EFFECT OF INTERNAL CONTROL SYSTEMS ON FINANCIAL PERFORMANCE OF
PUBLIC INSTITUTIONS OF HIGHER LEARNING IN NAIROBI CITY COUNTY,
KENYA

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D53/OL/CTY/26873/15

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PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF
DEGREE OF MASTER OF BUSINESS ADMINISTRATION (FINANCE OPTION) OF
KENYATTA UNIVERSITY

MAY, 2018
DECLARATION

This research project is my original work and has not been presented for the award of a degree in any other University

Signature .................................. Date...........................................

BENSON MUGI MUHUNYO

D53/OL/CTY/26873/15

This research project has been submitted for examination with my approval as the University supervisor

Signature ................................. Date...........................................

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DEDICATION

This research project is dedicated to my family whose prayers and support has seen me through this work. To my dear wife Esther Wangari, thanks for giving me the time and the peace I much needed for the two years to accomplish this achievement and to my children for being a source of inspiration to me and always giving me challenges and reasons to go on.
ACKNOWLEDGEMENT

This research project could not have been possible without the valuable input of a number of groups whom I wish to acknowledge. First and foremost, great thanks to God for His grace and the gift of life during the period of the study. Special appreciation goes to my supervisor, Dr. Jagongo. I wish to sincerely acknowledge his professional advice and guidance in the research project. Thanks to the entire academic staff of the school of business for their contribution in one way or another.
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### ABBREVIATIONS AND ACRONYMS

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<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACCA</td>
<td>Association of Chartered Certified Accountants</td>
</tr>
<tr>
<td>IFRS</td>
<td>International Financial Reporting Standards</td>
</tr>
<tr>
<td>CPD</td>
<td>Continuing Professional Development</td>
</tr>
<tr>
<td>ERP</td>
<td>Enterprise Resource Planning</td>
</tr>
<tr>
<td>COSO</td>
<td>Committee of Sponsoring Organizations</td>
</tr>
<tr>
<td>SAS</td>
<td>Statement of Auditing Standards</td>
</tr>
<tr>
<td>MVA</td>
<td>Market Value Added</td>
</tr>
<tr>
<td>ROA</td>
<td>Return on assets</td>
</tr>
<tr>
<td>ROE</td>
<td>Return on equity</td>
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<td>ROS</td>
<td>Return on sales</td>
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**OPERATIONAL DEFINITION OF TERMS**

<table>
<thead>
<tr>
<th><strong>Communication</strong></th>
<th>This is the transmission or exchange of information between two or more persons. The message emanates from the source to the receiver and back to the source as feedback.</th>
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<tbody>
<tr>
<td><strong>Decision making</strong></td>
<td>Relates to the act of making up your mind about a position or opinion or judgment reached after consideration.</td>
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<tr>
<td><strong>Financial Performance</strong></td>
<td>Is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues.</td>
</tr>
<tr>
<td><strong>Internal control</strong></td>
<td>Is refers to the measures instituted by an organization so as to ensure attainment of the entity’s objectives, goals and missions</td>
</tr>
<tr>
<td><strong>Internal Control Systems</strong></td>
<td>Is a process for assuring achievement of an organization's objectives in operational effectiveness and efficiency, reliable financial reporting, and compliance with laws, regulations and policies.</td>
</tr>
<tr>
<td><strong>Management</strong></td>
<td>This is the process of planning, controlling, directing, coordinating and evaluating ideas, activities and programmes in order to achieve the aims and objectives of an organization.</td>
</tr>
<tr>
<td><strong>Monitoring</strong></td>
<td>This is a process that assesses the efficiency and effectiveness of internal controls over time.</td>
</tr>
<tr>
<td><strong>Planning</strong></td>
<td>This is the process of setting goals, developing strategies, and outlining tasks and schedules to accomplish the goals.</td>
</tr>
<tr>
<td><strong>Productivity</strong></td>
<td>This is the output-input ratio within a time period with due</td>
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consideration for quality.

Public Institution

This is name that is applied to a school, college, courthouse, library, hospital and other place that is run for the public to use.
Most public institutions in many parts of the world have poor financial performance compared to private institutions. The poor financial performance can be attributed to financial management practice. The sound financial management practices require the institutions of strong internal control systems. However, there are limited empirical research findings regarding the relationship between internal control system and financial performance. In public institutions, there have been a lot of weaknesses in their policies and procedures and also in their Internal Audit, the extent to which employee’s in positions handling cash fail to take regular leave and lack of rotation of employees handling very sensitive areas in finance and administration department. The main objective of the study was to establish the effect of internal control systems on financial performance in public institutions of higher learning in Nairobi City County. The study specific objectives were; to determine the effect of control activities, risk assessment, control environment, information and communication and monitoring on financial performance of institutions of higher learning in Nairobi City County. The study was anchored on agency theory, stewardship theory, and positive accounting theory and attribution theory. The study used a descriptive research design. This study took a sample study approach with its target population being the different categories of staff in different departments of Public Institutions of Higher Learning in Nairobi City County, Kenya. It took on a sample of 96 employees. Primary data was collected from sample population using open and closed ended questionnaires. Descriptive statistics was used in the data analysis and information presented in statistical forms. A multiple linear regression was also used to analyze the relationship between the dependent and independent variable. The study realized that the control environment, risk assessment, control activities and information and communication as indicators of internal control systems have a significant influence on the financial performance of the institutions of higher learning in Nairobi City County, Kenya. The variables explained 99.1% of the changes in financial performance of the institutions. The study recommends that internal control systems among the institutions need to be improved and accountability of organizational resources be upheld.
CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

Financial performance is the ability to operate efficiently, profitability, survive, grow and react to the environmental opportunities and threats Sebbowa (2009). For purposes of the study I adopted Ray and Kurt’s definition of internal control systems. In as much as Internal control Systems are wide and numerous, for the sake of this study, Internal control systems will be limited to; the Control Environment, Internal Audit, and Control activities whereas financial performance will be looked at basically from the three perspectives of Liquidity, Accountability and Reporting (Donald and Delno 2009). Organizations have invested heavily in improving the quality of their internal control systems over the past decade arguing that a good internal control yields good business. Many organizations are required to report on the quality of internal control over financial reporting, compelling them to develop specific support for their certifications and assertions. The following five objectives help management in designing effective internal controls: maintaining reliable systems, ensuring timely preparation of reliable information, safeguarding assets, optimizing the use of resources, preventing and detecting error and fraud (Alvin et al, 1993).

The reliability of financial reporting is effective to internal control efficiency to ensure that transactions and bookkeeping are appropriate and properly authorized, valid, correctly recorded, complete, and on time. Moreover, it is very important that organizations have fairly summarized accounting information data disclosure Sebbowa (2009). However, in general, a quality reporting is affected by internal control mechanism. There is a general perception that institution and enforcement of proper internal control systems will always lead to improved financial
performance. It is also a general belief that properly instituted systems of internal control improve the reporting process and also give rise to reliable reports which enhances the accountability function of management of an entity. According to Dixon et al (1990), appropriate performance measures are those which enable organizations to direct their actions towards achieving their strategic objectives.

Internal control ensures effectiveness and efficiency of operations, reliability of financial reporting and compliance with applicable laws and regulations to which the company is subject. According to Mawanda (2008), a sound internal control system helps the firm to prevent frauds, errors and minimize wastage. The increase of business units has encouraged the use of internal control as it ensures orderly and efficient conduct of business including adherence to internal policies. The completeness and accuracy of accounting records, timely preparation of financial information, can only be achieved if the proper internal control system is in place. The institution’s ability to maximize its profit depends in part on the design and effectiveness of the processes and safeguards it has put in place over accounting and financial reporting (Ndungu, 2013). While no practical control system can absolutely assure financial reports will never contain material errors or misstatements, an effective system of internal control over financial reporting can substantially reduce the risk of such misstatements and inaccuracies in company’s financial statements (Kaplan, 2008).

Institutions of higher learning are where people go to further their knowledge in a specific area, and/or to acquire a diploma, degree, master’s degree and PhD. These involve college, universities and technical schools. In Kenya, public institutions are created under the Act of Parliament to carry out research using their variety of qualified staff in different disciplines. The primary purpose of
research, outreach and extension constitute the basis on which research goals are set and measures by which fulfilment of these goals are established (Onsongo, 2007).

### 1.1.1 Internal Control Systems

Saleemi (2008) defines internal control as the whole system of controls, financial and otherwise established by the management in order to carry the business of the enterprise in an orderly and efficient manner, safeguard the assets and secure as far as possible the completeness and accuracy of the records. The components discussed below must be present and functioning effectively for any internal control system to achieve organizational objectives (COSO 1994).

Control environment is the major aspect of managing an organization. This is because it is a reflection of the attitude and the policies of management in regard with the importance of internal audit in the economic unit, Theofanis, et al (2011). However, it is the foundation for the other components of internal control and providing structure, Sudsomboon and Ussahawanitchakit, (2009). Control environment assist toward reducing the level fraudulent activities within organizational operation also the quality of an entity’s internal controls system depend on the function and quality of their control environment, Amudo and Inanga (2009). Therefore, providing a proper control environment for a public institution is very essential to the effectiveness of their operation.

Risk assessment is the identification and analysis of relevant risks associated with the achievement of the management objectives, Theofanis, et al (2011). Similarly, Sudsomboon & Ussahawanitchakit, (2009) view risk assessment as the process of identifying and analyzing management relevant risks to the preparation of financial statements that would be presented fairly in conformity with General Accepted Accounting Principles. The management must
determine the level of risk carefully to be accepted, and should try to maintain such risk within determined levels. Therefore, public institutions are required to frequently assess the level of risk they are experiencing in order to take necessary actions.

Control activities are policies, procedures and mechanisms that ensure management’s directives are properly carried out (Aikins, 2011; Rezaee, Elam & Sharbatoghlie, 2001). Proper documentation of policies and procedural guidelines in these aspects help to determine not only how the control activities are to be executed but also provide adequate information for auditors examination of the overall adequacy of control design over financial management practices (Aikins, 2011). These control activities ensure that all necessary actions should be taken with the aim to address risks so that organizational objectives are achieved. Example of control activities include; segregation of duties, daily deposit of cash receipts, bank reconciliations and limiting access to check stock.

Information and communication refers to the process of identifying, capturing, and communicating of relevant information in an appropriate manner and within timeframe in order to accomplish the financial reporting objectives (Aldridre & Colbert, 1994). However, effective communications should occur in a wider sense with information within the various sections of the organization (Theofanis et al, 2011). Most of the recent literature on internal control system frameworks gave concerned on information and communication as one of the internal control system components, because of their importance in influencing the working relationship within the organization at all levels (Amudo & Inanga, 2009). Hence, such information must be communicated throughout the entire organization in order to permit personnel to carry out their responsibilities with regard to objective achievement.
It is usually accepted that internal control systems need to be adequately monitored in order to assess the quality and the effectiveness of the system’s performance over time. Monitoring provides assurance that the findings of audits and other reviews are promptly determined. (Theofanis et al, 2011), also notes monitoring of operations ensures effective functioning of internal controls system (Amudo & Inanga, 2009). Hence, monitoring determines whether or not policies and procedures designed and implemented by management are being carried out effectively by employees.

1.1.2 Financial Performance

According to Gerrit and Abdolmohammadi, (2010), Organizational performance encompasses accumulated end results of all the organization’s work processes and activities. Financial Performance measures in public institutions of higher learning can be financial or non-financial. The most effective way to improve financial performance is by reducing the level of irregularity and fraud through improvements in the firm’s systems of internal financial control. Shareholders need to be assured that their resources are being used efficiently and effectively in providing the right service at the least cost.

Donald and Delno (2009) noted that appropriate performance measures are those which enable organizations to direct their actions towards achieving their strategic objectives Brennan and Soloman (2008) contends that, performance is measured by either subjective or objective criteria; arguments for subjective measures include difficulties with collecting qualitative performance data from small firms and with reliability of such data arising from differences in accounting methods used by firms.

Value for Money is not paying more for a good or service than its quality or availability justifies as well public spending implies a concern with economy (cost minimization), efficiency (output
maximization) and effectiveness (full attainment of the intended results. Sustained profitability can simply be seen as a continuous financial benefit that is realized when the amount of revenue gained from a business activity exceeds the expenses, costs and taxes needed to sustain the activity. The most effective way to improve net income is by reducing the level of irregularity and fraud through improvements in the firm’s systems of internal financial control (Wainaina, 2014). Management should on a regular basis review all aspects of their company and ensure internal controls that will strengthen the company and increase profitability are in place, (Kamau, 2014). Every business decision contains risk; avoiding or mitigating this risk is achieved through strong internal controls. In this study, Return on Assets will be used to measure performance.

1.1.3 Internal Control and Financial Performance

Internal control systems including internal audits are intended primarily to enhance the reliability of financial performance, either directly or indirectly by increasing accountability among information providers in an organization (Jenning et al., 2008). Internal control therefore has a much broader purpose in the organization level. Internal controls provide an independent appraisal of the quality of managerial performance in carrying out assigned responsibilities for better revenue generation (Donald & Delno, 2009).

According to Ondieki (2013), fraud is a major enemy of profitability. Control measures are structured in place to avert, detect and eliminate fraudulent occurrence thereby creating an atmosphere for profitability. Effective Internal control system support profitability and growth of an organization by protecting the general assets and resources thereby averting cases of loss. Strong internal control system help to prevent, minimize, transfer or eliminate risks, which may affect a profitable operation (Mugo, 2009)
Effective internal control system prevents waste and inefficiency in the production line and processes of goods and services. Effective internal control systems assist in the formulation and implementation of quality procurement procedures that helps to factor justification for requisition at proper lead-time, quantity and at lowest prices (Ngechu 2004). This will boost profitability than blind ordering which result to loss and waste. It is very important for every section and department of an organization to have an effective internal control system which is involved in blocking the organization’s income leakages and loop holes thereby supporting a sustained profitability, growth and other general corporate goals and objectives.

1.2 Statement of the problem

According to Kirsty (2008) efficient internal controls creates an organization’s confidence in its ability to perform or undertake a particular task and prevents errors and losses through monitoring and enhancing organizational and financial reporting processes as well as ensuring compliance with pertinent laws and regulations. Muio (2012) studied the impact of internal control on the financial performance of private hospitals in Nairobi and established a significant relationship between internal control system and financial performance. Kakucha (2009) evaluated the level of effectiveness of internal controls operating in Nairobi and established that there are deficiencies in the systems of internal controls, with the degree of deficiencies varying from one enterprise to another. Njui (2012) investigated the effectiveness of internal control and audit in promoting good governance in the public sector in Kenya and found that internal control has the greatest effect on corporate governance within Kenya government ministries followed by risk management while compliance and consulting had the least effect. Ngugi (2011) survey of internal control systems among the listed private companies and the public sector companies in
Kenya in which the results indicated that the private sector compared to the public sector had a strong internal control system.

In Kenya, a number of important trends have recently emerged within the manufacturing sector. It is worth noting that manufacturing sector is a major contributor to the economic development of the country. According to the Economic Survey 2015, Kenya National Bureau of Statistics established that manufacturing sector contribution to Gross. Effectiveness of internal control on financial performance is very important in every organization, because the task of IC is to prevent and detect fraud in the organization. Internal controls help in achieving efficiency and effectiveness of operations.

Several studies have been carried out on internal controls globally, regionally and locally on the effect on internal control system on profitability of diverse firms. For example; globally studies by Abu-Musa (2004); Chunlan (2009); Wittayapoom (2011); and regionally Kakucha (2009) and Nyakundi & Nyamita (2014) have established there exist a relationship between effective internal control and financial performance of the firm. However, majority of these studies have concentrated on different industries, while others have concentrated on a mix of listed firms in their localities. In addition, the studies employed different methodologies hence such studies may not be generalized to the study context.

Locally, a study by conducted by Simiyu (2011) on effectiveness of internal control system in higher institutions of learning in Kenya clearly indicate that Institutions of higher learning face quiet a number of challenges during internal controls in performance like struggles with liquidity problems, financial reports are not made timely, accountability for the financial resources is still wanting, frauds and misuse of institutional resources. It is for this reason that this study sought to
investigate the effects of internal controls on financial performance of institutions of higher learning in Kenya. Therefore, this study sought to investigate the relationship between internal control systems and financial performance of Institutions of higher learning in Kenya, a case of Nairobi City County, Kenya.

Mohammed, (2003) researched effect of the internal controls of Ethiopian Airlines Branch office in Nairobi and a case study of internal controls of Nyayo Bus Service Corporations in Nairobi (Esmailjee, 1993). Chira (2009) researched on the analysis of internal controls systems in financial institution. The findings were that though various internal controls systems do exist in the banking industry more weight had been given to operational controls compared to other types of controls. There has been no research done on effects of internal control on performance of public Institutions of Higher Learning in Kenya. This study therefore sought to answer the question “what is the effect of internal control system on financial performance of public institutions of higher learning in Nairobi City County, Kenya?

1.3 Research Objectives

1.3.1 General Objective

The main objective of the study was to establish the effect of Internal Control Systems on Financial Performance of Institutions of higher learning in Nairobi City, County, Kenya.

1.3.2 Specific Objectives

The specific objectives included;

(i) To determine the effect of control activities on financial performance of institutions of higher learning in Nairobi City, County, Kenya.

(ii) To establish the effect of risk assessment on financial performance of institutions of
higher learning in Nairobi City, County, Kenya.

(iii) To evaluate the effect of control environment on financial performance of institutions of higher learning in Nairobi City, County, Kenya.

(iv) To establish the effect of information and communication on financial performance of institutions of higher learning in Nairobi City, County, Kenya.

(v) To establish the effect of monitoring on financial performance of institutions of higher learning in Nairobi City, County, Kenya.

1.4 Research Questions

This study sought to answer the following research questions in view of the specific objectives

(i) What is the effect of control activities on financial performance of institutions of higher learning in Nairobi City, County, Kenya?

(ii) What is the effect of risk assessment on financial performance of institutions of higher learning in Nairobi City, County, Kenya?

(iii) What is the effect of control environment on financial performance of institutions of higher learning in Nairobi City, County, Kenya?

(iv) What is the effect of information and communication on financial performance of institutions of higher learning in Nairobi City, County, Kenya?

(v) What is the effect of monitoring on financial performance of institutions of higher learning in Nairobi City, County, Kenya?
1.5 Scope of the Study
The conceptual scope of this study lies on the effect of internal control systems on the financial performance of Institutions of higher learning in Kenya. The specific context of interest was institutions of higher learning in Nairobi City, County. The management staffs of the institutions in the department of finance were involved since they have knowledge and would provide information on finance reports in relation to internal control system of institutions of higher learning in Kenya. It is believed that this would provide adequate information for the study and therefore give reliable results and findings. The study covered a period of five years, thus from the year 2011 to the year 2015.

1.6 Significance of Study
This research study is intended to establish whether there exists a relationship between internal control system and financial performance of Institutions of higher learning in Kenya. Thus, the findings of this study will be useful in identifying gaps within the systems of internal control in higher Institutions of learning in Kenya. It is also the researcher’s belief that invaluable benefits to management and those charged with governance and training institutions will emerge on how to streamline the systems of internal controls thus ensuring improved financial performance and ultimately ensure attainment of the institutional objectives.

1.7 Limitation of the Study
The respondents approached were reluctant in giving information fearing that the information sought would be used to intimidate them or print a negative image about them or their enterprises. Some even turned down the request to fill questionnaires. The study had an introduction letter from the University and assured them that the information they gave was to be treated confidentially and it was to be used purely for academic purposes.
The researcher also encountered problems in eliciting information from the respondents as the information required was subject to areas of feelings, emotions, attitudes and perceptions, which could not be accurately quantified and/or verified objectively. The researcher encouraged the respondents to participate without holding back the information they had since the research instruments would not bear their names.

1.8 Organization of the study

This research project comprised of three chapters. Chapter one involved background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, and significance of the study, limitation of the study, assumptions of the study and organization of the study. Chapter two reviews literature which include theoretical review, empirical review, research gaps and the conceptual framework. Chapter three dealt with research methodology which explained the research design, target population, sampling design, and rationale for sample selection, data collection instruments, questionnaires, validity of the research instrument, reliability, data analysis and ethical considerations. Chapter four outlined the results, presentation of findings and discussion while chapter five shows the summary of the findings, conclusion and recommendation of the study.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The study has provided theoretical literature as well as empirical literature. The chapter has provided a summary and critique of literature received with aim of bringing out the research gaps to be addressed by the proposed study. A conceptual framework captures the variables and clearly shows the relationships among the research variables.

2.2 Theoretical review

A theory is a set of statements or principles devised to explain a group of facts or phenomena, especially one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural phenomena (Creswell, 2006). This study used four theories to explain the influence of the independent variables on the dependent variable. The theories are the Agency theory, Stewardship theory, Positive Accounting Theory and the Attribution Theory.

2.2.1 Agency theory

Agency theory was developed in 1976 by Jensen and Meckling. This theory is an agency relationship as a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent. Agency theory analyses the relationship between two parties: investors and managers. The agent (manager) undertakes to perform certain duties for the principal (investors) and the principal undertakes to reward the agent. According to the agency theory, a firm consists of a nexus of contracts between the owners of economic resources (the principals) and managers (the agents) who are charged with using and controlling those
resources. The theory posits that agents have more information than principals and that this information asymmetry adversely affects the principals ability to monitor whether or not their interests are being properly served by agents.

As such, the theory describes firms as necessary structures to maintain contracts, and through firms, it is possible to exercise control which minimizes opportunistic behavior of agents (Mwangi, 2012). According to the theory, in order to harmonize the interests of the agent and the principal, a comprehensive contract is written to address the interest of both the agent and the principal. The agent-principal relationship is strengthened more by the principal employing an expert and systems (auditors and control systems) to monitor the agent (Jussi & Petri, 2004).

Further the theory recognizes that any incomplete information about the relationship, interests or work performance of the agent described could be adverse and a moral hazard. Moral hazard and adverse selection impact on the output of the agent in two ways; not possessing the requisite knowledge about what should be done and not doing exactly what the agent is appointed to do. The agency theory therefore works on the assumption that principals and agents act rationally and use contracting to maximize their wealth (Jensen & Meckling, 1976). This theory is applicable to this study simply because internal control is one of many mechanisms used in business to address the agency problem by reducing agency costs that affects the overall performance of the relationship as well as the benefits of the principal (Payne, 2003; Abdel-Khalik, 1993). Internal control enhances the provision of additional information to the principal (shareholder) about the behavior of the agent (management) reduces information asymmetry and lowers investor risk and low revenue.
This theory is applicable to this study simply because internal control is one of many mechanisms used in business to address the agency problem by reducing agency costs that affects the overall performance of the relationship as well as the benefits of the principal (Payne, 2003; Abdel-Khalik, 1993). Internal control enhances the provision of additional information to the principal (shareholder) about the behavior of the agent (management) reduces information asymmetry and lowers investor risk and low revenue.

2.2.2 Stewardship Theory

Stewardship theory has its roots from psychology and sociology and is defined by Davis, Schoorman and Donaldson (1997) as “a steward protects and maximizes shareholders wealth through firm performance, because by so doing, the steward’s utility functions are maximized”. Unlike agency theory, stewardship theory stresses not on the perspective of individualism (Donaldson & Davis, 1991), but rather on the role of top management being as stewards, integrating their goals as part of the organization. The stewardship perspective suggests that stewards are satisfied and motivated when organizational success is attained. Argyris (1973) argues that while agency theory looks at an employee or people as an economic being, which suppresses an individual’s own aspirations, on the other hand Donaldson and Davis (1991) argue that stewardship theory recognizes the importance of structures that empower the steward and offers maximum autonomy built on trust. It stresses on the position of employees or executives to act more autonomously so that the shareholders returns are maximized. Indeed, Fama (1980) contend that executives and directors are also managing their careers in order to be seen as effective stewards of their organization, whilst, Shleifer, Andlei and Vishny (1997) claims that managers return finance to investors to establish a good reputation so that they can re-enter the market for future finance.
Meckling and Jensen (1994) further state the cost incurred to curb agency problems (reducing information asymmetries and accompanying moral hazards) is less when owners directly participate in the management of the firm as there is a natural alignment of owner managers’ interest with growth opportunities and risk. It follows from the above that stewardship theory unlike agency theory is a complete contrast and doesn’t emphasize on the need to incur monitoring or agency cost which includes establishing an internal audit function. Nevertheless Donaldson and Davis (1991) further note that returns are improved by having both of these theories combined rather than separated which implies that management must strike a balance. In this study the steward theory supports the study by the fact that managers of institutions of higher learning act as stewards of shareholders, suppliers, creditors, consumers and employees of these institutions.

2.2.3 Positive Accounting Theory

In accounting research, it is labeled as either positive research or normative research. Research that tends to predict and find explanations for particular phenomena is categorized as positive research. Theories that are related to such research are called positive theories (Deegan and Unerman, 2006). These kinds of theories are typically based on observations, which can empirically be tested and improved through further observations. Unlike positive theories, other theories are not based upon observations. These kind of theories are normative and grounded upon the beliefs of the researcher. Normative research theories are aimed to provide a prescription of how a particular practice should be undertaken, Deegan and Unerman, (2006). This research departs from a positive theory, because this research uses empirical data to explain corporate sustainability practices.
The positive accounting theory itself was developed by Watts and Zimmerman (1986), who states that positive accounting theory is concerned with explaining accounting practice. It is designed to explain and predict which firms will and which firms will not use a particular accounting method but says nothing about which method a firm should use.” The theory is based on “the assumption that all individual actions is driven by self-interest and that individuals will always act in an opportunistic manner to the extent that the actions will increase their wealth” (Deegan and Unerman, (2006). From this perspective, the positive accounting theory predicts that organizations will seek to put mechanisms in place to limit actions that are driven by self-interest. This is needed to align the interest of managers of the firm (agents) with that off the owners of the firm (the principles). The costs of dealing with problems concerning the agency relationship and installing appropriate mechanisms are referred to as ‘monitoring cost’.

2.2.4 Attribution Theory

Attribution theory is a social psychology theory that explores how people interpret events and behaviors and how they ascribe causes to the events and behaviors. According to Schroth and Shah (2000), studies using attribution theory examine the use of information in the social environment to explain events and behaviors. Reffett (2007) asserts that when evaluators believe comparable persons would have acted differently in a given circumstance, they (evaluators) tend to attribute responsibility for an outcome to the person. On the other hand, when evaluators believe comparable persons would have acted similarly, the evaluators tend to attribute responsibility for the outcome to the situation. According to Wilks and Zimbelman (2004), the first case refers to internal or dispositional attributions while the second one refers to external or situational attributions.
Earlier literature shows that people are inclined to attribute others’ behavior to dispositional tendencies and to attribute their own behavior to situational circumstances (Wilks and Zimbelman, 2004; Schroth and Shah, 2000). Often, this is when the observed behavior is negative. Consequently, evaluators are expected to infer the failure to detect internal control on revenue generation as a dispositional tendency on the auditor’s part which concludes that auditors are negligent. Bonner et al. (1998) found that auditors are more likely to be sued when they fail to detect common misappropriations that would result to decreased revenues, and the evaluators believe that the fraud could have been detected by other auditors. The auditor’s accountability for detecting fraud is extended by Reffett’s (2007) study which predicted that auditors are more likely to be held accountable by evaluators when the auditors fail to detect fraud after they had identified the fraud occurrence as a fraud risk. The result of Reffett’s study shows an increase in auditors’ liability when an audit fails, after the auditors had identified the perpetrated fraud as a fraud risk and performed procedures to investigate the identified fraud risk. The findings support Reffett’s prediction.

Attribution theory thus advocates for auditors to report on the effectiveness of firms’ internal control. Auditors are therefore expected to gain a better understanding of the internal controls in place, assess the design and implementation of the internal controls, and test the operating effectiveness of the internal controls. This is deemed necessary for the auditors’ reliance and possibly scaling back of other substantive audit procedures for the required revenue generation. According to Bonner et al. (1998), evaluators can use the audit processes as a basis to determine negligence if auditors fail to detect internal control related fraud that may occur. This theory is relevant to the study in that it suggests that when fraud occurs, identified parties should be held
accountable and auditors, being the “public watch dogs” are most likely to be held accountable if evaluators determine substandard audit services were provided.

2.3 Empirical Review

2.3.1 Internal Control System and Financial Performance in public Institutions

Ndiwa (2014) studied the assessment of Internal Control System on Financial Performance in tertiary training institutions in Kenya. Many public institutions in Kenya are faced with poor financial performance which in extreme cases has led to the closure of some of them, despite having the necessary resources to run them. The study, therefore, endeavoured to investigate the persistent poor financial performance from the perspective of internal controls which had hitherto been ignored. The general objective of the study was to establish the relationship between internal control and financial performance in tertiary institutions in Kenya. The study was limited to the African Institute of Research and Development Studies. The findings indicated that most respondents were of the view that indeed there was a relationship between internal control and financial management.

In this light, therefore, the institutions that had entrenched prudent internal control strategies were most likely to manage their finances better hence meeting their financial and other pertinent obligations almost seamlessly. The study concludes that most training institutions had an internal audit department which was largely understaffed. The researcher concluded that staffing of the internal audit department determined financial performance of the institution in question. Ndifon (2014) sought to establish the relationship between internal control activities and financial performance in Tertiary Institutions in Nigeria. The study area is Cross River State College of Education, Akamkpa. The study revealed that all activities of the College are initiated by the top management. Regarding control activities, the study found that there is clear separation of role in
the institution’s finance and accounts department and that superior officer in the College supervised regularly work done by their subordinate.

Also, the Ndifon (2014) study found that the institution financial statements are audited annually by external auditors. The study results further show that there is no significant relationship between internal control activities and financial performance of Cross River State College of Education. The investigation recommends proper checks and balances in all financial transactions. There should be effective and efficient security network to reduce frequent theft, threat to life and property. The study also recommends that management of the institution should organize regular training for staff on control mechanism.

Whittington & Pany (2001), talk about the comprehensiveness of internal controls in addressing the achievement of objectives in the areas of financial reporting, operations and compliance with laws and regulations. They further note that internal control also includes the program for preparing, verifying and distributing to the various levels of management those current reports and analyses that enable executives to maintain control over the variety of activities and functions that are performed in a large organization. They mention internal control devices to include; use of budgetary techniques, production standards, inspection laboratories, employee training and time & motion studies among others. According Bakibinga (2001), corporate law requires a divorce between ownership and management of an entity. Owners normally entrust their resources in the hands of managers. Managers are required to use the resources entrusted to them in the furtherance of the entity’s objectives. Managers normally report to the owners on the results of their stewardship for the resources entrusted to them through a medium called financial statements. It is these financial statements that reveal the financial performance of an entity. John
J. Morris (2011) believes that Enterprise Resource Planning systems provide a mechanism to deliver fast, accurate financial reporting with built-in controls that are designed to ensure the accuracy and reliability of the financial information being reported to shareholders.

Mwakimasinde, Odhiambo and Byaruhanga (2014) analyzed the effect of internal control systems on the financial performance of sugarcane out grower companies in Kenya. The specific objective of the study was to determine the effect of internal control system components on the financial performance of the sugarcane out grower companies. Internal control system was characterized by control environment, risk assessment process, information system and control activities while financial performance was characterized by cost per unit, goal attainment and profitability or surplus. The regression results also show that internal control system helps increase financial performance of sugarcane out grower companies percent. Based on the findings and conclusions of the study, the following recommendations were made; Internal control system has been found to have a statistically positive effect on performance of sugarcane out grower companies hence there is need for the sugarcane out grower companies to improve on their internal control system. Despite the fact that the study produced meaningful results it was subject to some limitations which provide avenues for further research.

Kinyua (2015) studied the Effect of Internal Control Environment on the Financial Performance of Companies quoted in the Nairobi Securities Exchange. The objective of the study was to establish the effect of internal control environment on financial performance of companies quoted in Nairobi Securities Exchange. The findings indicated that there is a positive significant relationship between internal control environment and financial performance, which corroborates with the findings of Mawanda (2008), states that institution which have enforcement of proper internal control systems will always lead to improved financial performance. The study,
therefore, recommends that internal control environment should be enhanced to further improve the financial performance of companies quoted in Nairobi securities exchange.

Kamau, (2014) investigated the effect of internal controls on the financial performance of manufacturing firms in Kenya. The findings revealed that most manufacturing firms had a control environment as one of the functionality of internal controls of the organization that greatly impacts on the financial performance of the firms. The results also revealed that the staffs were trained to implement the accounting and financial management systems, the security system identified and safeguarded organizational assets. The statistical result from the regression analysis shows that there is a positive relationship between internal control and financial performance of manufacturing firms in Kenya. The study recommends that both internal and external auditor should be constantly updated and well-grounded on international financial reporting standards (IFRS) and principles in order to enhance their knowledge and skills in application of accounting practices and to keep them updated on the contemporary issues.

A study carried out by Palfi and Muresan (2009) examined the importance of a well-organized system of internal control in regards to the banking sector, thus credit institutions of Romania. The analysis of the survey answers revealed that the continuous collaboration, based on periodical meetings, between all structures of bank, characterizes an effective internal audit department. The Abu Musa (2010) study investigated the existence and adequacy of implemented security controls of computerized accounting information systems in the Saudi banking sector. The results of study revealed that the vast majority of Saudi banks have adequate security controls in place. The results also enable bank managers and practitioners to better secure their computerized accounting information systems and to champion the security of information technology for the success of their banks (Simiyu, 2011).
2.4 Summary of Literature and Research gaps

The reviewed literate showed mixed results on the relationship between the internal control systems and financial performance of organizations. Most of the researches done on internal controls are case studies and focus on specific institutions/companies that exhibit particular characteristics or material weakness in the internal control systems. Since most of the studies failed to show the contribution of control activities, control environment and monitoring, therefore this research address to fill those gaps.

2.5 Conceptual framework

A conceptual framework is a theoretical structure of assumptions, principles, and rules that holds together the ideas comprising a broad concept (Huberman, 1994). A conceptual framework is a basic structure that consists of certain abstract blocks which represent the observational, the experiential and the analytical/ synthetic aspects of a process or system being conceived. It is a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation. The interconnection of independent and dependent variables completes the framework for certain expected outcomes.
Figure 2.1 Conceptual framework
Source: Researcher (2017)
3.1 Introduction

This chapter provides a description of the research design and methodology that was employed in the study. It looks at the various sources of data for the study, sampling design and its procedures. The chapter also included the methods that were used in data collection, the instruments used in data collection and the limitations of the study.

3.2 Research design

According to Kothari (2007), research design is defined as a framework that shows how problems under investigation will be solved. This study adopted a cross-sectional descriptive survey design because it provides a clear outcome and the characteristics associated with it at a specific point in time. Descriptive design was relevant for this study since it focuses at one point in time and does not require several rounds of monitoring. The descriptive survey attempted to document current conditions to describe what exists at the moment (Mouser and Katton 1989). The study employed both qualitative and quantitative methods of data analysis most of the findings were quantitatively analyzed.

3.3 Target Population

Kombo and Tromp (2011) define a population as a group of individuals, objects or items from which samples are taken for measurement. The target population for the study was the employees in accounting/finance, administration and operations departments in the four public institution of higher learning in Nairobi County. The number of staff in the accounts/finance, administration and operations departments in the four institutions in Nairobi County as shown in table 3.1 below
Table 3.1 Staff Population

<table>
<thead>
<tr>
<th>Department</th>
<th>UON</th>
<th>COUK</th>
<th>TUK</th>
<th>KTTI</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts/Finance</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Administration</td>
<td>12</td>
<td>10</td>
<td>3</td>
<td>12</td>
<td>36</td>
</tr>
<tr>
<td>Operations</td>
<td>10</td>
<td>10</td>
<td>11</td>
<td>9</td>
<td>40</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>27</strong></td>
<td><strong>23</strong></td>
<td><strong>16</strong></td>
<td><strong>25</strong></td>
<td><strong>91</strong></td>
</tr>
</tbody>
</table>

*Source: Administration the various institutions (2017)*

3.4 Sampling Design

According to Mugenda and Mugenda, (2003), a sample of at least 10% to 30% of the entire population is a valid sample size for a considerably small size. A purposive sampling approach was used in this study to allow the research to pick concerned staff especially from the accounts/finance, administration and operations department within Institutions of higher learning in Nairobi. Therefore the sample was 28 staff at the Institutions of higher learning in Nairobi County as shown in the table 3.2

Table 3.2 Sample size

<table>
<thead>
<tr>
<th>Department</th>
<th>Target Population</th>
<th>Sample size</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts/Finance</td>
<td>15</td>
<td>5</td>
<td>47%</td>
</tr>
<tr>
<td>Administration</td>
<td>36</td>
<td>11</td>
<td>17%</td>
</tr>
<tr>
<td>Operations</td>
<td>40</td>
<td>12</td>
<td>47%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>91</strong></td>
<td><strong>28</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Researcher (2017)*
3.5 Data Collection Procedure

The study relied mostly on primary data sources. Primary data was collected using semi-structured questionnaires with both close-ended and open-ended questions. Drop and Pick later method of data collection was employed by the researcher to give respondents sufficient time to respond to the questions of the study. Secondary data was obtained from the analysis of company’s audited annual reports. This secondary data collected, was used to support the findings on the primary data and provide more information that may have not been captured by the respondents.

3.6 Validity and Reliability of Research Instruments

3.6.1 Reliability

To establish the reliability and validity of the research instrument the study sought for opinions of experts in the field of study especially the study’s supervisor and lecturers in the school of business administration and strategic management. This facilitated the necessary revision and modification of the research instrument thereby enhancing validity.

Cronbach’s Alpha was applied to measure the co-efficient of internal consistency and therefore reliability of the instrument. In order to check reliability of the results, study used Cronbach’s alpha methodology, which is based on internal consistency. Cronbach’s alpha measures the average of measurable items and its correlation. SPSS software was used to verify the reliability of collected data. Overall scales’ reliability of the present situation and the desirable situation were tested by Cronbach’s alpha, which should be above the acceptable level of 0.70 (Hair et al., 1998). The Cronbach’s alpha obtained from the instruments used to collect data was 0.886 which indicates that the research instruments were reliable.
3.6.2 Validity

Validity is a measure of the degree to which data obtained from the instrument accurately and meaningfully represents the theoretical concept and in particular how the data represents the variables. Where validity has been established, any inferences made from such data was accurate and meaningful (Mugenda & Mugenda, 2003). The validity of a study increases by using various sources of evidence (Yin, 2003).

3.7 Data Analysis and Presentation

The process of data analysis involved several stages namely; data clean up, editing and coding. Descriptive statistics (means and standard deviation) and multiple regression analysis were used to analyze the data. Data was then coded and checked for any errors and omissions (Kothari, 2007). Frequency tables, percentages and means were used to present the findings. Responses in the questionnaires were tabulated, coded and processed by the use of a computer Statistical Package for Social Science (SPSS) program to analyze data. The relationship between the dependent variable (Y) and the independent variable (X) was tested using multiple linear regression model captured below.

\[ Y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \epsilon \]

where:

- **Y** = Financial Performance
- **x_1** = Control environment
- **x_2** = Risk assessment
- **x_3** = Control Activities
- **x_4** = Information and Communication
- **x_5** = Monitoring
- **\alpha** = Constant
\[ \epsilon = \text{Error term} \]

### 3.8 Ethical Considerations

Ethical considerations in research are critical. Ethics are the norms or standards for conduct that distinguish between right and wrong. They help to determine the difference between acceptable and unacceptable behaviors. Informed consent was obtained from all those participating in the study. Those not willing to participate in the study were under no obligation to do so. Respondents’ names were not indicated anywhere in the data collection tools for confidentiality and information gathered was only used for the purposes of this academic study. The necessary research authorities were consulted and permission granted. The researcher ensured that nothing could be traced back to any of the respondents should the findings of this study be published.
CHAPTER FOUR
DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the analysis of the collected data, the results and finally the interpretation of the findings. Percentages, frequencies, frequency tables and pie charts are presented to illustrate the analysis and interpretation of the data.

4.1.1 Questionnaire Response Rate

As mentioned earlier, out of the selected sample of 28 respondents, 3 (10.71%) did not respond to the questionnaires accordingly, hence only 25 (89.29%) questionnaires were used in the subsequent analysis. This correlates with Mugenda and Mugenda (2003) recommendation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. This clearly shows that the response rate in this study was excellent.

Figure 4.1 Response rate
4.1.2 Validity and Reliability of Research Instruments

In order to determine the reliability of the research instruments, a pretesting was conducted by the researcher. A Cronbach Alpha was used to determine reliability where a coefficient of 0.7 or more indicated that the research instruments were reliable. The findings are indicated in table 4.1.

**Table 4.1: Validity and Reliability of Research Instruments**

<table>
<thead>
<tr>
<th>Variables</th>
<th>No. of Items</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Environment</td>
<td>5</td>
<td>0.898</td>
</tr>
<tr>
<td>Risk Assessment</td>
<td>5</td>
<td>0.862</td>
</tr>
<tr>
<td>Control Activities</td>
<td>5</td>
<td>0.955</td>
</tr>
<tr>
<td>Information &amp; Communication</td>
<td>5</td>
<td>0.827</td>
</tr>
<tr>
<td>Financial Performance of Institutions of Higher Learning</td>
<td>5</td>
<td>0.886</td>
</tr>
</tbody>
</table>

*Source: Researcher, 2017*

From Table 4.1 above, the Cronbach Alpha for performance is 0.886, control environment is 0.898, risk assessment is 0.862, control activities is 0.955 while for information and communication it was 0.827. All the coefficients of Cronbach Alpha were above 0.7, this indicates that the research instruments were reliable.

4.2 Background Information

The study sought to establish the background information on how long the institutions have been in existence, level of staffing of accounts or/and finance departments, whether training is given to the staff on internal control, effectiveness of the internal control systems and existence of a financial management system among the institutions of higher learning in Nairobi City County,
4.2.1 Period of existence of the Institution
The study sought to find out how long the sampled institutions of higher learning in Nairobi City County had been in existence. 65% had been in existence over 10 years, 21% for between 6-10 years, 11% were between 1 and 5 years old while only 3% had been in existence for less than one year. This indicates that most of the institutions had been in existence long enough to implement and have a working internal control system for their accounting and finance departments. This is illustrated in figure 4.2 below;

![Period of Existence](image)

*Figure 4.2 Period of existence of the Institutions*

4.2.2 Level of staffing of Accounts/Finance Departments
The study further sought to establish the level of staffing of the accounts/finance departments among the institutions of higher learning in Nairobi City County. It was realized that 77% of the institutions had well trained staff with respect to the accounts/finance department while 23% were not sufficiently trained. This indicates that most of the institutions have sufficient labour force in the respective department.
4.2.3 Existence of adequate segregation of duties in the finance and accounts department
The study sought to determine whether there is adequate segregation of duties in the finance and accounts department among the sampled institutions of higher learning in Nairobi City County. The findings were as presented below;

Figure 4.4 Existence of adequate segregation of duties in the accounts and finance department
From the figure above, 26% of the respondents strongly agreed that there exist adequate separation and allocation of duties in the department, 38% agreed, 21% disagreed while 15% strongly disagreed to that effect. This indicates that majority of the institutions of higher learning have adequate segregation of duties although the problem of allocation and description of duties exists.

### 4.2.4 Effectiveness of Internal Control System
The study sought to establish the degree of effectiveness of internal control systems among the sampled institutions of higher learning in Nairobi City County. It was realized that 44% of the institutions have effective internal control systems while 56% of them had porous and weak internal control systems which gave way to wastages, misuse and poor accountability of institution resources.

The study further sought to determine the existence of financial performance systems among the sampled institutions of higher learning in Nairobi City County. 91% indicated that their institutions had a functioning financial performance system while 9% indicated that there weren’t a financial performance system in place. This indicates that majority of the learning institutions had a financial performance system but its effectiveness and efficiency was in question.

### 4.3 Control Environment
The study sought to assess the internal control environment among the institutions of higher learning in Nairobi City County and how it influenced financial performance of the institutions. 79% of the respondents indicated that the internal control environment had a significant influence on financial performance of their respective institutions and it was effective while 21% indicated that it had minimal or no influence on the financial performance of the institutions due to its ineffectiveness.
The respondents were further requested to indicate the extent to which they agreed with the following statement regarding the effect of control environment on financial performance of institutions of higher learning on a scale of 1 – 5 where 5 (strongly agree), 4 (agree), 3 (neutral), 2 (disagree) while 1 (strongly disagree) respectively. The findings were as tabulated in table 4.2 below;

**Table 4.2 Influence of control environment on financial performance**

<table>
<thead>
<tr>
<th>ELEMENTS</th>
<th>Mean</th>
<th>SDEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control environment has affected institution’s revenue for the last five years</td>
<td>4.12</td>
<td>0.855</td>
</tr>
<tr>
<td>Control environment has affected institution’s operating costs for the last five years</td>
<td>3.98</td>
<td>0.921</td>
</tr>
<tr>
<td>Control environment has affected institution’s fees income on capital for the last five years</td>
<td>3.55</td>
<td>0.877</td>
</tr>
</tbody>
</table>

*Source: Field data, 2017*

Table 4.2 above indicates that control environment had greatly affected the institutions of higher learning’s revenue, operation costs and fees income on capital for the last five years as indicated by a high mean of 4.12, 3.98 and 3.55 respectively. This indicates control environment has a significant influence on financial performance of the institutions of higher learning. Weak and poor control environment negatively affects financial performance and vice versa.

**4.4 Risk Assessment**

The study sought to establish the effect of risk assessment on financial performance of institutions of higher learning in Nairobi City County. 61% of the respondents indicated that risk assessment procedures and systems of an institutions influence significantly its financial
performance while 39% indicated otherwise. This is pegged on effectiveness of risk assessment system. 42% indicated that their risk assessment systems were effective while 58% of them indicated that they are ineffective. This has led to poor risk assessment procedures which weaknesses the internal control mechanisms and systems.

To the same effect, the respondents were to rate the degree of agreement to the following statements regarding the effect of risk assessment on financial performance of the learning institutions on a scale of 1 – 5 where 5(strongly agree), 4 (agree), 3 (neutral), 2 (disagree) while 1 (strongly disagree) respectively. The findings were as tabulated in table 4.3 below;

**Table 4.3 Influence of Risk assessment on financial performance of institutions of higher learning**

<table>
<thead>
<tr>
<th>ELEMENTS</th>
<th>Mean</th>
<th>SDEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Assessment has affected institution’s revenue for the last five years</td>
<td>3.62</td>
<td>0.881</td>
</tr>
<tr>
<td>Risk Assessment has affected institution’s operating costs for the last five years</td>
<td>3.89</td>
<td>0.932</td>
</tr>
<tr>
<td>Risk Assessment has affected institution’s fees income for the last five years</td>
<td>4.11</td>
<td>0.801</td>
</tr>
</tbody>
</table>

*Source: Field Data, 2017*

Table 4.3 indicates that there is a high and significant influence that risk assessment mechanisms and systems have on financial performance of institutions of higher learning. Risk assessment has affected the institutions’ revenue, operating costs and fees income for the last five years greatly as indicated by a mean of 3.62, 3.89 and 4.11 respectively. Strong and effective risk management systems have yield strong internal control mechanisms which have resulted to high institution revenue, low operating costs and high fees income while weak and porous ones have
led to poor performance of the institutions.

4.5 Control Activities

The study sought to establish the extent to which control activities have influenced financial performance of the institutions of higher learning in Nairobi City County. 68% indicated that internal control activities have significantly influenced the financial performance of the institutions while 32% of them indicated otherwise. It was also indicated that 75% of the institutions’ control activities are not effective hence have a negative effect on financial performance while only 25% of them are effective. The control activities were found to affect internal control systems either positively or negatively which in turn influences financial performance of the institutions of higher learning.

The respondents were further requested to indicate the extent to which they agreed with the following statement regarding the effect of control activities on financial performance of institutions of higher learning on a scale of 1 – 5 where 5(strongly agree), 4 (agree), 3 (neutral), 2 (disagree) while 1 (strongly disagree) respectively. The findings were as tabulated in Table 4.4 below;

<table>
<thead>
<tr>
<th>ELEMENTS</th>
<th>Mean</th>
<th>SDEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control activities has affected institution’s revenue for the last five years</td>
<td>3.59</td>
<td>0.884</td>
</tr>
<tr>
<td>Control activities has affected institution’s operating costs for the last five years</td>
<td>4.08</td>
<td>0.791</td>
</tr>
<tr>
<td>Control activities has affected institution’s fees income for the last five years</td>
<td>3.71</td>
<td>0.906</td>
</tr>
</tbody>
</table>

*Source: Field Data, 2017*

From the table above, control activities have greatly affected the institutions’ revenue, operation
costs and fees income for the last five years as indicated by mean of 3.59, 4.08 and 3.71 respectively. This indicates that control activities have a significant influence on the financial performance of an establishment. Ineffective control activities result in weak internal control systems and poor financial performance and vice versa.

4.6 Information and Communication

The study sought to determine whether information and communication systems had a significant influence on the financial performance of institutions of higher learning in Nairobi City County, Kenya. 77% of the respondents indicated that information and communication had a significant influence on the performance of the institutions while 23% had a dissenting opinion. A further 69% indicated that most of their information and communication systems are ineffective making internal controls weak and hence poor performance. This indicates that an effective information and communication system strengthens internal controls of a firm which leads to prudent use of resources and hence good performance.

The respondents were requested to indicate the extent to which they agreed with the following statement regarding the effect of information and communication on financial performance of institutions of higher learning on a scale of 1 – 5 where 5(strongly agree), 4 (agree), 3 (neutral), 2 (disagree) while 1 (strongly disagree) respectively. The findings were as tabulated in Table 4.4 below;
Table 4.5 Influence of information and communication on financial performance of institutions of higher learning

<table>
<thead>
<tr>
<th>ELEMENTS</th>
<th>Mean</th>
<th>SDEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information &amp; communication has affected institution’s revenue for the last five years</td>
<td>3.27</td>
<td>0.908</td>
</tr>
<tr>
<td>Information &amp; communication has affected institution’s operating costs for the last five years</td>
<td>3.88</td>
<td>0.791</td>
</tr>
<tr>
<td>Information &amp; communication has affected institution’s fees income for the last five years</td>
<td>4.09</td>
<td>0.888</td>
</tr>
</tbody>
</table>

*Source: Field data, 2017*

From table 4.5 above, information and communication procedures, systems and mechanisms have had a significant influence on the institutions of higher learning’s revenue, operating costs and fees income over the last five years as indicated by a high mean of 3.27, 3.88 and 4.09 respectively. This indicates that good information and communication systems lead to high institutional revenue, low operating costs and high fees income.

**4.7 Financial Performance**

Lastly, the study sought to establish the levels of financial performance of the institutions of higher learning for the last five years ranging from 2011 to 2015 to compare and analyze the trend in revenue, fees income, and expenditure and operation costs. It was realized that the revenue and fees income for institutions generally grew by 11% between 2011 and 2013 as expenditure and operation costs remained at a growth rate of 14% however between 2014 and 2015 expenditure and operation costs surpassed revenue and fees income by a general margin of 10%. Revenue and fees income grew at 15% and 19% respectively while expenditure and operation costs went up by 24% and 22% respectively. This generally indicated that the
institutions ended up spending more than they could generate. This indicated a negative financial performance of the institutions.

**Table 4.6 Change in financial performance between 2011 and 2015**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Percentage change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2011</td>
</tr>
<tr>
<td>Revenue (From IGA)</td>
<td>13</td>
</tr>
<tr>
<td>Fees Income</td>
<td>14</td>
</tr>
<tr>
<td>Expenditure</td>
<td>9</td>
</tr>
<tr>
<td>Operating Costs</td>
<td>7</td>
</tr>
</tbody>
</table>

79% of the respondents revealed that the institutions’ accountability had a significant influence on the financial performance of the institutions of higher learning. Weak and low levels of financial accountability for utilization of organizational resources have led to poor financial performance of the institution. Poor cost management has negatively affected financial performance of the institutions. Institutional resources are utilized but management and accountability is wanting. This has led to misappropriation of the funds, corruption and misuse of office for personal gains.

68% of the respondents concurred that proper financial reporting among the institutions of higher learning has had a significant influence on the financial performance. Financial reporting that is not fair, a true reflection of the financial status of the organization, not open and accountable compromises on the assets, resources and expenditure of the institution, leading to poor financial performance due to low levels of accountability. The study further realized that capital investments of the institutions had a significant influence on their financial performance (72%).
Capital investments generate returns regularly and cushion the organization against any financial uncertainties hence making it financially stable.

4.8 Regression Analysis

The researcher conducted multiple regression analysis to establish the influence of internal control systems on financial performance of institutions of higher learning in Nairobi City County. The findings are indicated in subsequent sections;

**Table 4.7 Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.991</td>
<td>0.971</td>
<td>0.921</td>
<td>0.785</td>
</tr>
</tbody>
</table>

*Source: Field Data, 2017*

The table above indicates the model summary. From the findings, R was 0.991, R square was 0.971 and adjusted R squared was 0.921. An R square of 0.991 implies that 99.1% of changes in financial performance of institutions of higher learning in Nairobi City County, Kenya are explained by the independent variables of the study. There are however other factors that influence performance of the institutions of higher learning that are not included in the model which account for 0.9%. An R of 0.991 on the other hand signifies strong positive correlation between the variables of the study.

**Table 4.8 ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>521.04</td>
<td>5</td>
<td>521.4</td>
<td>676.005</td>
<td>0.0942</td>
</tr>
<tr>
<td>Residual</td>
<td>261.40</td>
<td>312</td>
<td>0.950</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>782.44</td>
<td>317</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Field data, 2017*
From the ANOVA table above, the value of F calculated is 776.005 while F critical is 499.545. Since the value of F calculated is greater than F critical, the overall regression model was significant and therefore a reliable indicator of the study findings. In terms of p values, the study indicated 0.000 which is less than 0.05 and therefore statistically significant.

Table 4.9 Regression Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>7.47</td>
<td>0.674</td>
<td></td>
<td>8.012</td>
</tr>
<tr>
<td>Control environment</td>
<td>0.955</td>
<td>0.022</td>
<td>0.811</td>
<td>14.15</td>
</tr>
<tr>
<td>Risk assessment</td>
<td>0.986</td>
<td>0.033</td>
<td>0.120</td>
<td>11.04</td>
</tr>
<tr>
<td>Control activities</td>
<td>0.875</td>
<td>0.029</td>
<td>0.127</td>
<td>1.15</td>
</tr>
<tr>
<td>Information and communication</td>
<td>0.961</td>
<td>0.031</td>
<td>0.384</td>
<td>4.42</td>
</tr>
</tbody>
</table>

Source: Field data, 2017

The resultant regression equation becomes;

\[ Y = 7.47 + 0.955X_1 + 0.986X_2 + 0.875X_3 + 0.961X_4 \]

Where Y is the financial performance of institutions of higher learning in Nairobi City County, Kenya; \( \beta_0 \), \( \beta_1 \), \( \beta_2 \), \( \beta_3 \) and \( \beta_4 \) are the regression coefficients and \( X_1, X_2, X_3 \) and \( X_4 \) represent control environment, risk assessment, control activities and information and communication respectively.

This implies that when all the variables of the study are held constant, performance of institutions of higher learning in Kenya will be at the intercept which is 7.47. A unit improvement in control environment while all other factors held constant results in 0.955 increase in performance of the institutions, a unit increase in risk assessment with other factors \textit{ceteris paribus} leads to 0.986 increase in performance of the institutions. Similarly a unit increase in control activities while other factor \textit{ceteris paribus}, translates to a 0.875 increase in
performance of institutions of higher learning in Kenya while a unit increase in information and communication with other factors held constant leads to a 0.961 improvement in financial performance of the institutions.
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the findings of the study, conclusion and suggests some recommendations. At the end of this chapter suggestions for further study and research are suggested. These are areas that in future can be explored to further the knowledge and research on public institutions.

5.2 Summary of the Findings

5.2.1 Control environment and financial performance

79% of the respondents indicated that the internal control environment had a significant influence on financial performance of their respective institutions and it was effective while 21% indicated that it had minimal or no influence on the financial performance of the institutions due to its ineffectiveness. It was revealed that control environment had greatly affected the institutions of higher learning’s revenue, operation costs and fees income on capital for the last five years as indicated by a high mean of 4.12, 3.98 and 3.55 respectively. Control environment was realized to having a significant influence on financial performance of the institutions of higher learning. Weak and poor control environment negatively affects financial performance and vice versa.

5.2.2 Risk assessment and financial performance

61% of the respondents indicated that risk assessment procedures and systems of an institutions influence significantly its financial performance while 39% indicated otherwise. This is pegged on effectiveness of risk assessment system. 42% indicated that their risk assessment systems
were effective while 58% of them indicated that they are ineffective. This has led to poor risk assessment procedures which weaken the internal control mechanisms and systems.

There is a high and significant influence that risk assessment mechanisms and systems have on financial performance of institutions of higher learning. Risk assessment has affected the institutions’ revenue, operating costs and fees income for the last five years greatly as indicated by a mean of 3.62, 3.89 and 4.11 respectively. Strong and effective risk management systems have yield strong internal control mechanisms which have resulted to high institution revenue, low operating costs and high fees income while weak and porous ones have led to poor performance of the institutions.

5.2.3 Control Activities and financial performance

68% indicated that internal control activities have significantly influenced the financial performance of the institutions while 32% of them indicated otherwise. It was also indicated that 75% of the institutions’ control activities are not effective hence have a negative effect on financial performance while only 25% of them are effective. The control activities were found to affect internal control systems either positively or negatively which in turn influences financial performance of the institutions of higher learning.

It was revealed that control activities have greatly affected the institutions’ revenue, operation costs and fees income for the last five years as indicated by mean of 3.59, 4.08 and 3.71 respectively. This indicates that control activities have a significant influence on the financial performance of an establishment. Ineffective control activities result in weak internal control systems and poor financial performance and vice versa.
5.2.4 Information and Communication and financial performance

77% of the respondents indicated that information and communication had a significant influence on the performance of the institutions while 23% had a dissenting opinion. A further 69% indicated that most of their information and communication systems are ineffective making internal controls weak and hence poor performance. This indicates that an effective information and communication system strengthens internal controls of a firm which leads to prudent use of resources and hence good performance.

Information and communication procedures, systems and mechanisms have had a significant influence on the institutions of higher learning’s revenue, operating costs and fees income over the last five years as indicated by a high mean of 3.27, 3.88 and 4.09 respectively. This indicates that good information and communication systems lead to high institutional revenue, low operating costs and high fees income.

5.3 Conclusions

The study concluded that the control environment, risk assessment, control activities and information and communication as indicators of internal control systems have a significant influence on the financial performance of the institutions of higher learning in Nairobi City County, Kenya. The variables explained 99.1% of the changes in financial performance of the institutions. A unit improvement in the control environment led to a 0.955 increase in financial performance of the institutions, a unit improvement in risk management practices led to a 0.986 increase in financial performance of the institutions, a unit improvement in control activities transformed to a 0.875 increase in performance of the institutions while a unit increase in use of information and communication systems led to a 0.961 increment in their financial performance.
There existed internal control systems, mechanisms and procedures but the environment was not favorable, poor assessment of risks and control activities and also diligent use of information and communication systems to reliably improve accountability and prudent use of organizational resources. This led to poor financial performance of the institutions despite them having massive resource base.

5.4 Recommendations

It was recommended that for the institutions to perform well financially, their internal control systems need to be improved, cultivated and implemented diligently. There is need for the employees responsible for preparation of financial statements and reporting to be transparent and honest and also be held accountable for any misreporting. The officers entitled with the authority to incur and approve expenditure need also to be accountable for every resource utilized and the organization gets value for its investments. The institutions of higher learning also need to improve their capital expenditure to generate income for them and improve their liquidity. There is need to take legal actions for those who have misused organizational funds and recoveries made.

5.5 Suggestions for Further Study

The study recommends that further studies be done in the following areas;

i. The influence of financial reporting on performance of institutions of higher learning in Kenya

ii. The challenges in effecting organizational internal control systems in Kenya

iii. Influence of information and communication technology on internal control systems efficiency among institutions of higher learning in Kenya
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APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

Dear Respondent

REQUEST FOR RESEARCH DATA

I am a Master of Business Administration (MBA) student at Kenyatta University. I am required to submit as part of my course work assessment, a research project report on “Effect of internal control systems on financial performance of public institutions of higher learning in Vihiga County, Kenya”. I am kindly requesting you to assist me in this study by filling the attached questionnaire to the best of your ability as it applies to you.

Please be assured that the information you provide will be used solely for academic purposes and all responses will remain confidential.

Thank you very much for your time.

Benson Muhunyo
APPENDIX II: QUESTIONNAIRE

SECTION A: GENERAL INFORMATION

1. How long has the institution been in existence?

<table>
<thead>
<tr>
<th>Less than 1 year</th>
<th>1 – 5 years</th>
<th>6 – 10 years</th>
<th>Over 10 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

2. Does your organization have a well staffed Accounts/Finance department? [Y] [N]

3. Staffs are trained to implement the accounting and financial management systems. [Y] [N]

4. There is adequate segregation of duties in the institution’s finance and accounts department.
   Strongly agree [ ]  Agree [ ]  Disagree [ ]  strongly disagree [ ]

5. What is the effectiveness of Internal Control Systems in your institution generally?

6. Does your organization have financial performance systems? [Y] [N]

SECTION B: CONTROL ENVIRONMENT

7. Do you consider that the control environment of your institution has a significant influence on financial performance of your institution? [Y] [N]

8. Do you consider control environment to be effective in your institution? [Y] [N]

9. In your opinion, how has control environment affected financial performance of your institution?

   __________________________________________________________
   __________________________________________________________

10. Kindly indicate by scoring on a scale of 1 – 5 the extent to which you agree with the statements below relating to effect of control environment.

   (Tick once against each factor as appropriate)
<table>
<thead>
<tr>
<th>ELEMENTS</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control environment has affected institution’s revenue for the last five years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control environment has affected institution’s operating costs for the last five years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control environment has affected institution’s fees income on capital for the last five years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SECTION C: RISK ASSESSMENT**

11. Do you consider that the risk assessment of your institution has a significant influence on financial performance of your institution? [Y] [N]

12. Do you consider risk assessment to be effective in your institution? [Y] [N]

13. In your opinion, how has risk assessment affected financial performance of your institution? __________________________________________________________

__________________________________________________________

14. To what extent do you agree with the statements below relating to effect of risk assessment

*(Tick once against each factor as appropriate)*
Risk Assessment has affected institution’s revenue for the last five years

Risk Assessment has affected institution’s operating costs for the last five years

Risk Assessment has affected institution’s fees income for the last five years

SECTION D: CONTROL ACTIVITIES

15. Do you consider that the control activities of your institution have a significant influence on financial performance of your institution? [Y] [N]

16. Do you consider control activities to be effective in your institution? [Y] [N]

17. In your opinion, how has control activities affected financial performance of your institution?

________________________________________________________________________

________________________________________________________________________

18. To what extent do you agree with the statements below relating to effect of control activities?

(Tick once against each factor as appropriate)

<table>
<thead>
<tr>
<th>ELEMENTS</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control activities has affected institution’s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

56
SECTION E: INFORMATION AND COMMUNICATION

19. Do you consider that the information and communication of your institution has a significant influence on financial performance of your institution? [Y] [N]

20. Do you consider information and communication effective in your institution? [Y] [N]

21. In your opinion, how has information and communication affected financial performance of your institution?

________________________________________________________________________

________________________________________________________________________

22. To what extent do you agree with the statements below relating to effect information and communication?

*(Tick once against each factor as appropriate)*

<table>
<thead>
<tr>
<th>ELEMENTS</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information &amp; communication has affected institution’s revenue for the last five years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information &amp; communication has affected institution’s operating costs for the last five years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information &amp; communication has affected institution’s fees income for the last five years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### SECTION F: FINANCIAL PERFORMANCE

<table>
<thead>
<tr>
<th>NAME OF INSTITUTION</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue (From IGA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fees Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenditure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

23. Do you consider that accountability of your institution has a significant influence on its financial performance? [Y] [N]

24. In your opinion, how has accountability affected financial performance of your institution?

________________________________________________________________________

________________________________________________________________________

25. Do you consider that cost management in your institution has a significant influence on financial performance of your institution? [Y] [N]

26. In your opinion, how has cost management affected financial performance of your institution?

________________________________________________________________________

________________________________________________________________________

27. Do you consider that proper financial reporting in your institution has a significant
influence on its financial performance? [Y] [N]

28. In your opinion, how has financial reporting affected financial performance of your institution?_______________________________________________________________

29. Do you consider that capital investments of your institution have a significant influence on its financial performance? [Y] [N]

30. In your opinion, how have capital investments affected financial performance of your institution?_______________________________________________________________

________________________________________________________________________

Thank you for taking time to fill the questionnaire.
## APPENDIX III: BUDGET

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>JUSTIFICATION</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stationery</td>
<td>Writing materials (notebooks, pens, etc.)</td>
<td>5,000</td>
</tr>
<tr>
<td>Internet cost</td>
<td>Cost of browsing and</td>
<td>4,000</td>
</tr>
<tr>
<td>Typing, Printing &amp; binding</td>
<td>Typesetting charges printouts &amp; photocopies</td>
<td>6,000</td>
</tr>
<tr>
<td>Library costs</td>
<td>User charges</td>
<td>2,000</td>
</tr>
<tr>
<td>Traveling</td>
<td>Supervisors administering questionnaires</td>
<td>20,000</td>
</tr>
<tr>
<td>Contingencies</td>
<td>Other costs</td>
<td>5,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>42,000</strong></td>
</tr>
</tbody>
</table>
## APPENDIX IV: WORK PLAN

<table>
<thead>
<tr>
<th>S/NO</th>
<th>Activity</th>
<th>1\textsuperscript{st} Month</th>
<th>2\textsuperscript{nd} Month</th>
<th>3\textsuperscript{rd} Month</th>
<th>4\textsuperscript{th} Month</th>
<th>5\textsuperscript{th} Month</th>
<th>6\textsuperscript{th} Month</th>
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</thead>
<tbody>
<tr>
<td>1</td>
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<td></td>
<td></td>
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<td>2</td>
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<tr>
<td>3</td>
<td>Collection of data</td>
<td></td>
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<td>4</td>
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<td></td>
</tr>
<tr>
<td>7</td>
<td>Submit final research project</td>
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<td></td>
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</tbody>
</table>