing department, and that the organization structure was questionable, as there was no internal audit unit and the accounting unit was answerable to the sales, giving weak ICS's, and so potential malpractices.

Esmailjee (1984), in his evaluation of the ICS's of Nyayo Bus Service Corporation, a then profit making organization, cited inadequate segregation of duties and poor physical control in the stores as possible trouble spots. The organizational structure was also questionable, with the internal auditor reporting to the general manager. Within a period of seven years, since the takeover of the parastatal from National Youth Service operations, the firm collapsed, with rapid expansionist policy cited as the main reason.

This study seeks to investigate the perceived role of ICS in promoting good corporate governance in a public university.

In an attempt to fill the existing knowledge gap, this study analyzed the role of ICS in the public sector, with specific reference to public universities, which are non profit making, yet financed by the tax payer funds, where legalistic policies guide management in designing ICS's, to enhance performance and proper corporate governance. To the best of my knowledge, such a study has not been conducted before.

Transparency International (2006) gives the source of corporate accounting scandals as abuse of ICS'S by those responsible for their operational effectiveness, besides suggesting a prevalence of corruption in African countries, the Corruption Perceptions Index (CPI), 2006.

## 1.3 Objective of the Study

To compare the Internal Controls of the University College with a theoretically sound Internal Control System of an institution of its repute.

### 1.4 Importance of the Study

Internal controls are key to the success of any organization, irrespective of its size, as they help the organization attain its objectives. Sufficient, reliable and accurate accounting information can be elicited from an organization that has a strong ICS, to allow reliable financial reporting, and good labor relations.

In addition to assisting management in effectively carrying out its responsibilities, Internal Controls also help external auditors in reducing their audit work and subsequently, saving on time and costs. The ICS's allow the auditor to reduce the need for routine, mechanical verification of bookkeeping accuracy, permitting substitution of a less time consuming approach that involves reasoning and judgment and stresses such activities as reviews, analysis evaluation and statistical sampling (Meigs, 1988).

Management is likely to benefit through highlighting of weaknesses of the existing system, and possibly urging them to adopt the recommendations, which will enhance their control, monitoring function and financial planning. With employees sensitized to the importance of the ICS, they will appreciate the importance of ICS's, hence creating good labor relation, enhancing smooth flow of work.

Policy makers who expect use of sound ICS's in a public institution will easily meet their requirements, for contract performance purpose, besides enhancing good corporate governance. This includes Parliament, to whom public institutions are accountable and by extension the public.

Academicians and students will increase their knowledge of ICS and will competently research on ICS's, debate on the research to come up with better proposals or draw conclusions on the area of ICS's, as the central role of ICS in effective management is imparted upon them. This is likely to be the birth of water tight harmonized ICS's in the public sector. The students will also appreciate need to abide by the ICS's for improved service delivery. The accounting and management students will not only strengthen their skills in writing projects, but also their life in employment will be strengthened enough to

uphold the KPUC's image of excellence. Properly designed and implemented ICS's will enhance learning.

The study, if accepted, will allow a smooth phase in of the new ICS, avoiding resistance in implementation. This will help enhance the old system without proposing a completely new ICS, by overall evaluation of factors that materiality affect the university's economic welfare.

### **CHAPTER TWO**

## LITERATURE REVIEW

### 2.0 Introduction

The many financial scandals that have shaken financial markets and investors worldwide have certainly contributed to the recognition of the key role of the Internal Control System (ICS) in the governance of firms. Theories have been documented, and they have formed the basis of the design of ICS. According to the agency and stewardship theories, the ICS contributes to the protection of investors' interests both by promoting and giving assurance on the reliability of financial reporting, and by focusing the boards' attention to the timely identification, evaluation and management of risks that may compromise the attainment of corporate goals. The social theory postulates need to design ICS's in recognition of the worker as having social needs that must be met, alongside the firms' goals.

In response to the major fraud in the financial market, the SOX Act created way where, institutions like COSO responded by designed ICS framework, from the beginning of the 1990's. The centrality of internal control systems in promoting the achievement of objectives concerning the effectiveness and efficiency of operations, the reliability of financial reporting and the compliance with laws and regulations (COSO, 1992; 2004) was emphasized, as discussed later. This framework was based on the agency, stewardship and social control theories.

Agency and stewardship theories have captured the attention of business researchers in recent years. Given that many business school professors continue to propound the relevance and validity of agency and stewardship theories, practicing managers need to know if the principles in these theories apply in the real world, provide useful guidance, and, thus, have merit.

#### 2.1.1 The Agency Theory

Agency theory is an economics-based control system design that has been used extensively to model the Internal Control System choices available to firms. It focuses mainly on the relationship between the stockholders (principals) and the managers (depicted as agents). In large modern corporations, the nature of this relationship is formal and contractual (Jensen & Meckling, 1976), owing to the presumed goal incongruity (Sharma, 1997; Shapiro, 2005) and divergence of interest between the principal and the agent (Davis, Schoorman & Donaldson, 1997).

The Jensen and Meckling model (1976), as it is called, was the first to explain the dynamics of principal-agent relationships, which are primarily contractual in nature. The relationship between stockholders (principals) and the managers (agents) of a firm has been described as the "pure agency relationship", because it is associated with the separation of ownership and control (Jensen and Meckling, 1976). In this process, principals delegate powers to executives to manage their firms (Davis, Schoorman & Donaldson, 1997; Shulze, Lubatkin & Dino, 2003).

Agency theory assumes that agents will try to act opportunistically (Sharma, 1997; Mustakallio, Autio & Zahra, 2002; Chrisman, Chua & Litz, 2004; Wasserman, 2006) by capitalizing on the loopholes in the contract or by taking advantage of the perquisites of the appointment for their own benefit, thereby maximizing their own utility at the expense of their principals (Chrisman, Chua & Litz, 2004; Shulze, Lubatkin & Dino, 2003). Ramachandran et al (2007) established that while principals have high level

needs, as structured by Maslow, most agents have low level needs, and will thus design ICS's to achieve the low level need.

However, the broader social context in which the agency relationships are embedded is completely overlooked by the agency paradigm. The theory also fails to account for the outside forces (community, environment, sentiments, and people) that make an indelible impact on the agency relationships.

Another interesting dimension that agency theory fails to highlight is the duality of role playing, where one is principal to his employees and a trustee (agent) to the family and community at large (Morck and Yeung, 2003). It is to the principal's best interests that effective ICS's be used. Unless the principal has great input in the ICS design, then the agent will most likely design those that enable him achieve his goals, and possibly frustrate the attainment of the high level management goals.

In conclusion to the agency theory, a true agent is not a mirror image of his principal; hence the possibility of designing ICS's that will primarily meet the needs of the agent.

#### 2.1.2 Stewardship Theory

Stewardship theory, complementary with the agency theory, plays a critical role in understanding the dynamics of organizational behavior. This theory, engages primarily in

analyzing the reasons for the co-existence of non-economic, trust-based relationships alongside agency relations in organizations, arising out of a principal-agent interest convergence (Corbetta & Salvato, 2004). The "stewardship attitude", which involves trust and commitment to a shared set of values exhibited by the principal and the agent alike (Albanese, Dacin & Harris, 1997; Davis, Schoorman & Donaldson, 1997), is the fundamental basis of this interest alignment. While the stewardship attitude of the actors in an organization compensates for some of the inadequacies of the agency theory, it is plagued with its own set of problems, when applied to the organizational context of some businesses.

Ramachandran et al (2007) argue that the familial context facilitates interplay of both agency and stewardship in family-controlled businesses. They sought to investigate the right blend of agency and stewardship at different stages of business development, to give sustainable and viable organizations. The study was to establish whether the involvement of family in the business could provide in-built solutions for the problems of governance associated with the agency as well as the stewardship theories and build successful and sustainable organizations.

### 2.1.3 Social Control Theory

Proponents of the socio-economic theory uphold that internal controls will only be effective if designed to appreciate man as having both economic and social dimension, and at the same time, being considered as an agent and steward in the organization.

In literature supporting the effect of social theory on management control, there is the two-stage rationality (Redmond, 2004; Verstegen, 1994, 1998, 2006). In this conception, which is strongly associated with institutional theory (Miller, 1994), purpose-seeking, self-interested, behavior will only have meaning in the second stage. In the first stage, a decision room is shaped, making purpose-seeking behavior attainable in the second stage.

The socio-economic view appreciates man as having both socio and economic pursuits, in which case, ICS that meet such needs will be well adhered to. According to him, a variety of aspects and sectors of economic action, among which consumer behavior, economic policy, organizational behavior and intra-organizational behavior greatly affect coordination of human behavior in organizations, and in particular on management control. Summarily, there is the view that management control is founded on a conception of human nature; in the economic view, this would be the self-interested rational individual. On the basis of this economic view, many instruments and methods were elaborated upon (Anthony & Young, 2004; Atkinson et al., 2003).

Verstegen et al (2010) intended to present a conceptual framework, broad enough to accommodate four coherent developments highlighted in the literature but are overlooked in the economic view on management control. These developments are: the importance of other variables besides financials, for instance culture, norms and values, for management control; the role of rule-following behavior; the role of management control

in framing the decision room of decision makers; and the evolutionary approach of management control.

#### 2.2 Empirical Literature Review

Research on evaluation of ICS's show that the regulatory environment largely determines the effectiveness of ICS's, as established by findings (Berreta et al), on firms listed in stock exchanges in London, Paris, Frankfurt and Milan. Locally, listed firms are expected to comply with regulations on the composition of the audit committees. Locally, the Capital Markets Authority demanded that all quoted companies should have their internal audit reporting to audit committees, to deter irregularities and fraud.

ICS cannot be directly observed by investors in order to appreciate its effectiveness because it is composed by internal managerial mechanisms, activities and processes put in place within the organization (Deumes & Knechel, 2008). Thus, investors must rely on management discretionary disclosure in order to get specific information on its design and implementation. For this reason, both regulation and codes of corporate governance across the world have called for increased ICS disclosure (Directive 2003/51/EU "Modernization"; Combined Code - discussion draft – FRC, 2009).

Adrian (2005) in his CPA publication believes internal controls, auditing policies and a tough stance can help deter fraud. He believes the first line of defense against fraud is a strong system of Internal Controls, which can be achieved through employee awareness policy and whistle blowing policy. All published guidance point to management as the individuals responsible for preventing fraud, with ICS's used as the main tools.

While corporate governance best practices ask for disclosure about the characteristics of the ICS, they do not detail what management should disclose (free hand, high level approach). Under these circumstances management has wide discretion in deciding the extent and contents of the narratives of ICS disclosure. Previous research on the relationship between corporate governance and disclosure is based on agency theory (Jensen & Meckling, 1976) and Williamson (1983). They provided the framework linking board monitoring and disclosure.

Berretta et al (2008) noted ICS disclosure in compliance with the regulatory environment determines the strength of ICS's. Empirical evidence shows that the ability of the board to play its monitoring role is related with the information disclosed to the market (Chen & Jaggi, 2000; Eng & Mak, 2003) and with the functioning of the ICS (Xie et al., 2003; Zhang et al., 2007), where the regulatory framework demands. On the one side, in an enforced setting, management is required to issue a report on the ICS. As investors value the costs they sustain to monitor management when pricing their claims (Jensen & Meckling 1976), the incentives for management to disclose are higher when the other monitoring mechanisms (such as the board of directors) are weaker and thus the overall agency problem is higher (Leftwich et al., 1981; Eng & Mak, 2003; Gul & Leung, 2004). Thus, management has incentives to communicate more information on the characteristics of the ICS in order to lower monitoring costs for investors and to inform them on the effectiveness of the ICS.

A study was conducted based on four European countries, characterized by different institutional settings. Samples comprised 160 European firms listed on the London, Paris,

Frankfurt and Milan stock exchanges during a three-year period (2003 – 2005). Whilst in Germany and France disclosure on the ICS was enforced by some provisions contained in the respective Commercial Codes, in Italy and the UK disclosure was simply recommended by national Codes of Corporate Governance.

Other researchers have made detailed researches on the relationships between an organization and its financial control systems. They used the agency, stewardship and social theories. Cook & Kaplan (1968) conducted studies that focused on aspects of controls and how they relate to performance reporting, organizational structure, behavior and the external auditors' work. Their findings gave high correlation. Ouchi (1981) studied the relationship between the organizational structure and organizational control. Based on 78 retail departmental stores, he conceded that output control was highly dependent upon the organization structure.

Bruns & Waterhouse (1975), conducted a survey of 25 companies to explore the interaction between an organization structure and budgets. The argument was put that budget related behavior was contingent upon these factors. They argued that budget related behavior was dependent on centralization, structuring and autonomy. Hayes (1977) made a survey of 103 companies to assess the effectiveness of departments in relation to internal, environmental and inter-dependency factors. He concluded that controllability and responsibility are different across different departments, due to differences in technology and environment. Haylas & Ashton (1982) sought to provide evidence on the effectiveness of particular audit techniques in detecting errors that affect financial statements. The results of the study suggested that intentional errors are

concentrated in relatively few audit areas, depending on the industry. Majority of the errors either over or understate profit.

Cook (1968) studied the attitude of managers towards control report. In a related study by Dew & Gee (1975), the results of the two studies were that the degree of reporting frequency determined the extent to which management would use the reports.

The National Audit Office of the United Kingdom, in collaboration with the Overseas Development Administration, in its Manual entitled "A Guide to Certification Audit" emphasizes the evaluation of internal control procedures during Systems Based Audit (SBA). In the United States of America, the introduction of the Foreign Corrupt Practices Act of 1977 (FCPA) requires the corporate management to maintain a system of Internal Accounting Controls, sufficient to provide reasonable assurances for the proper execution of transactions and effecting accountability

The COSO framework identifies specific elements as parameters to any ICS as discussed below. However, this framework may only be appropriate to large organizations due to cost and operational complexity. Small firms may not employ all the elements, yet the systems could still be effective, because of the personal involvement of the management in the firm. The COSO framework did not recognize and capture the delicate balance between formal and informal controls in small firms. COSO also failed to recognize the importance of Information Technology (IT) as a major control component.

Control Objectives for Information and Related Technology (COBIT 1996, 1998, 2000, 2005 & 2007) recognizes the IT importance and its omission in the COSO research as a

control component. COBIT identifies IT resources as a source of information, and they include, people, application systems, technology, facilities and data. These are then grouped into domains (planning and organization) with processes (acquisition and implementation, delivery, support and monitoring), so using the three theories stated above.

In Uganda, (Amundo, 2009), appreciated the importance of strong ICS's in running the African Development Bank, Uganda branch.

Studies conducted in Kenya by Salih (1983), attributed the performance of Ethiopia airline, to strong internal controls. Essajjee (1993) attributed the then pending collapse of Nyayo Bus Service Corporation to inadequate controls.

With the CMA (capital markets authority) just recently enforcing use of audit committees to enhance IC effectiveness, and for lack of regulatory requirements on ICS's of local public institutions, the research will largely use the COSO framework, which is developed from the agency, stewardship and social control theories.

Different approaches to the evaluation of effectiveness of internal controls could be used. This study will largely use the COSO findings, besides referring to COBIT framework, as indicated in the figure below. In this regard, controls evaluation will be a step toward achieving the study's objectives once the research questions are answered.

#### 2.2.1 Elements of Internal Controls

COSO IC – Integrated framework, 1992 (Knechel, 2007) gives specific components of the ICS as below:

Control environment- the essence of an effectively controlled organization lies in the attitude of its management (Aarens et al, 1997). The control environment consists of actions, policies and procedures that reflect management attitude about the control of the entity. This touches on integrity and ethical values, commitment to competence, Board of Directors or audit committee participation, management's philosophy and operating style, organization structure, and assignment of authority and responsibility and Human Resource practices.

Risk assessment – Management assesses, identifies and analyses risks relevant to the financial reporting in conformity to GAAP. This becomes a point of designing and operating ICS's to minimize errors and irregularities. The auditor assesses risks to decide evidence needed for audit.

Control activities – are policies and procedures, in addition to those included in the other four components, that help ensure necessary actions are taken to address risks in the achievement of the entity's objective eg segregation of duties (authorization, custody, operations and documents, electronic data processing), proper authorization, proper documentation and records, physical control over assets and records and independent checks on performance.

Information and communication – readable and readily understood information is important for the dissemination of instructions downwards, through all the internal

channels of communication. The flow of information should be adequate, sufficiently detailed and explicit, accurate and up to date in an upward direction, as part of a routine management information system (Woolf, 1982).

Monitoring - involves ongoing/continuous or periodic assessment of the quality of ICS performance by management to see if ICS are understood, implemented and need for revision, external and internal audit reports, financial statements, regulatory reports can be used. It can be achieved through use of internal audits and audit committees.

### 2.2.1.1 Organization and Behavioral Controls

The organization structure is determined by: size and complexity of the entity, clarity of lines of authority and responsibility; the level at which policies and procedures are established; adherence to these policies and procedures; adequacy of supervision and monitoring of decentralized operations (Hayes et al, 2005).

The organizational control, through variables such as culture, style of management, directional control, control strategic human resource management, organizational structure, together with the individual and social control, tends to guide the individual and collective behavior towards achieving the business goals (Ouchi, 1981). The culture and style of leadership are the most important variables of organizational control, because they affect the workings of organizational control, the individual and social controls.

#### 2.2.1.2 Segregation of Duties.

An important character of an effective ICS is a separation of functional responsibilities (Louwers et al, 2008). According to him, four types of functional responsibilities should be performed by the different departments. The initiation, authorization, execution, and recording of any transaction are executed by different officers.

Division of work, with no one person processing and recording a complete transaction reduces the risk of internal manipulation or error, as it increases checking. Where there are incompatible responsibilities, a combination of responsibilities that place a person alone in a position to create and conceal errors, fraud or misstatements in his normal job, duties should be avoided such that no one person can control two or more of these responsibilities. (Hayes, 2005), concedes that segregation of duties prevents persons with access to readily realizable assets from being able to adjust the relevant records, hence controlling assets. In a computerized environment, the operations responsibility, record keeping and the information technology duties should be separate. ie the programmer, computer operator, librarian and data reviewer duties should be separated (Hayes, 2005).

## 2.2.1.3 Authorization to Execute Transactions

This duty belongs to people who have authority and responsibility for initiating or approving transactions. The authorization may be general, based on a class of transactions or it may be specific, on a specified transaction. These people initiate and approve transactions subject to subject matter limit and as prescribed by the management policy (Louwers et al, 2008). Authorized transactions are those deemed to have been

sanctioned by the authorized officials, with clearly defined limits of authority for the various transactions.

#### 2.2.1.4 Transaction Records

To ensure all transactions are recorded with accuracy and completeness, the management design forms and procedures of recording such transactions. An entity should have controls that ensure that each transaction that occurs in an entity's accounting system is properly authorized, and the entity should design documents and records so that all relevant information is captured in the accounting system (Assmund et al, 2006). Systematically designed and classified information, serves as a basis for summarization and identification of the nature of the item to be recorded. This also allows the checking of arithmetical accuracy (Ricchiute, 2006).

Pre numbered documents should be used, having been prepared at the time a transaction takes place, simple enough to be clearly understood, designed to meet the needs of the accounting and record keeping function, in both manual and computerized environment. In a computerized environment, this calls for control over file revision, storage and updates and maintaining back up files like son-father-grandfather documents (Knechel et al, 2007).

#### 2.2.1.5 Flow of Information

A systems flowchart is a diagrammatic – symbolic representation of a system or a series of procedures, given in sequence. It shows the sequence of procedures, division of responsibilities, sources and distribution of documents, and types and location of

accounting records and files. Many CPA firms consider systems flowcharts more effective than questionnaires and narrative descriptions in documenting their understanding of a client's accounting information system (Whittington, 2010). In a computerized accounting environment, a flowchart is a diagram representative of the entity's accounting system – it can be a document, systems, program flow chart, showing the flow of documents, the processing steps and operations performed respectively (Aasmund et al, 2006).

## 2.2.1.6 Arithmetic and Accounting Accuracy.

Recording of transactions should be proper, accurate and arithmetically correct. The procedures here include checking arithmetic accuracy, checking totals, compiling reconciliations, writing up control accounts, trial balance and accounting for documents (Gray, 1999).

Data validation controls can be applied at various stages, depending on the entity's Information Technology capabilities, and are mainly concerned with accuracy assertion (Eilifsen, 2000). Errors can be identified at any point in the system.

### **2.2.1.7** Physical Controls.

These procedures ensure the physical security of assets and records against theft, damage or loss besides security over unissued pre numbered documents, ledgers, journals and computers (Whittington et al, 2010). Physical access to such assets should thus be restricted to authorized personnel, by use of strong rooms, locks, and security against fire and vagaries' of weather (Hayes et al, 2005). This concerns the safety and custody of the

company's assets and records through restricted accessibility (Gray, 1999). Restrictions to computer access can be effected by way of passwords (Louwers et al, 2008) and building of firewalls (Gray, 1999).

Custody of assets should be put in the custody of reliable persons. Close security being accorded highly valued items, especially those that are portable (Louwers et al, 2008). Separation of duties lowers the risk of disposal for personal gain and adjusting records to cover the theft (Ricchiute, 2006).

Performance reviews are independent checks on performance by a third party. They include review of actual performance vs budgets and surprise checks of procedures. Periodic comparisons of accounting records and physical asset like stocktaking, and a review of functional or activity performance like review of reports on branch performance. (Hayes et al, 2005). Such duties entail making comparisons at regular intervals and taking appropriate action with respect to any differences (Louwers et al, 2008).

## **2.2.1.8** Sound Operating Routines and Procedures.

These allow efficient running of the business organization in various area of operation. Specified procedures in the highly sensitive areas like procurement, preparation of payrolls, maintenance and safety of plant and equipment enhances the Controls in the organization. This can be achieved through use of descriptive words, diagrams or flowcharts.

The other important aspects of sound practices are the creation of an adequate system of internal control through molding of its integral parts into smoothly functioning units and having written policies, budgets, and standards to aid in planning, organizing and evaluating results. Management reports of actual results are equally important. To assure quality, ICS's should be monitored through continuing or periodic evaluations, or both – and discrepancies resolved by management at least one level above those responsible (Ricchiute, 2006).

#### **2.2.1.9 Personnel**

The internal control is only as effective as the personnel who implement and perform the controls (Aasmund et al, 2006). An entity with sound personnel policy for hiring, orienting, training, evaluating, counseling, promoting, compensating and taking remedial action on its work force is a direct function of possible errors, fraud and other irregularities (Ricchiute, 2006). It is vital to have adequate personnel, in terms of numbers, besides having the required competencies. This allows efficiency, accuracy and besides saving on time and cost. A motivated workforce will be less prone to high staff turnover, low likelihood of strikes, accidents and conflicts within the organization (Eilifse & Messier, 2000). Approximately 55 % of the errors detected by auditors resulted from personnel problems, insufficient accounting knowledge and judgment errors (Wright & Ashton, 1989). Careful selection and maintenance of employees determine the performance of an organization (Salih, 1983) (Chruden, 1980).

#### 2.2.1.10 Control Environment

The subjective component of the Internal Control System is the control environment, which is considered the basis of internal control (COSO, 1992). It determines the degree of sensitivity of staff to the control needs. The human system affects the other components of the internal control system during the design and the implementation phases. It is characterized by the values, principles, ethical beliefs, fairness, equity, trust, honesty, which affect the behavior of the internal and external organization members (Cohen et al, 2004). The culture of control exerts a considerable influence on all the elements of the control system (Dittmeier, 2007). It further considers that the strategic background of internal control policies is determined not only by control culture, but also by style of Internal Control. The style of Internal Control could be construed as an "intellectual practice", which combines the ways to consider and to use variables of the internal control system (Pini, 2000).

### 2.2.1.11 The Auditor and Controls

This is done through internal audit and management controls. These are the controls exercised outside the day-to-day routine of the system. They include the overall supervisory duties, controls exercised by the management accountant and comparison with budgets, the internal audit function and any other special review procedures. Internal checks this is an important tool of ICS where the work of one employee is checked by another employee on daily basis.

### **2.2.1.12 Supervision**

Close supervision of the firm's resources, for instance cash in the till and produce on the shelves should be conducted occasionally by the directors, or their nominee (Gray 1999). The responsibility of supervision should be clearly laid down and communicated to the person being supervised. The methods of supervision to be utilized, depend on the cadre of workers in question. Senior workers can be supervised through Management By Objectives (MBO), while junior workers can be closely monitored physically.

#### 2.2.1.13 Audit Committees

Are essential elements of the entity's top control environment, the full embodiment of the tone of the top. Since the committee is final (if not the only) authority over financial reporting, the chief executive and chief financial officers need to be competent. The Sarbane-Oxley Act, Sec 407, 'Disclosure of audit Committee Financial Expert,' requires that an audit committee include at least one financial expert, the requirements for which focus largely on relevant experience (Ricchiute, 2006)

In summary, while benefits may accrue from the implementation of collaborative ICS, this will require both an effective and comprehensive change programme, and the competences to support the change. Understanding and implementing ICS should bring about dramatic changes in work and business processes, positively resulting to efficiency, in quality service at the least cost.

This chapter has reviewed literature on the importance of various roles of ICS for good corporate governance. ICS are depicted both as monitor and agent of efficiency. The chapter also captures the relationship between corporate governance and ICS; agency,

social and stewardship theories and the ICS, from local and international empirical studies.

However, despite the existence of certain possible inherent weaknesses that would exist in almost every system, however perfect in design, the corrective action taken for rectification by management and its periodic assessment through the Systems Control Evaluation method would enable the fulfillment of the principal objectives of establishing and effectively operating Internal Control Procedures.

There is, however, unanimity that the best organization's control systems are those that take into account both internal and external environment of the entity. Its important that design of IC not only be sourced from the internal management (agent) but also from the principal and other stakeholders, to cater for high level needs of the principal and the low level needs of the agent (covering agency theory). This will allow the ICS to capture both the economic and social aspects of any organization.

The researcher also believes that the outcome of this study will be instrumental on having ICS disclosure regularly enforced, for public institutions.

## **CHAPTER THREE**

#### RESEARCH METHODOLOGY

#### 3.0 Introduction

This chapter details the research design to be used to achieve the objective stated earlier in the study. It aims at documenting and evaluating the existing Internal Control System of KPUC, paying due attention to cash/cheque collections and disbursements, procurement and payroll. It also sought to shed light on both the budgetary and personnel controls, in order to appreciate the benefits of using broader concepts of Internal Control Systems.

## 3.1 Research Design

The study sought to establish the effectiveness of ICS's in the KPUC. The researcher used the case study as the research design, as this type of design provides an opportunity to obtain responses which are more accurate and factual. Since this case study was based on one entity, it was expected to provide rich detail of a predominantly qualitative nature (Yin, 2004). According to Eisenherdt (2004), case study should emphasize detailed contextual analysis of a limited number of events or conditions or relationships. The qualitative research method used helped establish the basis for the application of ideas

and extension of method (Miles et al, 2003). According to Feagin et al (2004), case study is an ideal methodology when a holistic, in-depth investigation is needed, which befited this research, provided in-depth information about the sampled departments, producing new insights that generated additional studies.

Besides, the study aimed at investigating details of a real life phenomenon using multiple sources of evidence. The sources of evidence were the data collected through: questionnaires, interviews, observations, and documentary analysis. The research strategies to be used included: survey, grounded theory, ethnography, action research, cross-sectional and longitudinal studies, exploratory and descriptive and studies, besides observation and case studies.

Earl Babbie (1998) supports choice of case study method in opposition to others as follows:

Whereas most research aims directly at generalized understanding, the case study aims at the comprehensive understanding of a single, idiosyncratic case. Whereas most research attempts to limit the number of variables considered, the case study seeks to maximize them. Ultimately, the researcher executing a case study typically seeks insights that will have a more generalized applicability beyond a single case under study, but the case study itself cannot ensure such generalizability.

This method also generated answers to the "what? and how?" research questions asked in this study. It also allowed in-depth documentary analysis, extraction of data and information specific the organization and use of confidential information tailored to suit the study.

## 3.2 Population and Sampling

This study involved an examination of the College's ICS's, with sample elements to be interviewed drawn from among others, the human resource, administration, finance and internal audit. The selection of the sample units was basically judgmental. Having been guided by the administration on the areas to collect data, the researcher randomly selected the interviewees, in the specified areas.

### 3.3 Data Collection

The researcher collected data from both the primary and secondary sources. Semistructured questionnaires were used, supplemented with oral interviews to solicit for information. Documents were scrutinized, especially for the sensitive departments. For some departments, like the library, accounts, human resource etc, interviews and narrative notes were also used.

To those who were either too busy to respond to questionnaires, or not just interested, the questionnaires were administered in person, recording the responses as appropriate. Others called for drop and pick up later method. While primary data was gathered from

the heads of department, study and analysis of records provided the secondary source of data.

### 3.4 Data Analysis

Data was organized for analysis by reading through the filled questionnaires in an effort to spot any inconsistencies or errors which may have occurred during data collection stage. Any problems identified were corrected appropriately. The researcher will also undertook inspection, correction and modification of the information given in each questionnaire so as to guarantee the correctness and adequacy of data on a common basis to the categories of reply. Data collected was classified into departments so as to generate distinct application of ICS, on departmental basis. The data was then coded and tabulated for analysis, providing a general picture on the understanding, application and hindrances of application of the ICS's on departmental basis.

According to Marshall and Rossman (1999) data analysis is the process of bringing order, structure and interpretation to the mass of collected data. In qualitative studies, researchers devote more attention to conceptualization, to understand people, groups and organizations within the full context or situation in which they act (Sullivan, 2001). In fact, in qualitative data analysis, researchers devote more effort to contextualizing than to abstracting or generalizing. According to Yin (2004), content analysis is a research tool used to determine the presence of certain words or concepts within texts or sets of texts. For the purposes of the current study, content analysis was used.

Different approaches can be used to evaluate ICS's. This study used qualitative approach on the case study. Observation is also highly used. The researcher also believes that the outcome of this study will be instrumental on having ICS disclosure regularly enforced, for public institutions.

### **CHAPTER FOUR**

# DATA ANALYSIS, RESULTS AND DISCUSSIONS

#### 4.0 Introduction

This chapter sets to give a detailed analysis of data collected. Data was collected using the questionnaire besides the evaluation of documents from the institution. It was then tabulated and analyzed in order of the research questions to achieve the objective of the study; the evaluation of KPUC internal control system.

### 4.1 Discussion

This study identifies the following six essential components of an effective internal control system: control environment, risk assessment, control activities, information and communications, monitoring and information technology. The model includes working relationships, which is taken into account to achieve effective functioning of the six core control components, as illustrated in chapter two.

The six control components are assessed before expressing opinion on the design and effectiveness of the overall internal control systems. But this alone cannot identify the

exact weaknesses in the internal controls. To do this, core control components are broken down into minor independent variables and those that fall under each of the major independent variables are identified. The control components instituted for management of these projects are measured against the components identified in the benchmark. Each of the model's major independent variable is defined using several minor independent variables, which are used for rating the effectiveness of controls in the departments, and locate internal control weaknesses. To understand and apply the criteria to control components, the researcher used binary numbers of 0 and 1 as ratings. A rating of 1 reflects a control component with control problem, while 0 rating signifies a control component with no control problem.

Table 1 below defines each major independent variable with a set of corresponding minor independent variables, used as criteria for rating the effectiveness of controls in the departments. Each major independent variable and their respective minor independent variables have to ensure consistency in the evaluation process.

The data collected from the heads of departments of KPUC was summarized, tabulated and analyzed by the researcher to fit into the major independent variables, with a 1 rating being assigned for non compliance with the control elements, and a 0 rating assigned for compliance with the general controls. The assigned ratings must match the predefined criteria of the minor independent variables in the table during evaluation.

In the final evaluation, if controls provide reasonable assurance that management objectives will be achieved, a 0 rating is assigned by the researcher. A 1 rating is recorded if controls do not provide such assurance. The judgment of the researcher plays

a significant role in assigning these ratings. However, the existence of corrective recommendations indicates a problem with the controls evaluated. The evaluation processes commences as shown below.

Table 1: Evaluation of Controls of the KPUC ICS's Against the Model's Criteria

	Control compon ent	Benchmark for rating internal controls when a problem exists	Assessment of functioning of internal control components of the institution.	Rating o internal compone of the ins	control ents
		Minor independent variables	Minor independent variables	0	1
S		Organizational structure does not adequately reflect clear chain of command		0	
Major Independent Variables	Control Environment	Human resource policies and procedures not documented and updated regularly	Human resource policies and procedures not updated with the requirements of new legislation		1
Major Indep	Control 1	Responsibilities are delegated and no follow up action is taken by management to get feedback		0	
K		Not practicing honest and fair dealings with all stakeholders for the benefit of the institution	Procurements done without sourcing for three quotations from three different suppliers	0	

	Management has not defined appropriate objectives for the institution		0	
	The defined objectives are not compatible with the development objectives of the institution		0	
	Management has not identified risks that affect achievement of the objectives	Price escalation in cost of goods, works and services consumed are not properly identified		1
		High staff turnover and increased staff demands not adequately factored in		
Risk Assessment		Inadequate financing from internal sources not controlled due to delay in remittances and fees default		
Ris		Erratic student population due to a dynamic external environment		
	Management does not have criteria for determining the most critical risks			1
	Management has not put in place mechanisms for mitigation of critical operating risks that may arise.	Delay in implementation of projects activities because of delays in procurement processes	0	
	Documentary analysis of projects data and information identifies risks not contemplated by management	Finances were disbursed to entity's with no certificates of registration	0	
Contro 1 Activit	Transactions are not authorized			1

	Duties are not segregated	0	
	Verifications of transactions are not done	0	
	Key accounts records not reconciled on a regular basis	0	
	Proper books and records of accounts are not kept	0	
	Controls over access to resources are not tight		1
	There is no accountability of funds advanced for activities	0	
	Management does not review operation	0	
	Internal auditors are not present and where present, there is limitation in scope of their responsibilities by management	0	
	Procedures have not been documented/regularly updated in respective manuals		1
	Staff not supervised while they carry out their schedule of duties	0	
	Institutions fixed assets are not engraved	0	
	Control activities designed for running the institutions do not adequately reflect managements' risk mitigation strategies	0	
informatio n & Communi	Key criteria for evaluating performance are not identified, collected and communicated	0	

	Employees do not understand their control responsibilities		1
	Complaints and disputes by suppliers are not resolved in a timely manner	0	
Monitoring	There are no independent process checks or independent evaluation of control activities on ongoing basis		1
Mo	No internal reviews of implementation of projects	0	
chnology	No IT security procedures for accessing projects master data files	0	
Information Technology	No restriction of personnel to access of different levels of the system.	0	

Source: Researchers design

The findings of this study are summarized below to determine whether project controls provide reasonable assurance that management's objectives are achieved.

**Table 2: Control Evaluation Form** 

Ratings		Models obje	ctives
0: No problem exists 1: Problem exists	Effectiveness and Efficiency of operations	Reliability of financial Reporting	Compliance with laws, regulations, policies and procedures

	Control environment	0	0	0
Components	Risk assessment	1	1	1
mpo	Control activities	0	0	0
Control Co	Information & Communication	0	0	0
	Monitoring	0	0	0
Benchmark	Information technology	1	1	1
Ben				
Ove	rall	0	0	0

Source: Researchers' design

# 4.2 Analysis and Findings

Analysis and interpretation of the evaluation results in Table 2 generate interesting findings.

Control environment attained a rating of 0. An assumption was made that soft controls exist. During evaluation process this turned out to be otherwise. The implication is that the organizational structure with defined lines of authority and responsibilities though having competent management that is committed to proper use of the authority assigned to him or her by the structure to engage in genuine dealings with third parties and stakeholder for the benefit of the institution at all times, the personnel available stifle management effort, for lack of appreciation on the importance of controls. As a foundation upon which all other control components depend, this poses a challenge to the effective functioning of other control components. For example, updating the human resource policies and procedures are affected as a result. The evaluation informs that, one of the challenges of the internal control systems is weakness in the control environment.

The risk assessment has a rating of 1. This indicates that project management did not mitigate risks that threaten achievement of the projects objectives. The risks; delayed funding from internal and external sources, fees default and unprecedented population growth, against a fixed budget, with contingent directives from the ministry. The implication is that management did not anticipate and plan for the risk, and if they did, the bureaucracy in the government restricted contingency solutions. When such risks are identified through documentary analysis, a 1 rating is awarded on this observation alone, even when the project objectives are defined and compatible with both development and the institution's objectives. When a risk factor is known in this manner, the other defined objectives become non-functional.

The results of control activities in the evaluation form indicate a 0 rating. This means good control activities, with minor independent variables functioning as they should irrespective of the weaknesses in the control environment.

The information and communication results in the evaluation scored a rating of 0, indicating absence of a problem. This means that the criteria for performance evaluation are known by employees and employees understand their internal control responsibilities. Furthermore, complaints that arise whether from suppliers or employees are handled expeditiously. In conclusion, controls function as intended.

The monitoring results scored a rating of 0, indicating no problem exists. Documentary analysis reveals that the institution established an independent check. Monitoring and evaluations of implementations of activities are carried out, by an internal audit, in

compliance with ISO. Timely monitoring leads to identification and correction of emergent problems. This is more effective than independent process checks carried out annually. Internal reviews compensate few independent annual checks carried out by external parties.

Information Technology attained 1 rating, indicating a problem with the information technology controls in place. This is confirmed by access to resources and segregation of duties, although the overall rating changed to 1.

The study evaluates minor independent variables to locate weaknesses in the major independent variables. This succeeded because the findings of the study identified where weaknesses exists. For example, weaknesses are in: updating human resource policies and procedures; duties are not segregated; key records are not reconciled; near computer illiteracy; access of facilities to outsiders, like rooms, and other infrastructure to mention a few. The impact of these findings on management's objectives determines whether or not internal controls are effective.

The evaluation results of overall ratings in relation to management's objectives show that effectiveness and efficiency of operations attained a rating of 0. Thus controls are fairly functional. Optimum spending activities is ascertained.

Reliability of financial reporting also scored a 0 rating, meaning that controls in these projects provide reasonable assurance of accurate and reliable financial reporting on the projects. The evaluation results confirm that the institution transactions and events are verified; books and records of accounts are complete, though with huge outstanding balances. When key accounts are not reconciled, determining the exact amount of debtors and the indebtedness to creditors becomes difficult. This affects the quality of financial information generated by the control processes that feeds into financial reports.

Compliance with the laws and regulations also attained a rating of 0, which means that controls do indicate management's compliance with applicable laws, regulations, policies and procedures. The materiality level affirms this position. Compliance with Income Tax Act, Financing Agreement, Kenyan Government financial regulations, procurement policies and procedures, are major items of compliance. Since compliance is material and reaffirmed by the evaluation processes of the study, a conclusion is that some controls in this area are not functioning as intended.

#### 4.3 Conclusion

Based on the above results, the benchmark states that all the six major independent variables must be present and functioning properly for internal controls to be effective. From the above analysis and in line with the evaluation results of operational efficiency and effectiveness, reliability of financial reports, and compliance with applicable laws and regulations, the researcher established that some major independent variables were not quite functional. Risk evasiveness was not well factored in, and the information technology needs to be fully implemented in all areas. For major independent variables, only information and communication and monitoring are present and functioning

properly. The other three are fairly dysfunctional. With this information and the analysis carried out, the study now answers the research questions raised above. Most of the controls that are dysfunctional can be majorly attributed to the role of the external environment, changes in the market and the general poor economic performance, which inhibit proper implementation of the controls.

### **CHAPTER FIVE**

## SUMMARY, CONCLUSIONS & RECOMMENDATIONS

#### 5.0 Introduction

This chapter presents the summary of the findings from chapter 4, and also gives conclusion and recommendations of the study, based on the objective of the study.

## **5.1 Summary of Findings**

The study provides an understanding of the structure of the internal controls in KPUC. Internal control structure includes policies and procedures on controls over: funds management, purchases, and payments and monitoring, evaluations and reporting. These indirectly fall under the six control components recommended by the model. On the outset, they are inadequate as a control mechanism. Risk assessment component and other components should be categorically and directly designed, embedded within the rest of the activities, and spelt out in the control structure. This is why, when the components were measured against the model's control components, they were ineffective. Suggestions for improvements to the concerned parties are recommended.

#### **5.2 Conclusion and Recommendation**

Problems can be identified early if management monitors activities as stipulated in the appraisal reports to ensure effective functioning of controls. Not all the components of an effective internal control system recommended by the model are present in the control components. There is concentration on control activities, because they form majority of control activities as per the results of evaluation process. This is further supported by the internal control structure as discussed above.

Internal auditors' responsibilities are limited in scope, and his reporting standards questionable. This leads to undetected errors. Although the internal auditor is not mandated to verify all projects transactions, he samples transactions and tests the effects of controls over them to ensure the organization is in the right track Evaluating internal controls requires measurement of minor independent variables to identify and locate weaknesses in the major independent variables of the internal control systems of these projects. The findings of the study under evaluation results are that measuring effectiveness of internal control is concerned with the existence and functioning of the six major control components identified by the model.

The organizational structure with defined lines of authority and responsibilities does not ensure effective internal controls because in practice not all employees as depicted by the structure are present in the organization. The authority and responsibilities at times, does not flow as demonstrated by the organization structure because of the nature of working relationships that exist amongst personnel at different levels. The interferences caused by working relationships on controls should be addressed. Interdepartmental conflict is

common, with new structures trying to establish accountability and responsibility guidelines.

The functioning of internal control systems in the Public Sector Kenya funded by the government measured against the benchmark criteria of an effective internal control is that the controls are not well embraced by staff. To maintain a sound system of internal control, management should evaluate the risks the projects are exposed to, in the course of their operations. Continuous monitoring is undertaken to assess the achievement of preset objectives.

To the extent that this institution is financed by the government, the bureaucracy in the government greatly affects managements' free hand to institute ICS's competitively.

Delayed funding, with thrust of high student population calls for rescheduling of priorities, hence drifting from existing ICS's.

## **5.3** Limitations of the Study

A limitation for the purpose of this research was regarded as a factor that was present and contributed to the researcher getting either inadequate information or responses.

Otherwise the responses given would have been totally different from what the researcher expected.

The small sample size could have limited confidence in the results and this might limit generalizations to other situations. Most respondents needed to be continually reminded and persuaded to provide the required information. Time was a major concern due to official duties. Lack of sufficient funds was another challenge.

Respondents were reluctant to give information for fear that information sought would intimidate them or give a negative image to the institution. This was resolved by availing an introductory letter, authorizing collection of date, given by the head of the institution.

# 5.4 Suggestions for Further Research

The results of the study are either generalized or modified to suit the unique circumstances of the study. It is suggested that other studies be done on the ICS's of other public institutions, to provide general information on public institutions, since each institution has a different strategic approach. Other development partners can fund further research.

# **REFERENCES**

- Aarens A. A. & Loebbecke J. K., (1997). Auditing An Integrated Approach: 7<sup>th</sup> Edition, Prentice Hall
- Aasmund E., Messier W. F., Glover S. M. & Prawitt D. F. (2006). Auditing and Assurance services International Edition McGraw-Hill Education.
- AICPA, (2006). Statement of Auditing Standards No 1 Sec 320, pp 27 -28
- Albanese, R., Dacin, M. T., & Harris, I. C. (1997). Agents as Stewards. The Academy of Management Review, 22(3): 609-611.
- Amudo, Angella, (2008), "Evaluation of Internal Control Systems: The Case of Public Sector Projects Financed by the African Development Bank Group in Uganda", An Unpublished MBA Thesis
- Anthony, R.N. & Young, D.W. (2004), Management Control in Non-profit Organizations, McGraw-Hill, Boston, MA.
- Armstrong M., (1977). A Handbook of Human Resource Management Practice 8<sup>th</sup> edition.
- Atkinson, A.A.M., Anthony, A., Kaplan, R.S. & Young, M.S. (2003), Management Accounting, 4th ed., Pearson Education International, Upper Saddle River, NJ.
- Atkinson, A.A.M., Kaplan, R.S. & Young, M.S. (2004), Management Accounting, 4th ed., Prentice-Hall International, Upper Saddle River, NJ.
- Bruns, W. H. & Waterhouse J H.(1975). Budgetary Control and Organization Structure. "Journal of Accounting Research Vol 13", No 2, Pp 177- 202
- Burns, J., Ezzamel, M. & Scapens, R.W. (2003), The Challenge of Management Accounting Change. Behavioural and Cultural Aspects of Change

- Management, The Chartered Institute of Management Accountants, Elsevier, London.
- Beretta S., Bozzolan S. & Michelon G. (2008). The Relationship Between Board Monitoring and Internal Control System Disclosure in Different Regulatory Environments University of Padova, Italy
- Celani C. (2004) 'The Story Behind Parmalat's Bankruptcy' Executive Intelligence
- Chen C.J. & Jaggi B. (2000). Association between Independent Non-executive directors, Family control and Financial Disclosures in Hong Kong. Journal of Accounting and Public Policy, Vol 19, no 4-5, pp 285-310
- Chrisman, J. J., Chua, J. H., & Litz, R. A. (2004). Comparing the Agency Costs of Family and Non-Family Firms: Conceptual Issues and Exploratory Evidence. Entrepreneurship Theory and Practice, 28(4): 335-354.
- Chruden, H.J. & Sherman, A.W., (1980). Personnel Management: The Utilization of Human Resource. Sixth ed., Cincinnati, South-Western Publishing Co.
- Chwastiak, M. (2001), "Taming the Untamable: Planning, Programming and Budgeting and the Normalization of War", Accounting, Organizations and Society, Vol. 24 No. 6, pp.
- COBIT 4.1 Available, Internal Control Framework (2007), available <a href="http://www.isaca.org/amtempleta.cfm?section=downloads&template=/contentma\_nagement/contentdisplay.cfm&contented=34172(accesses:21july 2007).">http://www.isaca.org/amtempleta.cfm?section=downloads&template=/contentma\_nagement/contentdisplay.cfm&contented=34172(accesses:21july 2007).</a>
- Cook, D. M., (1968) The Impact on Manager of Frequency Feedback, 'Journal of Academy of Management, Vol xi, no 3, September
- Cook. J.M., (1979) 'Internal Accounting Control: A Matter of Law'. Journal of Accountancy, Vol 147. January pgs 56, 58, 60 64
- Corbetta, G., & Salvato C. 2004. Self-Serving or Self-Actualizing? Models of Man and Agency Costs In Different Types Of Family Firms: A Commentary On "Comparing The Agency Costs Of Family And Non-Family Firms: Conceptual Issues And Exploratory Evidence". Entrepreneurship Theory And Practice, 28(4): 355-362.
- COSO Definition of Internal Control, Available http://www.coso.org/key.htm (Accessed: March 2007).

- COSO Internal Control Integrated Framework (1992),
  Available:http://www.coso.org/publications/executive\_summary\_integrated\_fram
  ework.htm
- COSO, (2008). Guidance on Monitoring Exchange Commission (SEC) Under Securities Act, 1934
- COSO, (2011). Internal Control Integrated Framework: September <a href="http://www.coso.org/Publications/COSO%20Monitoring%20GT%20Final%20Re">http://www.coso.org/Publications/COSO%20Monitoring%20GT%20Final%20Re</a> lease 1.8.07
- Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward A Stewardship Theory of Management. The Academy of Management Review, 22(1): 20-47.
- Dee R. B. & Gee K. P., (1972). 'The Frequency of Performance Reporting and Managers Reference for Control a note, "Accounting and Business Research, Summer pp 234-236.
- Directing Procedures', The Accountant Review, pp 710 728, October issue.
- Eilifsen A. & Messier W.F., Jr (2000) 'Auditor Detection of Misstatements: A Review and Integation of Empirical Research, 'Journal of Accounting Literature (19), pp 1 43
- Eisenhardt, K.M.,(2007). Building Theories From Case Study Research: Academy of Management Review, 14 (4), pp 352 550
- Eng L.L. & Mak Y.T. (2003). Corporate governance and Voluntary Disclosure and Public Policy, Vol 22, no 4, Journal of Accounting pp 325-345
- Esmailjee AE.K. (1993), Internal Controls The Case of Nyayo Bus Service Corporation, Nairobi, Unpublished MBA Research Paper
- Feagin, (2004) A Case for Case study. Chapel Hill, NC: University of North Carolina Press
- Hayes R., Dassen R., Schilder A. & Wallace P., (2005). Principles of Auditing An Introduction to International Standards on Auditing 2<sup>nd</sup> Edition Prentice Hall.
- ICPA(K), (2001). Kenya Auditing Guidelines Operational No. 6 Internal Controls, Nairobi
- International Journal of Social Economics (1987). Institutional Economics: An Essay on Dual-mode Rationality", Journal of Economic Issues, Vol. 42 No. 3, pp. 695-708.

- ISA 400, (2005). Risk Assessment and Internal Control.
- Jensen M.C. & Meckling W.H/ 1976. Theory of the firm: Management Behavior, Agency Costs and Ownership Structure. Havard University Press Journal of Economic Methodology, Vol. 1 No. 2, pp. 268-78.
- Kaplan, R.S. (1972). Optimal Investigation Strategies with Imperfect Information, 'Journal Of Accounting Research, Vol 10, no 2.
- Kenya National Assembly Official Record (Hansard). June 2009. Books.google.co.ke/books?id=rbcGHFGdah4c
- Kenya National Audit Office. <u>www.statehousekenya.go.de/government/officeof</u> c&ag.htm
- Knechel W.R., Salterio S.E. & Ballou B. (2007) Auditing Assurance & Risk. Thomson South-Western
- Lain G. & Stuart M. The Audit Process Principles, Practice & Cases: 4<sup>th</sup> edition. ISA edition, South Western Cengage Learning
- Louwers T.J., Ramsay R. J., Sinason D.H & Strawser J. R., (2008). Auditing and Assurance Services, Mcgraw-Hill Irwin 3<sup>rd</sup> edition
- Marshall C. & Rossman G.B. (1999) Designing qualitative Research (3<sup>rd</sup> edition). Thousand Oaks, Sage publications McGraw-Hill, Boston, MA.
- Meigs W.B, O.R. Whitington, K.Pany & Meigs R.F.(1988). Principles of Auditing 8<sup>th</sup> Edition, United States of America: Richard D. Irwin Inc pp 174 176
- Merchant, K.A., Stede, W.A. & van der Stede, W.A. (2007), Management Control Systems: Performance Measurement, Evaluation and Incentives, Prentice-Hall, Harlow.
- Miles M.B. & Huberman A.M.(2003) Qualitative Data Analysis: A Sourcebook of New Methods, Beverly Hills, CA; Sage Publications International Education & Professional Publisher, Thousand Oaks.
- Morck, R., & Bernard, Y. 2003. Agency Problems in Large Family Business Groups. Entrepreneurship Theory and Practice, 27(4): 367-382.
- Mwangi, M. W., (2008). Strategic Management in the Kenya Red Cross Society, Nairobi.
  - Unpublished MBA Research paper.

- Notes in Economics, Vol. 7 No. 36.
- Ouchi, W. G. 1981. The Relationship Between Organizational Structure and Organizational Control. Administrative Science Quarterly, 22(1): 95-113. pp. 173-88. Prentice-Hall International, Upper Saddle River, NJ.
- Redmond, W.H. (2004), "On institutional rationality", Journal of Economic Issues, Vol. 38 No.1
- Redmond, W.H. (2008), "Voluntary ceding of control: why do people join?", Journal of Economic
- Ricchiute D. N., (2006). Auditing, 8<sup>th</sup> edition, International Student Edition: Thomson South-Western
- Salih M.A. (1983). Internal Controls; The Case of Ethiopian Airlines, Nairobi. Unpublished MBA Research paper.
- Schulze, W. S., Lubatkin, M. H. and Dino, R. N. 2003. Toward a Theory of Agency and Altruism in Family Firms. Journal of Business Venturing, 18: 473-90
- Schulze, W. S., Lubatkin, M. H., & Dino, R. N. 2002. Altruism, Agency and the Competitiveness of Family Firms. Managerial and Decision Economics, 23(June/August): 247-59.
- Schulze, W. S., Lubatkin, M. H., & Dino, R. N. 2003. Exploring the Agency Consequences of Ownership Dispersion Among The Directors of Private Family Firms. Academy of Management Journal, 46(2): 179-194.
- Shapiro, S. P. 2005. Agency theory. Annual Review of Sociology, 31: 263-84.
- Sharma, A. 1997. Professional as agent: The knowledge Asymmetry in Agency Exchange. The Academy of Management Review, 22(3): 758-798.
- Simon, H.A. 1973. Organization Man: Rational or self-actualizing? Public Administration Review, 33 (July/August): 346-353.
- Simons, R. (2000), Management and Control Systems for Implementing Performance Strategy: Text and Cases, Prentice-Hall, Upper Saddle River, NJ.
- Stettler H. F. (1980). Auditing Principles, Prentice-Hall, India pg 54
- Sullivan T.J., (2001). Method of Social Research, London: Harcourt College publishers

- The Kenya Polytechnic University College Order, (2007). Legal Notice No. 159
- Transparency International Corruption Perceptions Index (2006) Available http://www.transparency.org/policy\_research/surveys\_indices/cpi/2006 (Accessed: 10 March
- Verstegen, B.H.J. (1994), "Law and economics and the infinite regress in explaining rationality", Journal of Economic Methodology, Vol. 1 No. 2, pp. 268-78.
- Verstegen, B.H.J. (1998), "The non-rational foundations of constitutional economics", Briefing Notes in Economics, Vol. 7 No. 36.
- Verstegen, B.H.J. (2006), "Relating the Institutional Approach in Management Accounting to Institutional Economics: An Essay on Dual-Mode Rationality", Journal of Economic Issues, Vol. 40 No. 4, Pp. 1137-51.
- Wasserman, N. 2006. Stewards, Agents and the Founder Discount: Executive Compensation in New Ventures. Academy of Management Journal, 49(5): 960-76.
- Whittington O. R & Pany K., (2010). Principles of Auditing and Other Assurance Services, McGraw-Hill International edition 17<sup>th</sup> edition.
- Woolf E., (1982). Auditing Today, 3<sup>rd</sup> edition, Prentice Hall International
- Wright A. & Ashton R. H. (1989). 'Identifying Audit Adjustments With Attention –
- Yin R. K., (2004). Case Study Research, Design and Methods, Newbury Park, CA; Sage
- ZhanyY., zhou J & zhou N (2000). Audit committee Quality, auditor Independence and Internal Control Weaknesses Journal of Accounting & Public Policy, Vol 26, no 3 pp 300-321

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# SAMPLE QUESTIONNAIRE

Dear respondent,

You are kindly requested to assist in filling this questionnaire on the ICS of Kenya Poly.

Any information that you give will be treated in the strictest of confidence and will not be used for any other purposes than for this research study.

Kindly spare a few minutes of your time to go through the questionnaire and answer the following questions as objectively as possible.

1.	Name and title of respondent
2.	Name of work section/department
3.	For how long have you worked/been in the College?
4.	Briefly explain your major duties

Kindly tick or briefly state your responses pertaining to the Internal Control Systems that are currently in use in the college.

No Q	Question	Yes	No

	Policies and Procedures	
1	Does your organization have an organization chart that clearly defines lines	
	of authority and responsibility?	
2	Does your organization have an up-to-date accounting policies and	
	procedures manual?	
3	Are gift acceptance policies maintained and distributed to all appropriate	-
	personnel?	
4	Does the governing board authorize all bank accounts and check signers	
	annually?	
5	Is the bank immediately notified of all changes in authorized check signers?	
6	Are all bank and investment accounts in the name of the organization?	
7	Are personnel policies maintained and distributed to all personnel?	
,	The personner poneres maintained and distributed to air personner.	
8	Is employee performance reviewed and documented regularly?	
9	Are current job descriptions on file for each employee in the organization?	
10	Does the organization have a written conflict-of-interest policy?	
Casl	h Receipts	
11	Are all checks received made payable to the name of the organization?	
12	Is the list of receipts compared to the duplicate bank deposit slip?	
13	Are cash receipts kept in secure storage until deposited?	
14	Are cash receipts recorded and reconciled to the general ledger monthly?	
15	Are deposits made daily?	
16	Are cash receipts deposited intact with no expenditures made from	
	collections?	
17	Are deposits made by someone independent of the accounting and cashiering	
	functions?	
18	Are cash handling responsibilities rotated among when possible?	
19	Are numerically controlled receipt slips used for all cash receipts received in	

	the organization?	
20	Are the bank statements received and opened by someone independent of the	
	accounting function?	
21	Are bank reconciliations prepared by someone independent of the cash	
	receiving, processing and recording activities?	
22	Does someone other than the preparer review and approve the bank	
	reconciliations?	
23	Does someone review cancelled checks?	
24	Is the cash receipts journal posted by someone independent of the receiving	
	and cash processing activities?	
25	Are contributions reported by the accounting department compared monthly	
	to records maintained by the development department?	
Pett	y Cash	
26	Are petty cash funds kept in secure storage?	
27	Are petty cash funds maintained on an imp rest basis?	
28	Is responsibility for each petty cash fund assigned to a specific responsible	
	individual?	
29	Are these individuals independent of employees who handle cash receipts and	
	accounting records?	
30	Is there a prohibition against petty cash disbursements over a specified	
	amount?	
31	Is a voucher used for all petty cash disbursements?	
32	Are surprise cash counts of organization petty cash and change funds	
	performed on a regular, random, and unannounced basis?	
33	Is the cashing of employee paychecks out of the petty cash fund prohibited?	
Casl	h disbursements/purchases	
34	Are the authorization, processing, check signing, recording and bank	
J <del>4</del>		
25	reconciliation functions clearly segregated?  Are persons outborized to approve expanditures clearly identified?	
35	Are persons authorized to approve expenditures clearly identified?	

36	Are all expenditures approved in advance by an appropriately authorized	
	person?	
37	Are all invoices or requests for disbursements supported by appropriate	
	receipts or documentation that indicates receipt of the goods or services?	
38	Are all disbursements made by pre-numbered checks?	
39	Is a record of the cash disbursement (e.g., check stub, check copy, cash	
	disbursement record) kept by the person processing the check?	
40	Is a record of the cash disbursement kept by the person processing the check?	
41	Does a disbursement list accompany the checks for signature?	
42	Do larger checks require a higher level of authority?	
43	Have dollar limits been established for one-signature checks?	
44	Is the number of authorized signatures limited to a minimum practical	
	number?	
45	Does the check signer compare check amounts, on a selected random basis, to	
	the disbursement list that accompanies the checks to be signed?	
46	If part of an automatic data system, are there independent checks and balances	
	to ensure proper processing without manual intervention?	
47	Does the organization have competitive bidding policies for its purchases?	
48	If so, are these policies followed?	
49	Are unpaid invoices maintained in an unpaid invoice file?	
50	Is a list of unpaid invoices regularly prepared and periodically reviewed?	
Inve	estments	
51	Is those a vywitten investment melicy?	
51	Is there a written investment policy?	
52	Has the policy been approved or reaffirmed by the governing board within the	
	last year?	
53	Are all investment transactions reviewed and approved by the governing	
	board or an authorized board committee?	
54	Does a responsible official or investment committee determine that	
	investments are of the type permitted by funding sources, donors, and/or	

	organizational policy?		
Payroll			
55	Are all staff time records reviewed and authorized by an appropriate senior officer?		
56	Are copies of timekeeping records retained on file?		
57	Are all changes to employee status or pay rate authorized and approved by an appropriate official?		
58	Is documentation of this approval maintained in each employee's personnel file?		
Information system security			
59	Is the need for password security reinforced to organization staff?		
60	Is the use of software not licensed to the organization prohibited on organization computers? of software not licensed to the organization prohibited on organization computers?		
61	Are the computer applications logged-off when the user is away from the terminal or PC?		
62	Are all disks brought in from outside sources tested for computer viruses before being used?		
63	Are disks secured when not in use?		
64	Are back-up disks maintained of all critical information?		
65	Are electrical surge suppressers used on all computer equipment?		