THE IMPACT OF INFORMATION SYSTEMS TO AN INTERNAL AUDIT ENVIRONMENT

CASE STUDY OF UGANDA BREWERIES LTD

BY

KARIUKI MARTIN NJOROGE

BIB/5120/41/DF

SCHOOL OF BUSINESS AND MANAGEMENT

KAMPALA INTERNATIONAL UNIVERSITY

The Research Report is submitted in partial fulfillment of the requirement for the award of a Bachelor Degree in International Business Administration of Kampala International University.

DATE: April 2007

DECLARATION:

I declare that this research project is my original work and has never been submitted to any university for any award. Where the works of others have been cited acknowledgment has been made.

Signature.................................   Date....07. 06. 2007.

MARTIN NJOROGE KARIUKI

BIB/5120/41/DF

DEDICATION

This research proposal is dedicated to my mum Mrs. Grace Nyambura Kariuki, dad Mr. Francis Kariuki Maina, my dear sister Veronica Njeri Katoni for their support, hardship and struggle of laying the foundation of my education.

Also dedicated Etam Nelly Shiverenje my intimate and closest friend for being there for me during the hard time of my research.

ACKNOWLEDGEMENT

This is to express my sincere thanks to all those who assisted me during the years of my study at Kampala International University.

My heart felt thanks to my special supervisor, Mr.Malinga Ramadhan

Thanks to all lecturers especially in the school of Business and Management who spent their time impacting in me the skills and knowledge that will serve as a special shield as I face the outside world

My special thanks also to go to all my classmates and the entire K.I.U community at large

LIST OF ABBREVIATIONS

AICPA: American Institute of Certified Public Accountants

UBL: Uganda Breweries Limited

DBMS: Database Management Systems

MIS: Management Information System

TPS: Transaction Processing Systems

TABLE OF CONTENTS

LIST OF TABLES

ABSTRACT

The study was carried out in Uganda Breweries Limited, in PortBell. The study aimed at assessing the Impact of Information Systems to an Internal Audit Environment and see whether it is viable and powerful to changes on technological development of Uganda Breweries Limited.

The dissertation comprises of five (5) chapters. It started with the background of the study which analyzed the background of the organization and the problems that the manual system had. This chapter also gave the direction of the study, set the objectives, purpose of the study, scope and significance.

Chapter two (2) of the dissertation sort in depth the review of the related literature on the topic at hand. Chapter three (3) focused on the research methodology that the researcher adopted. It contains research design, area of the study, data collection instruments data analysis and sampling that I employed in the course of the study. Also it assessed the limitations and delimitations encountered during the data collection process. Chapter four (4) of this dissertation dealt with the presentation of the data from the field and its interpretation. Finally chapter five (5) the researcher gave the summary, conclusion and recommendation to the research.

CHAPTER ONE
INTRODUCTION

1.0 Introduction

The UBL currently uses a manual system to compute and record with regards to salaries, sales and other financial and non-financial records of the company. There has been great Problem with the management in calculating the number of hours worked by each worker, the sales made during the day and also a problem in inventory control. It is therefore posing a challenge in future management of audit of transactions hence leading to errors frauds and other irregularities. The company therefore urgently requires an automated system to minimize the internal audit costs, ensure timely and efficient payment methods and also ensure accurate methods and techniques of data recording and also facilitate the audit trail of daily transactions. The company has also prospective plans to expand and open more branches in future where the manual system being currently used will pose a problem.

1.1 Background of the study

An internal audit environment seeks to know and monitor the daily monetary and non-monetary operations and activities of a business enterprise. A lot of data, records and information have been lost as a result of poor filing system, others fraudulently misplaced as a result of using manual system in the organization. Error prawn operations and activities are also common due to manual data capture, data processing, recording and retrieval of the information required.

It is of utmost important that the problem be addressed at the shortest time possible and a solution be found in order to reduce the error prone activities in the internal audit environment and also put measures to prevent frauds and irregularities that are likely to occur as a result of the manual system.

1.2 Background of the company

Uganda Breweries limited is a brewing company located at Port Bell on the shores of Lake Victoria. UBL is a subsidiary of East African Breweries that has its headquarters in Kenya.

UBL has got five (5) departments that are: distillery, human resources department, finance department and the sales and marketing department. The distillery department

1

mainly deals with production of different brands of beer, for example club, bell, guiness among others. The human resources department deals with the hiring of workers and termination of employment contracts, management of employee's records and performance appraisal. The finance department deals with recording of all financial transactions while the sales and marketing department deals with selling and distribution of the company's products.

1.3 Statement of the problem

UBL uses manual system in the organization to capture, process, record and retrieve information. The use of manual system in the organization has led to loss of information and misappropriation of the company's resources for example through stock theft. This problem is brought about by improper record keeping.

There is therefore a need to introduce a proper system of checks and balances to ensure that this discrepancy is minimized to an acceptable level. Hence, the research problem revolves around the importance and/ or relevancy of information systems to an internal audit environment.

1.4 Objectives of the study

General objectives

The general objective of the researcher was to find out the impact of information system to an internal audit environment of the organization.

Specific objectives

I. To bring to the attention of the management the weaknesses in the manual system of the internal control of the organization.

II. To see whether data capture using information technology will have an effect on accuracy and completeness of the information prepared by the internal control system.

III. Advice the management on particular software and programa that could be used to detect and prevent errors, frauds and other irregularities within the organization.

1.5 Research questions

The research will attempt to answer the following questions:

1. The main research question will be what will be the effect of information system to an internal audit environment of Uganda Breweries Limited?
2. How will data capture have an effect on accuracy?
3. What information systems will be required to enhance accountability?
4. How will an increase in the frequency of audit checks prevent errors, frauds and other irregularities?

1.6 Significance/ Justification of the study

The study will contribute to academic in terms of experience in approaching a research problem and will also help in putting into practicality the knowledge gained at school to develop a program and carry out a research, it will also helpUBL Management to be up to date with changing technological advances in the world and the current computerized management system.

The technological advance will keep the company at per with other competitors in the market who have also adopted technology, it will also avoid the controversies between the management and the accountants and also better methods of data recording will ensure no losses to the company in terms of information loss.

It will also be advantageous since a centralized and an easier management system will be developed which will even eliminate workers involved in the computation process and therefore it is of economic value to the company as only one personnel required. It will also ensure that the company is not limited to expansion in reference to its future prospectus of being nation wide as the automated system will enhance it and also dynamism that it can change with changes in technology, marketwise and financially.

1.7 Scope of the study

The study will be limited to four main branches not including the headquarters in Kenya. My research will be focused on four departments in every branch because I believe they will give the relevant and required information in reference to my area of study. This includes; finance, human resource, internal audit, IT department and the sales and marketing department

My research will be limited to a total of five respondents per department whom it is anticipated will give relevant and reliable information out of approximately fifteen workers per department. I believe that the outcome of my study can be replicated/generalized to other branches, since the few branches sampled will be an adequate representative of the company.

1.8 Limitations and Delimitations

I expect to meet the following limitations in the course of the study:

  i.   Financial constraints to facilitate all the requirements of the study.
  ii. Lack of capability, because to conduct a successful research one needs skill and expert knowledge. This is the first time I will be undertaking a research assignment.
  iii. Limited time schedule for data collection, analysis of the collected data and compilation of the research report. This is because I will also be attending lectures and doing other class assignments.
  iv. I expect some difficulties in meeting some of the respondents on time and delays in getting back the responses from the same.

Delimitations of the Study

During the course of my research undertaking, I expect the limitations to be minimized by the co-operation from most of the respondents and especially the management of Nile Breweries.

I also expect to get some funding and assistance in terms of means of transport, typesetting and processing the Dissertation.

1.9 Conceptual framework

```
┌─────────────────────────────────────────────────────────────────────┐
│        INFORMATION TECHNOLOGY AND INFORMATION SYSTEMS                  │
└─────────────────────────────────────────────────────────────────────┘
```

Data processing time   context   form

```
┌──────────────────┐      ┌──────────────────┐      ┌──────────────────┐
│ Timeliness       │      │ Accuracy         │      │ Clarity          │
│ Currency         │      │ Relevancy        │      │ Detail           │
│ Frequency        │      │ Completeness     │      │ Presentation     │
│ Time period      │      │ Scope            │      │ Order            │
│                  │      │ Performance      │      │ Media            │
└──────────────────┘      └──────────────────┘      └──────────────────┘
```

```
┌─────────────────────────────────────────────────────────────────────┐
│  Internal Controls and The Internal Audit Environment                 │
└─────────────────────────────────────────────────────────────────────┘
```
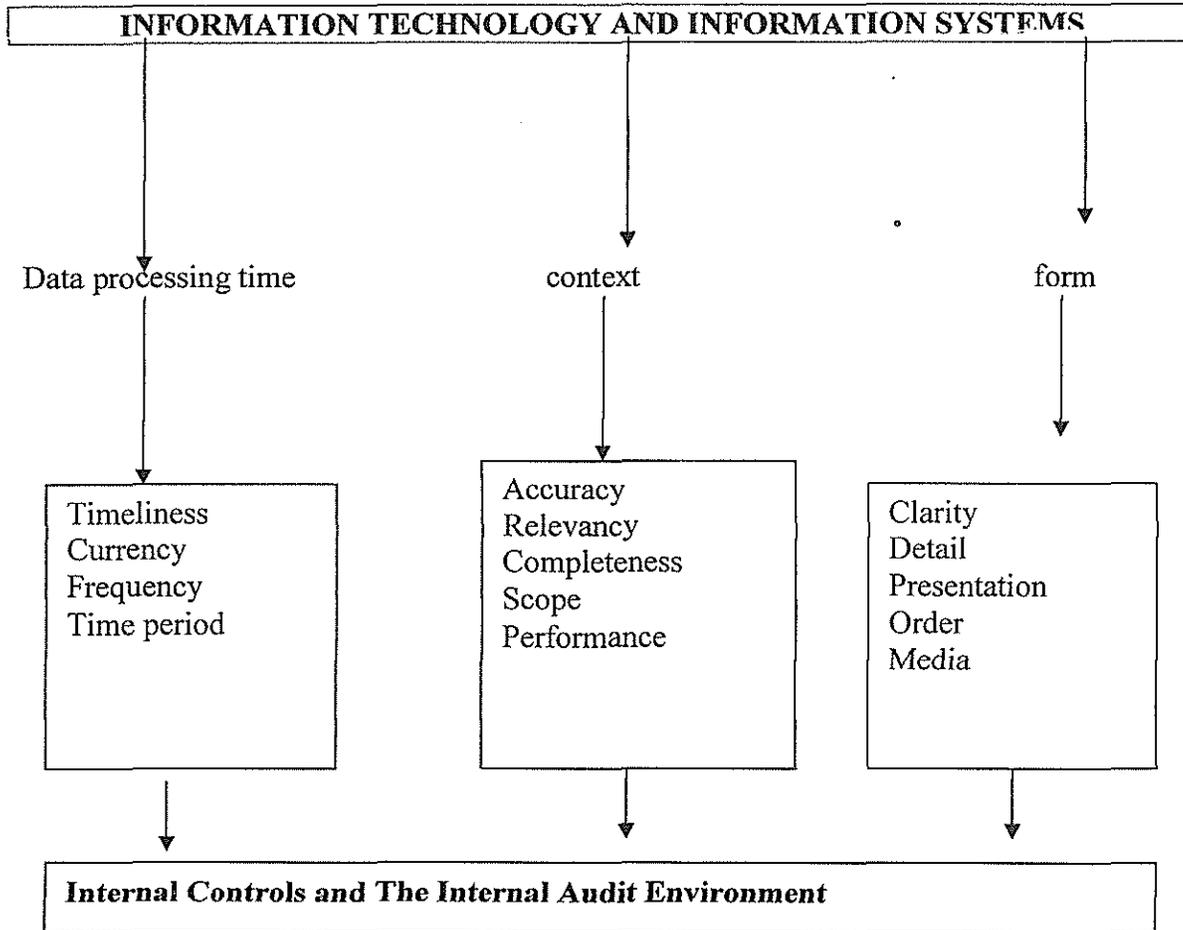
DEFINITION OF TERMS

Impact: An effect or influence of one variable to another (Oxford Dictionary)
It refers to how the introduction of information systems in the organization will affect the internal auditing procedures.

Internal Audit: This refers to an independent appraisal of activities within an organization with an aim of ensuring that the management operates efficiently.(Foulks Lynch, 2000)

Environment: The physical surrounding, conditions, circumstances etc, in which a person lives. (Oxford Dictionary)
The environment in the research context will refer to the internal audit department.

nal Control: a process effected by an entity's board of directors, management, and other personnel, designed to provide a reasonable assurance regarding the achievement of objectives (AICPA, 1996)

Control: The systems component that evaluates feedback to determine whether the system is moving toward the achievement of its goal and then makes any necessary adjustment to the input and processing components of the system to ensure that proper output is produced (O'Brien, 2003)

A management function that involves observing and measuring organizational performance and environmental activities and modifying the plans and activities of the organization where necessary (Lucas C Henry, 2000)

Information: this refers to the data placed in a meaningful and useful context for an end user (Alter, Steven, 2000)

Information Systems: A set of people, procedures, and resources that collects, transforms, and disseminates information in an organization (Timothy and Linda, 2004)

CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction

In this part, effort will be to carry out the survey or what different people say in connection with topic at hand. This will be done basing on the research objective formulated in the study. It may involve the different views of different scholars.

2.1 Literature Review and Other Researchers' Works

"Internal audit engagements are usually undertaken as part of a pre-planned programme of work with a variety of objectives as part of an entity's overall corporate governance arrangements. These objectives can relate to the risks faced by the business, internally and externally, and/or they can deal with the enhancement of performance.

Internal auditors, external auditors, and consultants who perform internal audit and review engagements provide reports to management (internal audit reports). These reports are important because they provide documentary evidence of the work performed, the conclusions reached and the recommendations made. The quality and presentation of such reports makes a substantial difference to the value added by internal audit and those performing similar functions." (Katharine Bagshaw, internal audit and review reports; student accountant, February 2003)

2.2 Real-world conditions of information

Information obtained by means other than direct observation by the decision maker is a step away from the real-world conditions of interest and requires rules for how conditions are to be represented. All conditions can't be represented, and measurement requires specification of how the **information system is to sense, measure, summarize and display** representation of the real situation at hand in abstract form such as on paper, a computer monitor display, or an electronic media. It requires specification or measurement methods for how the real issues are to be represented, displayed or portrayed.

The **American Institute of certified Public Accountants (AICPA)**, a trade association of independent assurance professionals in the United States, has directed attention to a broad class of information quality improvement services by defining auditing services as, "independent professional services that improve the quality of information, or its context."

Internal control can improve the quality of information for management, but it's not an assurance service as defined by AICPA. Internal control has been defined as, "a process effected by an entity's board of directors, management, and other personnel, designed to provide a reasonable assurance regarding the achievement of objectives in the following categories:

- ➤ Effectiveness and efficiency of operations,
- ➤ Reliability of financial reporting,
- ➤ Compliance with applicable laws and regulations.

Determining an organization's long term objective and strategies to achieve them are beyond the scope of internal control, but most business activities are subject to internal control, broadly defined. These measurement systems are designed to assure employees adherence to internal operating policies and ethical codes, and to external contracts provisions, laws and regulations.

Internal control systems can also help protect the assets of a business. Example, inventory on hand at a point in time can be compared with recorded accountability for inventory in the accounting system to possible theft of inventory, and control procedures for payments, prevent disbursements of company's cash without proper authorization of the purchase and receipt of the goods.

2.3 Information technology and information system

Jeffrey et.al (2000) defines management information systems as information systems as information systems that provides for management -oriented reporting. These reports are usually generated on a predetermined schedule and appear in a prearranged format. (pg 47).

Timothy and Linda(2004) defines a transaction processing system (TPS)as a kind of computer based information system which record day to day transactions to support middle managers. At health wise, production supervisors use TPS to record and monitor the current inventory levels and production line output. (pg 45).

Manual systems

A manual system is asset of integrated components that use human effort in each and every step of their activities. Manual systems have computers but they run their activities. Manual systems have computers but they run their activities mostly through human effort. For example, the employees have to enter data manually in every file and as a result work is slowed down. This also means that data is duplicated and not consistent (Garcia-Molina, 2000[pg 17]).

2.3.1 Payroll generation

Payroll is used to display salary and wages data. They are used for output that will be distributed or stored in paper form. They are also used to present summarized data. A report of the salaries can easily handle multiple pages of output and it can also combine both detailed and summary data. It will act as a database for all the relevant data to salaries and wages information and also will be a reference point in future.

2.3.2 Data flow diagrams

These are diagrams that are used to show the context of the system in terms of processes entailed. They involve various stages or levels' depending on how big a system to design is. They are used to show the flow of information within the system (Hoffer et al, 2001[pg 14]). Refer to the appendix for data flow diagrams.

2.4 Database systems

A database system is a collection of inter-related files and a set of programs that allow users to access and modify these files. A database system solves the following problems that occur when using a traditional file system:-

Data redundancy and inconsistency; with a database system, changes made to one piece of data are updated to all relevant files because it is centrally stored.

Difficulty in accessing data; with this system, access to data is very easy since it is automated but in manual system the only method is manually searching for it.

Data isolation; with manual systems, data is scattered in various files and files may be in different formats

2.4.1 The data base management approach

The development of databases and data base management software is the foundation of modern methods of managing organizational data. (Williams, 1999) The database approach consolidates data records and objects into databases that can be accessed by many different application programs. In addition, an important software package called a database management system (DBMS) serves a software interface between users and databases. This helps users easily access the records in a database. Thus database management involves the use of database management software to control how databases are created, interrogated and maintained to provide information needed by end users and their organizations.

Customer records and other types of data are needed for several different applications in banking, such as cheque processing, automated teller systems, bank credit cards, savings accounts and installment loan accounting. These data can be consolidated into a common database, rather than being kept in separate files for each of those applications. The database management approach involves three basic activities:

- ➢ Updating and maintaining common databases to reflect new business transactions and events requiring changes to organizations records.
- ➢ Providing information needed for each end users application by using application programs that share the data in common databases. This sharing of data is supported by the common software interface provided by a database management system package. Thus end users and programmers do not have to know where or how data are physically stored.
- ➢ Providing an enquiry/response and reporting capability through DBMS software so that end users can use web browsers and the internet or corporate intranets to easily interrogate databases, generate reports, and receive quick responses to their ad hoc requests for information.

Management Information Systems

Williams, Sawyer, Hutchinson (1999) define **MIS** as a computer- based information system that uses data recorded by **TPS** as input into programs that produce routine reports as output.

They summarized features an MIS are as follows:

> **Input and Output**: Inputs consists of processed transaction data, such as bills, orders, and paycheques, plus other internal data. Outputs consist of summarized, structured reports: budget summaries, production schedules, and the like.

> **For middle level managers**: An MIS is intended principally to assist middle managers. That is, it helps them with tactical decisions. It enables them to spot trends and get an overview of current business activities.

> **Draws from all the departments in an organization**: The MIS draws all the information and data from all the five departments or all functional areas of the organization, not just one.

> **Produces several kinds of reports**: Managers at this level usually receive information in the form of several kinds of reports: *summary, exception, periodic, on-demand.*

Summary reports show totals and trends. An example would be a report showing total sales by office, by product, by salesperson, or as total overall sales.

Exception reports show-out-of-the-ordinary data. An example would be an inventory report that lists only those items that number fewer than 10 in stock.

Periodic reports are produced on a regular schedule. These may be daily, weekly, monthly, quarterly, or annually. They may contain sales figures, income statements, or balance sheets. Such reports are usually produced on paper, such as computer printouts.

On-demand reports produce information in response to an unscheduled demand. A director of finance might order an on-demand credit-background report on unknown customer who wants to place a large order. On-demand reports are often produced on a terminal or microcomputer screen rather than on paper

CHAPTER THREE
METHODOLOGY

3.0 Introduction

A detailed description of the methodology that was used in the study in order to accomplish the stated objectives of the study thoroughly. It gives a plan, structure and strategy of the investigation conceived so as to obtain answers to the research questions. It will also give light on the study area, point out the subjects to be used and reasons for the preference of the subject. It will also describe the instruments that were used and procedures followed during data collection.

3.1 Research design.

The research design that the researcher used in the case study will comprised of UBL, within Kampala district. The study assesed the effect of Information Systems on the internal audit environment of UBL, and if the internal review procedures named can be automated.

This was an important consideration in determining the design choice of the study. A meaningful picture of the study emerged by employing both qualitative and quantitative approaches to research. However, my research was mainly concentrated to quantitative study.

According to Marshall and Ross Man (1995), qualitative approaches are appropriate for research that deals in depth into complexities and processes .The study of the effect of information systems on an internal audit environment involves issues such as respondent experiences, attitudes and benefits that are normative and sensitive in nature that will demand the use of qualitative method.

Quantitative methods on the other hand were used to quantify and make numerical comparisons between the respondents. The researcher used a descriptive design. The researcher chose the study because accuracy was important and minimized biasness and increase reliability of the results.

3.2 Study area

The study was carried out in Port Bell which is located in Kampala district .This is because of the samples chosen and the limitations stated earlier like financial constraints and time.

3.3 Target population

Population in research refers to people from whom information can be obtained. The population within each branch is estimated to be 30 people.

With regards to the kind of information that was required from the study of the target population, the following people and departments were chosen who gave the necessary information: accountants, casual workers, paymaster general, human resources manager, supervisors, internal auditors and IT managers.

3.4.1 Sampling design

In this category the units of the study was selected. The researcher considered three respondents in different departments of the branches. The sample size considered was optimum in relation to available time and resources and it was a good representative of the total population.

The different categories of the sample population will be selected as follows: two accountants and one paying clerk in the accounts department; two recruiting officers and a supervisor and human resource manager; chief internal auditor and senior finance controller officer from the internal audit department; IT manager, chief programmer, data entry clerks and database manager from the IT department.

3.4.2 Sampling

It was not possible to study the whole population due to main constraints such as; time, limited resources and manpower. The researcher selected a few subjects for the study but the results generated were generalized to the whole population. The small population of people to participate was selected as samples. The sample was a good representative of the total population. This is because most of the population characteristics was represented.

The researcher used purposive and random sampling technique/methods when selecting samples. Purposive sampling refers to sampling techniques that helping getting information from a source, which is adequate enough for any piece of study.

Kein (1996) referred to purposive sampling as gathering information with rich materials from chosen or social people. The sample subjects to be considered we believe will have the right information since they are directly affected by the problem at hand. McCall(1985)supports this by stating," a researcher needs to get appropriate sample size in term of accuracy, the cost and also put into consideration the subject matter of investigation".

According to Patton (1995) key informants are people who are particularly knowledgeable and whose insights can be useful.

3.5 Method of Data Analysis

A data process involves arrangement and collecting of instruments. Post-coding was used, whereby numerical values were assigned to the categories in the study.

The data that was collected from the field through the use of the questionnaire was coded and analyzed using tables. Descriptive measures were also used in the study.

Time Schedule

FEBRUARY	MARCH	APRIL
Proposal development and writing	Administering Questionnaires	Data Analysis , Discussions and Conclusions
Presenting the proposal to the supervisor	Conducting interviews from the selected sample population	Preparing the Research Report and making Recommendations
Corrections and Approval of the proposed document	Receiving Questionnaires	Presenting the Research Report to the School of Business and Management

CHAPTER FOUR

DATA PRESENTATION , ANALYSIS AND INTERPRETATION

4.0 Introduction

In this chapter the data is presented and analyzed in line with research question which were to find out the impact of information systems to the internal audit environment of Uganda Breweries Limited. The findings presented were from a total of 30 respondents. Out of the 30 respondents 8 were accountants while 12 were internal audit officers, and the remaining 10 were from the information technology department. In the same chapter the data is presented and analyzed quantitatively using descriptive methods with the help of tables.

4.1 Years worked by the respondents.

Table4.1: Illustration of years worked

Year categories	Percentage				
	Accountants	Internal Auditors	Information Technology Department	Freq	Percentage
05-09	25	25	40	8	26.67
10-14	50	37.5	35	12	40
15-19	25	37.5	25	10	33.33
Total	100	100	100	30	100

Source: Primary data

From the table 4.1 above the findings shows that the respondents (40%) were in the year working bracket 10-14.Most of the accountants were both in the 10-14 and 15-19 years working bracket while the internal audit officers were in the 05-09 and 15-19 bracket the ages considered important in enabling the researcher to understand the impact of information technology to an internal audit environment.

4.2 Educational level of respondents:

Table4.2: Showing educational levels of respondents:

Education Level	Percentage			Frequency	Percentage
	Accountants	Internal Auditors	Information Technology Department		
Degree	3	5	2	10	33.33
Professional courses (ACCA, CPA(U))	5	5	7	17	56.67
Professional courses (information technology)	0	2	3	3	10

Source field data:

From the above the findings show that all the respondents have completed their tertiary education and have various accounting qualifications and professional courses in information technology.

16

4.3 Effects of information technology

Table 4.3: shows the effect of Information Technology to an internal audit environment.

Research question	Responses From informants	Freq	Percentage
Qn (1) To what extent are the effect of information systems to an internal audit environment?	(a)Information systems affect asset measurement	8	26.67
	(b)Information Systems will help to monitor stock in trade	15	50
	(c) Information systems will help reduce the possibility of loss of accounting records	7	23.33
TOTAL		30	100

Source: Field Data

Looking at the Table 4.3: above, the study findings shows that the majority of respondents (50%), pointed out that information systems will help monitor the amount of stock in trade.

Preparing a stock in trade form entails collecting information and presenting data in a coherent manner; therefore, both individuals and businesses frequently hire information systems analyst to determine their stock position. Information systems, however, are not identical with Management Information Systems theory and practices.

The study further established that (26.67%) of the respondents responded that Information Systems affects the asset measurement and profits in the company more so because UBL being a company from Kenya they in a way have a way of not wanting to expose the much that they have made and normally want to keep it a secret i.e. in terms of asset valuation that is inventory and fixed assets.

17

Also the results show (23.33%) show that Information Systems will help reduce the possibility of loss of accounting records.

4.4 Information Systems

Table 4.4: showing the effects of Information Systems on accuracy of data capture.

Research Question	Responses from informants	Freq	%
Qn (2) Will data capture using information system have an effect on accuracy?	(a) It will enhance reliability of information.	8	26.67
	(b) Information systems will enhance data integrity and completeness.	17	56.67
	(c) Information Systems will help improve relevancy of data.	5	16.67
	TOTAL	30	100

Source: Field data

From the Table 4.4: above (56.67%) which is the highest number of respondents said that through the use of Information Systems for data capture data integrity and completeness will be enhanced . Also the results show that 26.67% of the respondents said that Information System will improve and enhance reliability of data capture.

Another 16.67% said that Information Systems will improve and enhance the relevancy of data captured.

18

4.5 Effects of Information Systems in the frequency of Audit Checks, prevention of errors, frauds and other irregularities

Table 4. 5: Showing the importance of Information Systems to prevent errors, frauds and other irregularities.

Research question	Responses from informants	Freq	%ge
Qn (3) To what extent will Information Systems help reduce the possibility of errors, frauds and other irregularities	(a) They will help if only relevant software programs are installed into the system.	13	43.33
	(b) A proper system of checks and balances need to be established in the company to work closely with the current system.	4	13.33
	(c) Information Systems will not only completely reduce the above mentioned problems but may instill fear amongst the workers.	3	10
	(d) Since no previous Management Information Systems have been established in the organization it is difficult to ascertain the outcome of the new system.	10	33.33
	TOTAL	30	100

Source: Field Data

As seen in Table 4.5 above, the highest number of respondents 43.33% revealed that Information Systems will help to reduce the possibility of errors, frauds and other irregularities only if relevant software programs will be installed into the syatem 13.33% of the respondents said a proper system of checks and balances needs to be established in the organization that will work closely with the current manual system, while 33.33% said that since no previous MIS have been established in the organization it was difficult

to ascertain the outcome of the proposed system. The results also show that 10% of the respondents observed that that the proposed system may instill fear among employees.

CHAPTER FIVE

SUMMARY, CONCLUSSION AND RECOMMENDATIONS

5.1 Summary of the Findings of the Study

The study findings shows that the majority of respondents, pointed out that information systems will help monitor the amount of stock in trade.

Preparing a stock in trade form entails collecting information and presenting data in a coherent manner; therefore, both individuals and businesses frequently hire information systems analyst to determine their stock position. Information systems, however, are not identical with Management Information Systems theory and practices.

The study further established that Information Systems affects the asset measurement and profits in the company more so because UBL being a company from Kenya they in a way have a way of not wanting to expose the much that they have made and normally want to keep it a secret i.e. in terms of asset valuation that is inventory and fixed assets.

Also the results show that Information Systems will help reduce the possibility of loss of accounting records

Through the use of Information Systems for data capture data integrity and completeness will be enhanced. Also the results show that 26 Information System will improve and enhance reliability of data capture. Information Systems will also improve and enhance the relevancy of data captured.

The study revealed that Information Systems will help to reduce the possibility of errors, frauds and other irregularities only if relevant software programs will be installed into the system and that a proper system of checks and balances needs to be established in the organization that will work closely with the current manual system, and that since no previous MIS have been established in the organization it was difficult to ascertain the outcome of the proposed system. The results also show that the proposed system may instill fear among employees.

21

5.2 CONCLUSSION

The researcher found that there was a discrepancy between the current manual system used by the organization and the proposed system (Information Systems).

Management decision processes will have to be determined in a multiperiod business strategy, operating plans and resolutions or follow-up transactions on deviation from expected (planned outcomes) will have to be determined by the internal auditor by the use of information technology available to him.

The management will have to consider the overall costs and expected benefits of internal control when deciding what quality of internal controls and information systems is to be established. Specifically, management will have to consider the expected benefits of fewer and less costly decision errors when using more reliable information and the expected reduction in possible loss of assets due to information errors.

5.3 RECOMMENDATIONS

The re-engineered process using the enterprise software and databases will help in integrating accounting and operating records and will yield efficiencies for both accounting and operation, with enterprise software documents will be electronic and separation of duties for transactions processing will be accomplished using the software.

The Internal Audi Department is therefore recommended to adopt the re-engineered process based on a business contract or alliance with the other departments using the Electronic Data Interchange (EDI), and enterprise software. The contract or alliance will involve sharing of information between departments to lower the costs involved during the implementation of the new system.

The Internal Audit Department will schedule the tasks using the Production Planning Module (PP). This schedule will be accessible by the management using the Electronic Data Interchange through an independent Value Added Network (VAN) provider. The VAN provider will be an independent within the organization that will act as a secure data processing agent, verifying identities of parties requesting data from other departments, transferring valid requests, and maintaining records of the transfers.

The re-engineered system will differ in form from the traditional manual system in that there will be no paper documentation accompanying the transactions. There will be substantial cost savings due to better and more reliable information.

The Information Technology Department of the organization is advised to customize enterprise software for the company. The system designing will determine user's needs and will specify what is supposed to be accomplished by the software.

Component configuration will operationalize the design by activating and customizing particular software components available. The component confirmation will be akin to setting of access in Cable Networks within the organization

I therefore request the management to consult system designers who will choose the components that will be applicable to their firm, and sometimes re-engineer their processes to comply with the application software. Customization will specify numerical criteria to be used for admitting transactions for processing and conditions that are to precede each of these transactions types. Customization of the software will be equivalent to computer programming in a non standardized system. Personal codes will be assigned and entered to initiate a particular function. Access code assignment will allow implementation of ARC separation.

Management decisions processes will therefore have to determine a multiperiod business strategy, operating plans and resolutions or follow-up transactions on deviations from expected values (Planned Outcomes).

Management will also have to consider the overall costs and benefits of the propose System of Internal Control when deciding what "quality" of fewer and less-costly decision errors when using more reliable information and the expected reduction in possible loss of assets due to information errors. To the extent that the internal Auditor can rely on the proposed System and communicate the quality of its internal control to others, and it will also lower the information risk premium charged by outsiders i.e. External Auditor.

REFERENCES

1. Alter, Steven (2000) <u>Information Systems</u>, 3rd edition, Noida, Pearson Education

2. Buxton, J. (1998) Management: The Growing Business: Co-operative's Wheels of Fortune. <u>The Financial Times</u>, February 24

3. Currie, L Wendy, Galliers Bob (1999): <u>Rethinking Management Information Systems</u>, New York, Oxford University Press

4. Lucas, C Henry, Jr (2000): <u>Information Technology for Management</u>, 7th edition, New York, Oxford University Press

5. Needle, D. (1994): <u>Business in Context</u>, 2nd edition, London, Chapman and Hall

6. O'Brien, A. James (2003): <u>Introduction to Information Technology</u>, 11th edition, Boston, McGraw-Hill Irwin

7. Paula de F.R.M, Paula de F. Clive (1970): <u>The Principles of Auditing</u>, 14th edition, Wales, Pitman

8. The Economist (1997) 'New technology is no snap', October 11, p125

9. The Student Accountant (2003) 'Internal Audit and Review reports', February, p25

10. Kinney, William r, Jr (2000): <u>Information Quality Assurance and Internal Control for Management Decision Making</u>, New York, The McGraw-Hill Companies.

11. <u>Http://www.hightoweric.com/pdf/enhancements/te.pdf</u>

12. Http://www.cas.usf.edu/walker/mla.html 11 September 1996

13. <u>Http://www.aicpa.org, 20 October 1996</u>

APPENDICES

Appendix 1: QUESTIONNAIRE FOR THE KEY INFORMANTS
KAMPALA INTERNATIONAL UNIVERSITY

Dear sir/Madam;

You are kindly requested to participate in this study in assessing the Impact of Information System to an Internal Audit Department. Your information shall be treated confidentially and it shall only be used for the purpose of the study.

Instructions

(a)   Please answer the following questions as honestly as possible

(b)   Tick where appropriate

Section A

1.   Name of Department

....

2.   Position held

....

Section B

3.   Number of years worked in the Company

....

4.   The level of education

Degree..

Professional Course (Accounting)...............................

Professional Courses (Information Technology)...............................

25

Section C

Analysis of the manual system

5. Are the manual systems used in your organization effective and efficient?

Yes   ☐   No   ☐

6. To what extent are the effects of information systems to an internal audit environment?

....
....
....

7. Will Data capture using information systems have an effect on accuracy?

Yes   ☐   No   ☐

Explain your answer

....
....
....

8. Will information systems help reduce the possibility of errors, frauds, and other irregularities?

Yes   ☐   No   ☐

Explain

....
....
....

9. Will there be a wide variation between the proposed system and the current system?

Yes   [ ]   No   [ ]

10. Are there some inconsistencies brought about by the current system?

Yes   [ ]   No   [ ]

Explain

....

....

....

11. From your own opinion will the management be able to install and implement the proposed system?

....

....

....

12.   What is the view of creditors, institutional and non institutional investors with regards to your current system?

....

....

....