FACTORS AFFECTING THE USE OF INTERNAL CONTROL SYSTEMS IN THE UNIVERSITY OF KABIANGA, KENYA

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Abstract

Like any other organization, institutions of higher learning have their internal control systems evaluated in order to provide the management with some assurance regarding its effectiveness. It involves control evaluation of everything the management does to control the organization. In the effort to achieve their objectives, internal controls must be judged effectively if its components are present and function effectively for operations. The study was done to establish the factors that affect the use of internal control systems in the University of Kabianga in Kenya. The study's scope was limited to the finance department at the university. The

outcome of the study will be useful to institutions of higher learning in Kenya by knowing the factors that affected the use of internal controls so as to put controls in place. On assessing the awareness by their staff of the existing internal controls, the adequacy of the internal control systems and the factors affecting the extent of their compliance in order to incorporate measures in their planning to ensure internal control systems were understood by all staff and that they contributed towards improved systems.

Keywords: Control Environment, Control Procedures, Internal Control Systems

Introduction

Millichamp (2011) defines ICS as the whole system of controls, financial and otherwise established by the management in order to carry out the business of the enterprise in an orderly and efficient manner, ensure adherence to management policies, and safeguard the assets as far as possible, the completeness and accuracy of the records. He suggested that the individual components of an internal control system are known as controls or internal controls. Internal control activities are the policies and procedures as well as the daily activities that occur within an internal control system. A good internal control system should include control activities. These activities generally

fit into two types of activities. Preventive control activities aim to deter the instance of errors or fraud. Preventive activities include thorough documentation and authorization practices. Preventive control activities prevent undesirable "activities" from happening, thus require well thought out and risk identification. Detective control activities identify undesirable "occurrences" after the fact. The most obvious detective processes control activity is reconciliation. The framework of a good internal control system includes: A sound control environment is created by management through communication, attitude and example. This includes a focus on integrity, a commitment to investigating discrepancies, diligence in designing systems and assigning responsibilities. This

involves identifying the areas in which the greatest threat or risk of inaccuracies or loss exist. To be most efficient, the greatest risks should receive the greatest amount of effort and level of control. For example, dollar amount or the nature of the transaction (for instance, those that involve cash) might be an indication of the related risk. The system of internal control should be periodically reviewed by management. By performing a periodic assessment, management assures that internal control activities have not become obsolete or lost due to turnover or other factors. They should also be enhanced to remain sufficient for the current state of risks. The availability of information and a clear and evident plan for communicating responsibilities and expectations is paramount to a good internal control system. These are the activities that occur within an internal control system.

Organizations set objectives and goals to be achieved. Due to scarce resources management needs to establish and supervise the implementation of internal controls through which there will be proper allocation of resources which will be utilized effectively and efficiently (Thomas et al., 2007).

According to Saleemi (2009), internal control indicates the whole system of controls employed by management in conduct of the business. It includes internal check, internal audit and internal control. Its efficient working in practical aspect is helpful not only in management but also for the external auditors. He further described internal check as a system under which the work relating to carrying out and recording of transactions is allocated amongst various persons in such a manner that the work of one person is automatically checked by another and thus possibilities of fraud or error or irregularity are minimized if not completely eliminated. Moreover, he described internal control as a system concerned with internal check, internal audit and otherwise established by management in order to carry on the business of the company in an orderly manner, safeguard its assets and secure as far as possible the accuracy and reliability of its

records. Finally, he concluded by describing internal audit as continuous review of operations and records undertaken within the business and is normally done by a special assigned staff. It should operate Independently of the internal check and in no case should divest anyone of the responsibilities placed upon him, therefore it is apparent that internal control expression is used in a wide sense and includes internal check and internal audit as well. Therefore, for organizations to meet their objectives there should be a proper internal control system that ensures the business is carried in an orderly and efficient manner, there is adherence to management policies, companies can safeguard these assets, records maintained are accurate and complete and finally where errors can be prevented and detected.

Statement of the problem

Institutions of higher learning always have to meet their objectives by ensuring adequacy of systems of control, reliability of data and efficient use of organizational resources. Being funded by the government and other stakeholders and given the number of transactions they transact, this exerts pressure on institutions both private and public to integrate proactive measures in internal control procedures in order to enhance accountability. Therefore, internal controls remained as the only way the public organizations ensured accuracy and reliability of their financial transactions. To try to reduce this problem the government of Kenya has increased the number of higher institutions to incorporate the large number of students. This has led to an increase in the number of campuses in the country, thus adversely affecting the management systems, the manner of recruitment of staff, creation of low standard of education and among others. Internal control system therefore remain as the only way that higher learning institutions can ensure accuracy and reliability of their financial transactions. Despite the importance of internal control systems limited studies have been conducted to know the factors affecting use of internal control systems. Therefore, this study

intended to fill this gap by studying the factors affecting the use of internal control systems in University of Kabianga.

Objectives of the study

The specific objectives of the study are to:

(a) establish the determinants influencing the use of internal control systems in the University of Kabianga.

(b) determine the controls in place to ensure effectiveness of internal control systems in the University of Kabianga

Research Methodology

The research design that was used was descriptive approach and the area of study was University of Kabianga. The population of the study was 22 staff at the university's finance department. Data sources that were used were secondary data from published and unpublished articles. Primary data was also used Data was collected using likert scale and it was self-administered. Data was analyzed through descriptive statistics and percentages were used to establish logical conclusions.

Data Presentation, Analysis and Discussion of Findings

Determinants of internal control systems in the University of Kabianga

Determinants are the factors that affect the effectiveness of internal control systems at any institution. They may be affecting positively or negatively depending on how they are controlled and taken by the institution. At the University of Kabianga the interest was to determine what determinants affect the internal control system at the finance department. The following tables show and analyze the data as collected.

Table 1: Complexity in use of internal control system

	Strongly agree	Agree	Uncertain	Disagree	Strongly Disagree
Response	1	4	2	3	0
Percent	10%	40%	20%	30%	0%

The complexity of internal control system in the University of Kabianga is agreed upon by 50% of the respondents and disagreed by 30% of the respondents. 20% of the respondents are uncertain as presented on table 1. Thus, the internal control system in the University of Kabianga is complex. As per Millichamp, (2011) a system that is complex can create problems of understanding for the accountant be he the auditor or just the company's accountant.

Table 2: Operational cost of the internal control system

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Response	3	2	3	1	1
Percent	30%	20%	30%	10%	10%

The response on the cost of the internal control system at the University of Kabianga is that 50% agreed while 20% disagreed. 30% were uncertain as on table 2. Thus, the internal control system at the University of Kabianga is costly. As per Norman, (2006) the internal control systems are not manual nowadays but computer systems have been put in place thus making it expensive to buy and as the staff were used to manual systems they have to be taken for training so as to be familiar and be able to use the system. This makes the system expensive. Although the cost is high it should not exceed the benefits of the system and that sometimes there is no out- of- pocket costs to establish an adequate control.

Table 3: Efficiency of the internal control system

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Response	4	5	1	0	0
Percent	40%	50%	10%	0%	0%

Speed means it is faster working on the system than when working manually. In the University of Kabianga 90% of the respondents agreed that it is faster to work on the system while10% were uncertain as seen on table 3. Saleemi, (2009) suggests that working on machines is faster than manual especially with trained staff. On internal control systems he comments that segregation of

duties which is created by the system makes it faster to work on the system as each person does a particular task.

Table 4: Audit Trail of the internal control system

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Response	6	3	0	1	0
Percent	60%	30%	0%	10%	0%

90% of the respondents agreed that the flow cannot be known unless the information is printed. 10% of the respondents disagreed. Thus for table 4, as per Wood and Sangster, (2007) the system does not show the flow of information unless printed because with the system one is able to work on an item at a time and one cannot view all the information at a time.

Table 5: Erroneous output

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Response	7	0	2	1	0
Percent	70%	0%	20%	10%	0%

The University of Kabianga as on table 5 agreed that the system can produce erroneous output at 70%, 20% of the respondents were uncertain while 10% of the respondents disagreed. Generally speaking, if correct data is presented to the machine and faultless computer programmes are used the output should be error free. This however, reinforces the mistaken belief that machines do not make mistakes. But machines cannot be relied upon to recognize nonsense data. A machine will not think, it will do as it is told. Therefore, if it has been instructed incorrectly it will always correctly make the same mistake, whereas a clerk in a manual system would be expected to notice and query this. Thus, the University is in line with literature.

Controls in place for effective internal control systems

For the internal control system to work correctly as asserted by Saleemi, (2009) there must be internal control meant not only internal checks and internal

audit but on the whole system of controls, financial and otherwise, established by the management in order to carry on the business of the company in an orderly manner, safeguard its assets and secure as far as possible the accuracy and reliability of its records. He further asserted that an effective internal control system can only operate when some specific procedures are adopted by the management. The controls at the University of Kabianga are analyzed as on the following tables.

Table 6: Physical Restricted entry as a control

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Response	2	3	2	1	2
Percent	20%	30%	20%	10%	20%

At the University of Kabianga 50% of the respondents as seen from table 6 agree that there is restricted entry to specific people, 20% were uncertain while 30% disagreed. As per Thomas et al., (2009) only some authorized employees be allowed to use machines. Cash and stock should be under the custody of some reliable persons. This safeguarding is also known as physical controls. In the University thus, as the literature suggests there exists the physical control.

Table 7: Keeping backup copies as a control

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Response	2	0	2	4	2
Percent	20%	0%	20%	40%	20%

20% of the respondents at the University of Kabianga agreed that there are backup copies of important programmes and files, 20% of the respondents were uncertain while 60% disagreed. This is contrary to literature as according to Mwindi, (2005) maintaining backup copies of all important programmes and files. This includes the grandfather and son configuration whereby three files are maintained at different levels and at different locations to enable reconstruction to take place should the need arise.

Table 8: Back up Power supply as a control

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Response	1	0	1	5	3
Percent	50%	30%	10%	10%	0%

About the power supply at the University 80% agreed that there is uninterrupted power supply, 10% were uncertain and 10% disagreed as seen on table 8. According to Norman, (2006) having standby arrangements like uninterrupted power supply units to deal with power blackouts and having arrangements with other similar machines to allow processing of urgent information should the machines break down.

Table 9: Access to programmes and files as a control

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Response	1	3	1	1	4
Percent	10%	30%	10%	10%	40%

The controlled access to programmes and files at the University of Kabianga was 40% of the respondents agreed, 10% of the respondents were uncertain and 50% of the respondents disagreed that there is controlled access to programmes and files as presented on table 9. Mwindi, (2005) comments that there should be maintenance of a library to ensure that access to programmes and files is properly controlled.

Table 10: Monitoring of Execution of procedures as a control

	Strongly Agree	Disagree	Uncertain	Disagree	Strongly Disagree
Response	3	2	4	0	1
Percent	30%	20%	40%	0%	10%

50% of the respondents at the University agreed that different persons execute procedures while others authorize. 40% of the respondents were uncertain while 10% disagreed. The presence of computers does not dispense with the need to observe that fundamental aspect of internal control, that is, the division of responsibilities in such a way as to ensure that as per Mwindi, (2005) those in a position of responsibility do not themselves become involved in executing the routine of the procedures they have authorized.

Table 11: Standardized Procedures as a control

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Response	6	1	1	1	1
Percent	60%	10%	10%	10%	10%

The documents used are prepared in accepted standards as 70% of the respondents agreed, 10% were uncertain and 20% disagreed. Wood and Sangster, (2007) argues that the aims of a company are achieved by the use of standard documentation, the use of standard procedures whenever possible.

Table 12: Generally Accepted Accounting Standards as a control

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Response	5	2	3	0	0
Percent	50%	20%	30%	0%	0%

At the University 70% of the respondents agreed that generally accepted standards are adhered to while 30% were uncertain. Woolfgang, (2008) defines generally accepted standards as those procedures that are used worldwide and are understood in every part. They were set by the International Accounting Standards Board (IASB) and should be followed in any accounting procedure. The University of Kabianga is in line with literature.

Table 13: Testing of routines as a control

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Response	0	3	5	0	2
Percent	0%	30%	50%	0%	20%

According to 30% of the respondents routines are adequately tested prior to implementation, 50% of the respondents are uncertain while 20% of the respondents disagree. According to Wood and Sangster, (2007) the adoption of routines should be after adequate testing prior to implementation which is contrary to how it is done at the University of Kabianga as presented.

Table 14: Comprehensive security as a control

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Response	0	2	3	4	0
Percent	0%	22.2%	33.3%	44.4%	0%

22.2% of the respondents agreed that there is comprehensive security while 44.4% of the respondents disagreed but 33.3% of the respondents were uncertain as on table 14. According to Saleemi, (2009) within the computer area itself, the principles of this aspect of internal control must be observed. System development staff and programmers should play no part in actual processing; infact ideally they should have no access to the computer room. The system should also be secured with passwords for the users only that no one else should log on the system except the users. This will ensure instituting a comprehensive system of program and document security. In the University this is contrary to literature.

Table 15: Authorization as a control

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Response	6	3	1	0	0
Percent	60%	30%	10%	0%	0%

The respondents at 90% agree that there is specified authorization when new applications are introduced or existing programs are amended or extended. 10% of the respondents are uncertain. As per Thomas et al., (2009) specified rigid authorization procedures should be put in place and followed whenever new applications are envisaged or existing programs amended or extended.

Table 16: Ranking of Determinants in the University of Kabianga

DETERMINANTS	1	2	3	4	5	Mean	Mode	Rank
1. The internal control system is complex	1	4	2	3	0	1	4	4
2. The system is expensive in terms of training people to operate and initial cost	3	2	3	1	1	1	3	5
3. It is faster working using the computer system	4	5	1	0	0	1	5	3
4. The system is difficult to install	3	3	2	1	1	1	3	5
5. The system does not show the flow of information unless printed	6	3	0	1	0	1	6	2
6. The system can produce erroneous output	7	0	2	1	0	1	7	1

As per the determinants the mean shows that each person filled a form and that is why it is one at every level. The mode shows the frequency of appearance, that is, how many people filled a certain field the same way. As per the data complexity has a mode of four meaning that four people actually filled the field the same way and that is at agree, thus, it is agreed that the system is complex. About the system being expensive the mode is three at agree, and three at uncertain thus, it is concluded that the system is expensive as most people see it to be expensive. Five people which is the mode, agree that the system is faster to work with, thus, it is concluded that the system is faster to work with. The system is also difficult to install as the mode is three which appears twice meaning some strongly agreed while the others agreed, thus, it is concluded that the system is difficult to install. The flow of information cannot also be seen unless the information is printed as the mode is six at strongly agree, thus showing that it is true unless the information is printed one cannot be able to see the flow. The system is also strongly agreed that it can produce erroneous output as the mode is seven at strongly agreed. The determinants are then ranked from that with the highest mode to the least showing that number one is actually the one with the most effect to the last one with the least effect.

Table 17: Ranking of controls in the University of Kabianga

	CONTROLS	Mean	Mode	Rank
7.	Entry is restricted to particular persons.	1	3	4
8.	Backup copies of important programmes and file.	1	4	3
9.	Power supply is uninterrupted.	1	5	2
10.	There is control to access programmes and files.	1	4	3
11.	Different persons execute procedures while others authorize.	1	4	3
12.	Those occupied with recording functions do not have control over or access to the assets whose movement they are recording.	1	6	1
13.	A person's work is checked by another independent member of staff preferably in a different department.	1	4	3
14.	Documents used are prepared in accepted standards.	1	6	1
15.	The procedures used are based on the generally accepted standards.	1	5	2
16.	Routines are adequately tested prior to implementation.	1	5	2
17.	There is a comprehensive system of program and document security.	1	4	3
18.	There is specified authorization when new applications are introduced or existing programs are amended.	1	6	1

Table 17 shows the mean at one because each person filled a form but at question seventeen one person did not fill and thus nine is used in the calculation of the mean. It is concluded that actually entry is restricted to particular persons as the mode is three which is at agreed. Backup copies of important files and programmes are not kept as the mode is four at disagreed. There is also a mode of five at disagreed at the field of uninterrupted supply, thus, showing that the power is actually interrupted. Programmes and files are actually accessed by any person as there is no control to its access. The conclusion is because of the mode which is four and is at disagreed. There is uncertainty as to whether different people execute procedures while others authorize as the mode is at four which is actually at uncertain. There is also uncertainty as to whether those recording certain functions on assets actually have control over the access of the assets and there movement as the mode is six at uncertain. The work of a person is not checked by an independent person who should be preferably from another department as the mode

which is four is at disagreed. There is a mode of six at strongly agree on the accepted standards meaning the documents are prepared as per the accepted standards. There is a mode of five at uncertain at the testing of routines before they are implemented, thus, a conclusion that there is uncertainty as to whether routines are tested prior to implementation. There is also uncertainty as to whether there is a comprehensive system of program and system security as the mode is four at uncertain. There is specified authorization when new programs are introduced or when existing ones are amended or extended as the mode is six at strongly agree.

As in the literature review the factors of cost, complexity, speed, trail, erroneous output, and the difficulty in installation have clearly shown that they really affect the effectiveness of internal control systems thus, as literature review reveals they should be monitored. The controls are not really in place like in the literature review the controls in place are very important, and as the employees are not sure whether they are there or maybe others are not there then as per the literature review the internal control system cannot be effective. Those controls that are ranked number one are the ones that are really in place until those that are numbered the last number are least implemented in the University.

Summary of findings

Concerning determinants on factors influencing internal control system in the University of Kabianga the complexity of the system is presented by fifty percent (50%), those uncertain being twenty percent (20%), those disagreeing three which is thirty percent (30%).

About the system being costly those agreeing are fifty percent (50%), those uncertain are 30%, those disagreeing are twenty percent (20%). As per the speed of the system ninety percent agree (90%), and ten percent (10%) uncertain while none disagree.

On the trail ninety percent (90%) of the respondents agree, none uncertain while ten percent (10%) disagree. As per the respondents seventy percent

70% agree that the process can produce erroneous output, twenty percent (20%) are uncertain and ten percent (10%) disagree. None disagreed.

According to respondents on the controls in place for effective internal control systems the security of the system in terms of restriction to entry fifty percent (50%) 0f the respondents agreed, twenty percent (20%) are uncertain; thirty percent (30%) of the respondents disagreed.

Backup copies of important programmes and files being available twenty percent (20%) of the respondents agreed, twenty percent (20%) were uncertain, and sixty percent (60%) of the respondents disagreed. About the power interruption ten percent (10%) of the respondents agreed, ten percent (10%) were uncertain, eighty percent (80%) of the respondents disagreed.

Control to the access of programmes and files forty percent (40%) of the respondents agreed, ten percent (10%) were uncertain, and fifty percent (50%) disagreed. In internal controls different persons should execute procedures while others authorize and thus at the University of Kabianga the response was that fifty percent (50%) agreed, forty percent (40%) of the respondents were uncertain and ten percent (10%) disagreed.

As for those recording functions and assets not having control over the functions and assets they record ten percent (10%) of the respondent agreed, sixty percent (60%) of the respondents were uncertain, and thirty percent (30%) disagreed. A person's work should be checked by an independent member preferably in a different department but in the University of Kabianga finance department ten percent (10%) of the respondents agreed, twenty percent (20%) were uncertain, and seventy percent (70%) disagreed.

The accepted standards for documenting seventy percent (70%) of the respondents agreed, ten percent (10%) were uncertain, twenty percent (20%) of the respondents disagreed. The generally accepted accounting standards as per the respondents seventy (70%) agreed, thirty percent

(30%) were uncertain while none disagreed. The internal control system routines should be tested prior to implementation and so the response at the University of Kabianga fifty percent (50%) of the respondents agreed, thirty percent (30%) were uncertain while twenty percent (20%) disagreed.

General system and program security in the department was responded as: 22.2% of the respondents agreed, 33.3% were uncertain, and 44.4% disagreed. When new applications are introduced or amendments done there should be specified authorization as a control to effective use of internal control system and the response was 90% of the respondents agreed, while 10% of the respondents were uncertain.

Conclusions

In determinants affecting internal control systems at the University of Kabianga, it is complex in line with literature. On cost, it was not definite so it was concluded that those uncertain are the staff that are not involved much in procurement and organizing training programs thus the system is expensive. The system is faster working on as in literature. The system also does not show the flow of information or audit trail unless printed and on producing erroneous output it is also true and this is in line with literature. Thus the determinants influence the extent of use of internal control systems.

Concerning the controls in place at the University of Kabianga, restriction of particular persons to the control system is in place and in line with literature. Accepted standards are used as a control, generally accepted accounting standards are also used and are controls to internal control system, there is specified authorization when new applicants are introduced or existing programmes are amended or extended. Most of the respondents were not conversant with the system as most of them were uncertain in many matters. The controls in place are not adequate as they are only 33.3% (four out of twelve) of the controls an institution should have in place. Despite challenges in respondents reluctance to fill the questionnaire the study was a success.

Recommendations

University of Kabianga should train its staff on internal control systems to ensure the determinants do not negatively influence the system and ensure that controls are in place because once the staff know about the system then they can embrace the controls to ensure assets are safeguarded, there is division and segregation of duties, there is order in work, detection and prevention of errors is done, there is accuracy and completeness of work and the management policies are adhered to.

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