COMPUTERIZED ACCOUNTING SYSTEMS AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN UGANDA; A CASE STUDY OF CENTENARY BANK –ENTEBBE ROAD BRANCH

BY

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DECLARATION

I, Bakosoro Dodo Viveline, do solemnly declare that this Research Report is my own original work and has not been submitted or, presented to any other Institution of learning for any academic purposes for the award of a Bachelors Degree or its equivalent, nor has it been published any where by anyone.

Signed .....

Date ....12-5-2012....

APPROVAL

This research report has been under my supervision as a University Supervisor and is now ready for submission to the Faculty of Business and Management at University for approval.

Signed .....

Date 12.05.2012

MR. SUNDAY ARTHUR

Supervisor

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May the almighty God bless you all.

ABSTRACT

The study was conducted in order to assess effects of computerized accounting systems and financial performance of commercial banks in Uganda. The study objectively sought to examine the application of computerized accounting systems on the performance in commercial banks in Uganda, to establish the performance of commercial banks in Uganda and to determine the relationship between computerized accounting systems and performance in commercial banks in Uganda.

The literature review was conducted with the aim of establishing and shading more light the relationship between computerized accounting systems and financial performance of commercial banks in Uganda. The researcher collected the necessary using questionnaire and interview methods of data collection. The data was tabulated and then analyzed in order to draw inference from the data collected. The information collected from the respondents through questionnaires and interview guide questions were used in order to answer the objectives of the study.

The research study contains the summary of the findings, conclusions, recommendation. Various findings have been obtained from chapter four where clear and satisfactory conclusion and recommendation have been made on the basis of the research objective stipulated in chapter one.

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CHAPTER ONE

1.0 Introduction

This study was undertaken in order to assess effects of computerized accounting systems and financial performance of commercial banks in Uganda. This chapter presents the background to the study, statement of the problem, objectives of study, research questions, scope of the study and significance of the study.

1.1 Background to the study

Over the past decade, developing, transition and post-conflict countries have increasingly embarked on efforts to computerize their government operations, particularly with respect to financial management. Most common among these have been efforts to introduce Integrated Financial Management Information Systems (IFMIS) that computerize and automate key aspects of budget execution and accounting operations across the institutions of government. IFMIS can enable prompt and efficient access to reliable financial data and help strengthen government financial controls, improving the provision of government services, raising the budget process to higher levels of transparency and accountability, and expediting government operations. Donors and international institutions like the International Monetary Fund (IMF), the World Bank, and USAID have played a critical role, and will continue to do so, in supporting and shaping developing countries' financial management systems through projects that provide a combination of technical assistance, training, financial resources and procurement support to partner governments.

Technology has dramatically changed the accounting profession. One response to this change is the development of accounting programs that emphasize Accounting Information Systems (AIS) (Strong, et al, 2006).The rapid change in information technology, the wide spread of user-friendly systems and the great desire of organizations to acquire and implement up-to-date computerized systems and software have made computers much easier to be used and enabled accounting tasks to be accomplished much faster and accurate than hitherto. On the other hand, this advanced technology has also created significant risks related to ensuring the security and integrity of Computerized Accounting Information Systems (CAIS) (Musa and Abu, 2005). With the expansion of business the number of transactions increased. The manual method of keeping and maintaining records was found to be unmanageable. With the introduction of computers in business, the manual method of accounting is being gradually replaced. And finally, the database technology has revolutionized the accounts department of the business organizations.

An accounting system is comprised of accounting records (checkbooks, journals, ledgers, among others) and a series of processes and procedures assigned to staff, volunteers, and/or outside professionals. The goals of the accounting system are to ensure that financial data and economic transactions are properly entered into the accounting records and that financial reports necessary for management are prepared accurately and in a timely fashion (Boston, (1995). This unit covers the competency to establish and operate under supervision, a computerized accounting system. This unit requires the application of skills and knowledge required to set up and operate a computerized accounting system.

In a computerized system, data is typically entered into the system only once. Once the entry has been approved by the user, the software includes the information in all reports in which the

With the development of computerized accounting systems of the auditees in centenary bank, most of the accounting and management information are digitalized. Many of the traditional audit methodology are no longer applicable.

1.2 Statement of the Problem

Like any bank else where in the world, Ugandan banks too, face the desire to provide diverse and efficient services to their customers to obtain profits which is any bank's main objective. Commercial banks in Uganda have therefore taken on computerization as their major roadmap to increasing their performance but this has not been greatly achieved and it has resulted into the following effects; reduction in efficiency among employees, reduced service delivery especially on illiterate clients which affects the bank's level of profitability. And it's against such undesirable circumstances the researcher wants to find out how computerization has contributed to the financial performance of commercial banks in terms of performance.

1.3 Purpose of the Study

The study established the influence of computerized accounting systems and financial performance of commercial banks in Uganda.

1.4 Objectives of the Study

(i) To examine the application of computerized accounting systems on the performance in commercial banks in Uganda.

(ii) To establish the performance of commercial banks in Uganda.

(iii) To determine the relationship between computerized accounting systems and performance in commercial banks in Uganda.

1.5 Research questions

i) How are computerized accounting systems on the performance in commercial banks in Uganda?

(ii) How is the performance of commercial banks in Uganda?

(iii) What is the relationship between computerized accounting systems and performance in commercial banks in Uganda?

1.6 Scope of the Study

1.6.1 Geographical Scope

The study focused on Centenary bank-Entebbe road (U) Ltd. It covered the operations of the bank for a period of 5 years from 2005 to 2010. The study was carried out mainly on accounting systems in relation to computerization on its effects.

1.6.2 Content Scope

The study focused on the effects of computerized accounting system as the independent variable, and the level of financial performance as the dependent variable since the two are inter-linked.

1.7 Significance of the study

i) The study will help commercial banks' management to make effective decisions as far as management of business is concerned, which in turn may improve on the performance of these firms.

ii) The study in general will also help the researcher to clearly understand accounting methods based on computerization process in practice as he attains her bachelors' business course from the university.

iii) The study will add more knowledge to the existing literature on financial accounting records which are computerized, then will further be used by future academicians who would wish to expound more on the area of study for reference.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

In this chapter, a review of some literature about the effects of computerized accounting systems on financial performance in commercial banks in Uganda and else where in the world was made. Specific interest areas are the specific objectives which are; 2.1 to establish the effects of computerized accounting systems on management performance in Centenary Bank in terms of profitability, 2.2 to find out the relationship between computerized accounting systems and profitability in Centenary Bank, then 2.3 to determine the performance of centenary bank before and after computerizing her accounting systems however, this objectives are reviewed in sub-themes having sub-sections. The chapter reviews the works of other scholars who have written about the topic of the study or those who have addressed similar issues as those of the variable that were available in the study.

2.1 Accounting

Accounting is concerned with designing the system of recording, classifying and summarizing the business data, auditing the books of records, cost studies, forecasting future events, incoming tax work, computer applications to accounting process and analysis and interpretation of accounting information as an aid to internal and external users (ICMA, 1998).

American accounting association defines accounting as the process of identifying, measuring and communicating of economic information to make informed judgment and decision by the users of the information. The American institute of Certified Public Accountants (ACPA) defines

accounting as part the art of recording, classifying and summarizing in a significant manner and terms of money transactions, events which are in parts at least of financial character and interpreting the results there of.

A testament to the ingenuity of the double-entry methodology is that it has not been fundamentally changed since it was invented. Whether in government, banks, small or large businesses or non-governmental organizations, the same concept forms the basis of today's modern computerized accounting systems. It is important to understand this concept before embarking on an analysis of the reasons why IFMIS systems sometimes succeed, but more often fail when implemented by developing country governments. For such a robust system to falter, the problems faced must be related to factors external to the system itself.

2.1.1 Accounting systems

Meon (1996), defines accounting systems as storage of accounting records on paper, magnetic media, and photo media. Wahab (2000), defines the accounting record keeping as the elementary part of accounting, which is concerned, with recording of transactions in proper books of accounts in significant and systematic manner. Whitehead (1974) defines accounting records as the primary source documents prepare during financial accounting to enhance preparation of periodic financial statements for the determination of business performance in profitability terms.

Wallace (1983) cited accounting systems involves planning, controlling, directing, organizing, training, promoting, recording, creating, maintaining, use and finally disposition of records. Meon (1996) also established that record retention and deposition are the foundation of record management programmes. Information is an important business tool as well as an essential business resource. Transmitting and receiving information occurs every minute of every business

day. For information to be fully effective, it must be recorded in some form, stored in an appropriate system and retrieved in an effective manner.

Records are basic tools of administration. They are a means by which many operational progress and functions are based. They include all recorded information created by an organization in the course of performing the business. records take a form of conventional documents on paper, but they can also be in microfilm or on electronic media such as company tapes and that include photographs, sound recordings, motion pictures, maps and all other media on which information may be recorded or conveyed in the process of performing organizational functions (Wallace et al, 1984).

As the lifeblood of any competitive business, accounting information is a critical resource for all enterprises. The concept of Accounting Information System (AIS) is quite well established and numerous commercial packages as well as tailor-made systems have been developed. However, the business world is best by accounting systems that have varying levels of efficiency and excessive costs for such information. (Yau et al., 2000). Advancements in Information Technology (IT) have enabled companies to use computers to carry out their activities that were previously performed manually. Accounting systems that were previously performed manually can now be performed with the help of computers. Therefore, improvements in the information technology have facilitated the use of cost and management accounting procedures. This study has been designed on few segments.

Information about business transaction is first obtained from original business papers. A business paper from which information is obtained for a journal entry is called a source document. Source document describes in detail the information about a transaction. Each journal entry must be supported by a source document providing that a transaction did occur (objective evidence). Source documents include; receipt, invoice memorandum, cash register tapes.

Accounting information system is considered as a subsystem of Management Information System (MIS). Boochholdt (1999) defines accounting information systems as systems that operate functions of data gathering, processing, categorizing and reporting financial events with the aim of providing relevant information for the purpose of score keeping, attention directing and decision-making. Accounting information systems are considered as important organizational mechanisms that are critical for effectiveness of decision management and control in organizations. Studies have shown that successful implementation of accounting systems requires a fit between three factors (Markus and Pfeffer, 1983). A fit must be achieved with dominant view in the organization or perception of the situation. Second, the accounting system must fit when problems are normally solved, i.e. the technology of the organization. Finally, the accounting system must fit with the culture, i.e. the norms and value system that characterize the organization (Christiansen and Mouritsen, 1994).

Systems will be useful when information provided by them is used effectively in decision-making process by users. The ongoing revolution in information technology (IT) has had a significant influence on accounting information system (AIS). Improvements in the IT have brought improvements in computers. Today, almost all organizations are using computers in

their daily businesses. As computers become smaller, faster, easier to use, and less expensive, the computerization of accounting work will continue. Accounting activities that were previously performed manually can now be performed with the use of computers. That is, accountants are now able to perform their activities more effectively and efficiently than before (Dalchi and Tenis, 2004). Along with the improvements in the technology, information systems have been computerized. Improvements in this technology have replaced manual bookkeeping systems with computerized ones. The revolution in the information systems, which were started in the early 1950s when the first business computers became available, is still in progress (Nash, 1989). By reviewing research studies during 1987-1999, one finds out that 57 researches have been conducted on the issue of accounting information systems and decision making the number of which shows the importance of the research in this area.

Sajady et al (2008) Researchers have developed many models of the decision-making and problem-solving process. All those models depict decision making as a complex, multistep activity. First, the problem has to be identified. Then the decision maker must select a method for solving the problem. Next, the decision maker must collect the data needed to execute the decision model, and interpret the outputs of the model and evaluate the merits of each alternative. Finally, the decision maker chooses and executes the preferred solution. The AIS can provide assistance in all phases of decision making. (Romney et al, 1997). In computerized system computers are used in processing data and in disseminating accounting information to interested users. Now-a-days most of the small business organizations eventually replace their manual accounting system with computerized accounting system. Computerized accounting systems are software programs that gather the various accounting information related to sales,

purchases, receivables, payables, cash receipts, cash disbursements, and payroll. And in this procedure the financial statement is generated. (Islam, 2010). Most of the accounting information is generated from transactions.

Transactions of firms have both accounting and non accounting attributes. During the early days of computerization of AISs, accounting system used to be isolated from other information systems and served as operational; support systems. Today, as more powerful, flexible, economical, and user-friendly software and hardware have become available, the trend is toward a logical arrangement where a single system can support both accounting and operational needs. In sum, today's accounting systems are closely tied into and may even be fully integrated with other information systems. (Wilkinson et al, 2000). Quality information is critical to organizations success in today's highly competitive environment. Accounting information systems (AIS) as a discipline within information systems require high quality data. However, empirical evidence suggests that data quality is problematic in AIS. Therefore, knowledge of critical factors that are important in ensuring data quality in accounting information systems is desirable. (Hongjiang, 2003) Kim (1989) argues that usage of AIS depends on the perception of the quality of information by the users. Generally the quality of information depends on reliability, form of reporting, timeliness and relevance to the decisions. Effectiveness of accounting information system also depends on the perception of decision-makers on the usefulness of information generated by the system to satisfy informational needs for operation processes, managerial reports, budgeting and control within organization (Sajady et al, 2008).

Effectiveness of accounting information systems can be analyzed on three bases: 1) information scope, 2) timeliness, 3) aggregation. Information scope is considered as financial and non-financial information, internal and external information that is useful in prediction of future events. Aggregation of information is considered as means of collecting and summarizing information within a given time period (Choe, 1998). Doll and Torkzadeh (1988) for studying the satisfaction of users use some concepts to measure the effectiveness of the accounting information systems. These concepts are information content, accuracy, format, ease of use and timeliness. In a recent study (Nasrin, 2010), some attributes were identified to find out the influence of using Computerized Accounting Software (CAS) by the users and their perceptions about this. The users believed that using CAS would help him or her better attain significant rewards and they feel comfortable in using CAS. Social influence was one of the most important factors that affected users to use CAS to improve their workability and performance and it was found that most of the respondents agreed that their performance could be better every time by using CAS.

2.2 Relationship between computerized accounting systems and profitability in centenary bank

The computer is a machine that under the control of a stored program automatically accepts and processes data and supplies the results of that processing. (British Computer Society, 1986). They Also went ahead to describe information technology as a man made tool that is used in the collection, generation, communication, recording, rearrangement and exploitation of information and that it can also be referred to as all equipment and related systems which are utilized in the storage, processing and transmission of information.

An information system is therefore a collection of interrelated and interdependent elements that work together to facilitate identification, measuring, computations and communication of data that has been organized to achieve a particular purpose like decision making, (Bodnor *et al.* 1993). However, accounting systems should be developed in a way that it constitutes certain elements namely;

2.2.1 Record creation

This is an important element in record keeping and management because there is need to select the best data which is justified before it comes into existence and once created, serves a meaning purpose until it's properly positioned. Records are methods of communication and measurement of progress and can be most effective if limited to essential and designed for efficiency and economy (Benedon, 1978).

2.2.2 Record maintenance

This is the creative progress in record management that includes proper preparation of documents. Correspondence, the arrangement of written material is useable filling sequence and the selection of the most effective type of filing equipment. The development of filing and retrieval system whether manual, mechanized or automated focuses on the order in which records or information is filed and maintained and ready identification and retrieval of individual record file (Rhoads, 1989).

2.2.3 Record scheduling

Record scheduling deals with records that should be saved as permanent documentation of the organization and how long after their creation. Other records should be retained for on going administrative records.

2.2.4 Record centers

A record centre is a primary respiratory for those records that require retention for a specific period of time.

2.3 Computerization of banking services and its influence on accounting systems

Before the introduction of computer based systems, all banking services were carried out manually. The banking process used to be slow and cumbersome till when computerized systems were introduced. The computerization of banks is also called automation of banking services. This was introduced to provide banking services in more convenient way to enable customer satisfaction; information technology has also been introduced in the banking industry.

Mugisha (2003), stipulates that unlike in develop countries where computerization has lasted for quiet a long time; computer systems are very new in countries of the south since they have been in use foe a very short time. According to the Bank of Uganda (BOU) document, 2001, it is clearly stated that despite being presumably expensive, computer systems should be introduced by possibly all banks and at all levels of banking foe modern banks to have their accounting, audit, finance, human resource and credit departments computerized.

Therefore, Boggs (1999), states that modern banks should employ banking computer programs (soft ware) which are specifically designed to accommodate data input and basically record transactions and update data quickly and accurately at the lowest cost possibly. With all these, banks are able to provide quick and accurate services to their clients and this has enabled them to save time and money and finally acquire profits, such programs have come up with instruments such as:-

2.3.1 Debit cards: These are simple and convenient ways to pay for goods and services without having to write cheques. A debit card is handed to the sales assistant and then a customer is asked to sign a sales voucher.

2.3.2`Credit cards: These were first introduced in 1960s and have now become increasingly supplicated and wide spread. Credit cards can be used to purchase goods and services from a retail outlet which participates in the same scheme. This fastens the banking services, by saving time and money of both bankers and their customers.

2.3.1 Electronic Funds Transfer at the Point Of the Sale (EFTPOS): EFTPOS is a further development in computerization of the banking industry. This package enables funds to be transferred automatically from the customer's bank account to a retail organization's account via a computer link at the time a customer purchases goods and services, hence its name. In highly developed countries of the United States of America and the European Union, there are more advanced payment systems which have highly improved the performance of banks and above all support the movement of capital to countries of the south.

(i) Swift: This is the society for world wide inter bank financial telecommunication systems. It was established in 1973 in Belgium and it is a highly computerized method by which member banks are able to remit messages to each other through an international line by transmitting financial messages, payment orders, forex confirmation, security delivery and others. This network is available 247 throughout the year to all member banks. With this system therefore, banks on the network have had their performances improve drastically.

(ii) Fedwire. This is the Federal Reserve transfer system and it is a real time gross settlement transfer system, it is used by deposit taking institutions that keep reserves or clearing accounts of their clients.

(iii) There are also the CHIPS and CHAPS both of which help commercial banks on the network to review and send messages to each other on a 247 basis. These payment systems are so efficient that all banking activities are ably done in the shortest time possible and at the lowest possible cost.

2.4 Effects of computerization on management financial performance

Computers are the most visible IT invasions. They are used by banks world wide and have generally become the electric face to many customers. Computers however affect the performance of banks as follows;

(i) Cost effectiveness: To many banks computers are largely seen as a way of saving money by reducing the number of employees as extracted from (http/www.stopatmfees.com, 2002). In addition with relative expensive computer technologies, the cost of processing deposits and withdrawals via computers have proved to be less than those for training and recruiting workers to do the same job.

(ii) Creation of customer loyalty: Many banks like standard chartered are using computers as a strategic means of enhancing customer loyalty. Computers create loyalty which is vital for the organization to be a going concern and attain competitive advantage.

(iii) Convenient and accessible services: computers enhance a 247 service provision by banks easy accessibility to clients this has been made possible by use of ATMS.

(iv) Technological advancement: computers have been proved the most and latest visible reliable.

2.4.1 Terminal banking

When computerized banking is taken on some banks introduce terminal banking to improve their performances. This kind of automation allows customers to access their accounts no matter how many accounts they have and at which branch. Payment can be made without writing cheques, funds are also transferred up to a minute banks and monitoring of accuracy of accounts as stipulated by (Palme and mayrael, 1984).

Access bank products and services. Internet banking would free both clients and bankers of the need to appropriate software, to carry on their online banking transactions such as security infrastructure, including supplicated encryptions that protect customers from intrusion when they can access the bank over a public network. Banks make use of internet mainly to allow clients to check on-line balances and s statements, implement credit transfers so that bills can be paid on-line for any of e-commerce products and maintenance of standing orders and indirect debits. Customers are therefore able to affect agent and even routine transactions with minimum convenience, stipulated by (Boggs, 1999).

2.4.2 Telephone banking

This is a form of remote or virtual banking that uses telecommunication devices, where the clients can perform retail banking transactions by dialing a torch tone, telephone utilizing automated voice report technology. It provides facilities like; balance inquiry transfers of monies between accounts, payment of household accounts as well as request for statements. In addition is the personal computer banking though not well developed in Uganda. However (Mugisha, 2003), defines personal computer banking as a computer hardware, software and telecommunication system that enables retail to access both specific and general bank information on products through personal computers.

2.4.3 Benefits and challenges of electronic banking

According to Lumala (2004), electronic banking offers the following benefits; a very fast development high quality economic strength among clients and the entire economy as a whole. On the centrally however, electronic banking in Uganda has only been established in urban areas and rural areas are left in the dark, some clients can not use these services due to ire Tracy and likewise some banks have failed to reap to their expectations due to high costs involved. Electronic banking has also left some employees unemployed since most of their work can now be done by a single machine.

2.5 The Concept of Bank Performance

According to the World Bank (1993), research bulletin, bank performance is the ability of a specific bank to provide services that may enhance customer satisfaction. Banks always compete for better performance through the services they provide to their clients, such as

customer service, account holding through accepting deposits, credit creation, overdraft facilities and to-date, level of automation used in service provision.

2.5.1 Relationship between computerization and bank performance

In order to compete favourably, banks have resorted to computerization as a major tool for improving service quality, hence improving their performances. The emergency of electronic banking has incredibly reduced the need for direct link between the bank and its customers. This is basically because internet, telephone and ATM banking networks do complement each other to give customers a wider range of financial services that can substitute those provided by traditional banking tools. Automation of banking services enables customer satisfaction through its ability of speed, accuracy, accessibility and flexibility in service provision.

2.5.2 Risk in computerization of banking institutions

The Uganda institute of bankers emphasizes that there are many and owing to information technology, the geographical boundaries are rapidly being demolished and there are cross boarder electronic functional transactions. The issue of whether a bank should computerize or not is no longer an opinion, for a bank to protect its market, it has to provide services that suit customer demands, and this electronic banking, which is however exposed to high risk like below;

(i) Operating risk; this arises from potential loss due to significant deficiency in system reliability or integrity, security consideration is paramount as banks may be subject to

external and internal attacks on their systems or products. It can also arise from inadequate designed and poorly implemented electronic systems.

(ii) Reputation risk: this is a risk of significant negative public opinion that results in a critical loss of funding or customers' reputation risk may involve actions that create a lasting negative image of the overall ability to establish and maintain relationships.

(iii) Market risk: "this includes foreign exchange risk, arising from accepting of foreign currencies in payment for electronic money. This is because interest rates are highly volatile," as per the (institute of bankers, 2003)

(iv) Legal (compliance) risk: this arises out of the violation of laws, rules and regulations or prescribed practices or when rights and obligations of the parties to a transaction are not established and uncertain. There is also the credit risk, results from the fact that electronic banking faces a risk of default of borrowers who applied for credit via remote banking.

2.6 Important Books when carrying accounting systems

Books of original entry are books in which we record transactions first.

a) Journals

Are books of original entry that is in a chronological order (day-by-day records) showing each transaction before they are posted in the ledger. Journals are prepared from source such as invoices, vouchers, bank pay in slips etc.

They include;

Purchase journals

A purchase journal records all the purchases made by the firm on credit. It shows the invoice date, name of suppliers, the reference number of the invoice and final amount of invoice for the goods bought on credit (Frank wood, 1995).

Cash receipt journals

All transactions involving the receipt of cash are recorded in the cash receipt journal. When a cash sale is made, it is entered in the cash register and at the end of the day the total in the register and at the end of the day the total in the register is entered in the cash receipt journal that contains one entry for the total cash sales of the day.

Cash payment journals

This records transactions that involve payment of cash to creditors, payment of operating expenses (Meigs & Meigs).

2.7 Relationship between accounting systems and performance of commercial banks

Accounting systems contribute a lot to the performance of commercial banks as they provide all kind of information needed by management, owners, banks and government authorities.

Frank Woods (1993), there are just questions that accounting systems of a bank has to answer, otherwise without it, they cannot be answered, which include; whether or not the business is operating at a profit and whether the business will be able to meet it's commitments as they fall due.

Garbutt (1995), says that proper recording of transactions provide sufficient information as regards to performance and financial position of the business.

Boston, (1975), states that conducting business. Therefore proper accounting systems should be kept so at any required moment a reference could be made on it and the combined efforts to all transactions.

According to Omunuk, (1999), when proper accounting records are kept, it helps in the preparation of financial statements that help in planning the way forward. Every business is formed with an aim of making profits and no business can survive with out reasonable profits.

Conclusion

The banking industry in Uganda is becoming increasingly competitive due to increased computerization, and it's now extremely hard for banks to favourably compete minus computerization. Automation of banking activities especially on accounting systems has been incorporated in very competitive bank strategies in a bid to provide more proficient and suitable services that enhance improved performance among the employees and clients. Banks should have the ability to integrate the system, technology and human resource efficient processes in conveying quality services. However, in order to invest in high automation to harvest the benefits through enhanced performance to achieving the objectives, projects should be carefully planned, then plans should be a complete and clear understanding of the vision of the bank, its objectives and strategy, its strength and weaknesses together with the critical success factors of the project.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

In this chapter, the researcher highlighted on the research design, research area, population size, research instruments, data collection methods that were used, data analysis and validity and reliability of data.

3.1 Research Design

The study used a cross-sectional research design which was often used in assessing respondents' views towards the effects of computerized accounting systems on financial performance of commercial banks. This type of research design utilizes different groups of people who differ in the variable of interest, but share other characteristics such as socioeconomic status, educational. Cross-sectional research design is designed to look at a variable at a particular point in time and focuses on finding relationships between variables at a specific point in time.

3.2 Study Population

The study sampled various categories of people above the age of 18 years and they included the managers, accountants, tellers, supervisors and other authorized employees who have knowledge about the topic under study.

3.3 Sample size and Selection

The study used both simple random sampling and purposive sampling procedures. Purposive sampling was used to select different activities in the area of investigation in order to get first

hand information from the key informants. Simple random sampling was used because respondents have equal chances of being selected.

The sample size will be determined using Slovin's formula;

$$n = \frac{N}{1+Ne2}$$

Where by; n=Sample Size

N=Population

e=0.05

3.2 Sampling Techniques

The respondents were randomly selected and categorized. They comprised of both sexes but of different marital statuses and age groups and the study used 100 respondents that is: managers, accountants, tellers, supervisors and other authorized employees. This was intended in order to get a variety of views and unbiased response which made the study a reality. Also this sample size was selected since, Sutton and David, (2004); state that a sample size should not be less than 30. Beyond basic description it would be difficult for the researcher to under take more complex statistical analysis, as most of these analyses require a minimum sample of 30.

3.5 Data Collection Methods

To obtain data about the research variables, primary and secondary data sources were used as elaborated below;

a) Primary Source

This involved the use of first hand information that obtained from the field using interviews and questionnaires. The types of data included the social- demographic characteristics of the respondents (age, gender, level of education etc), and perceptions of solid waste management.

b) Secondary Source

This included the already existing literature about the effects of computerized accounting systems on the performance of commercial banks. This information was collected from reports, circulars, newspapers, magazines and internet.

3.5.1 Questionnaire

A comprehensive questionnaire covering all the aspects of the study variables was designed. The first section of the questionnaire covered general information (gender, age, education, marital status). Section B covered the questions which were set inline with the objectives of the study. The questionnaires were first pre-tested before being administered on the respondents. The questionnaires were self administered to ease data collection. The questions were both open and close ended. This enabled the respondents to express their opinion about the implication of reward competitiveness.

3.5.2 Interview Method

Interviews with the target respondents were conducted to interview all the categories of respondents mentioned above. A separate interview was used for the key informants. This involved first making an appointment with the targeted respondents after which an interview meeting between the researcher and respondents to discuss the issues concerning the effects of computerized accounting systems on the performance of commercial banks.

3.5.3 Research Instruments

The researcher used questionnaires and an interview guide as the main tools for collecting data. The selections of these tools was guided by the time, objectives and the nature of data to be

collected. The researcher was interested in capturing the views, perceptions, feelings, attitudes and opinion of respondents towards solid waste management.

3.5.4 Documentary Review

This involved the researcher revisiting existing literature on the study variables by reading news papers, journals, text books plus the already existing on internet and magazines among others.

3.6 Measurements of Variables

3.6.1 Validity of the Instruments

Validity is the efficiency or the degree to which a method, a test or a research tool actually measures what is supposed to measure. It refers to the accuracy of the research data. For this case, the validity of the questionnaire will be tested using the Content Validity Index test (CVI). This involved item analysis to be carried out by the supervisors and an expert who was knowledgeable about the theme of the study. The process involved examining each item in the questionnaire to establish whether the items will bring out what it is expected to bring out. Item analysis was conducted using the scale that runs from Relevant (R), Neutral (N), to Irrelevant (I).

3.7 Pre-testing

In order to ensure and maintain a high level of consistency in this study, the researcher did the following:

Questionnaires were pre-tested. Ambiguous questions were made clear and irrelevant questions were deleted. The researcher used accurate questions which were open-ended and closed ended questionnaires. The questions which were set had enough space to give appropriate responses.

3.8 Reliability of Instruments

Reliability means the degree of consistency of the items, the instruments or the extent to which a test, a method, or a tool gives consistent results across a range of setting or when it is administered to the same group on different occasions. The reliability of research questionnaire will be tested using Cronbach's alpha coefficient test for its internal consistency to measure the research variables.

3.9 Data Validity

An introduction letter was obtained from the faculty by the researcher to solicit approval to conduct the study from respective departments in Centenary bank –Entebbe Road Branch. When approved, the researcher secured a list of the qualified respondents from the Bank authorities in charge and selected through systematic random sampling from this list to arrive at the minimum sample size

3.10 Data Analysis

Data analysis included editing the findings, coding and tabulation in the computer Statistical Package for Social Scientists (SPSS) for analysis. Main ideas in qualitative data were clearly recorded. The data filled in the questionnaires were copied and analyzed by tallying it and tabling it in frequency tables identifying how often certain responses occurred and later evaluation was done. This yielded the primary data which was raw in nature. Both qualitative and quantitative methods were used for data analysis as the study generated both qualitative and quantitative data. Once the data was collected, it was coded and analyzed by use of descriptive statistics such as frequencies percentages, means, modes, medians, standards deviations, variances and correlations.

3.11 Ethical considerations

It is important during the process of research for the researcher to make respondents to understand that participation is voluntary and that participants are free to refuse to answer any question and to withdraw from participation at any time they are chosen.

Another important consideration, involves getting the informed consent of those going to be met during the research process, which involved interviews and observations on issues that may be delicate to some respondents. The researcher undertakes to bear this seriously in mind.

Accuracy and honesty during the research process is very important for academic research to proceed. A researcher should treat a research project with utmost care, in that there should be no temptation to cheat and generate research results, since it jeopardizes the conception of the research.

Personal confidentiality and privacy are very important since the report was public. If individuals have been used to provide information, it is important for their privacy to be respected. If private information has been accessed then confidentiality has to be maintained (Stephen, P. 2002). All respondents will therefore, be re-assured of this before being involved.

CHAPTER FOUR

PRESENTATION, INTERPRETATION AND DISCUSSION OF FINDINGS

4.0 Introduction

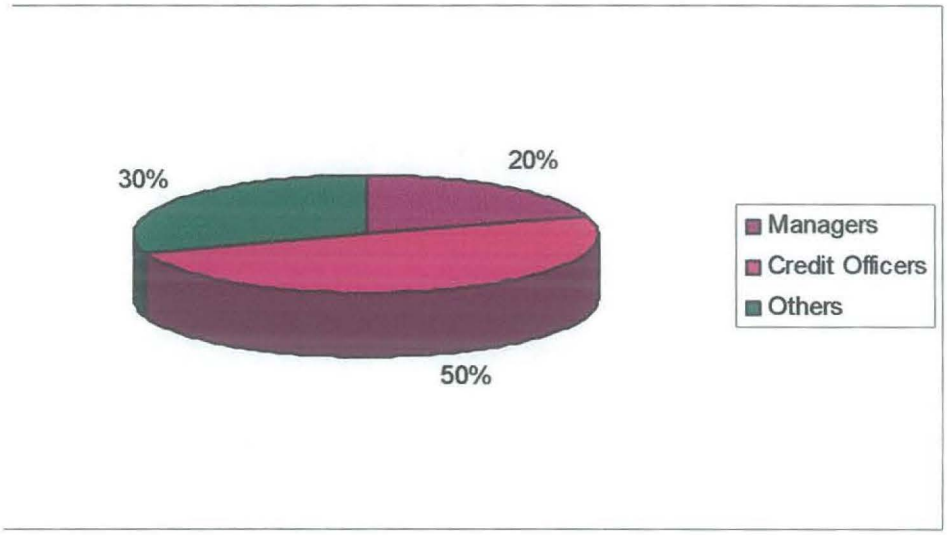
This chapter presents the facts, which the research discovered. The findings were presented in line with the objectives of the study whereby the raw data in form of questionnaires was edited and interpreted which ensured uniformity, legibility and consistency. The data-filled questionnaires were copied and analyzed by tallying and tabling in frequency polygons while identifying how often certain responses occurred and later evaluation was done. The information was then recorded in terms of percentages. Also, interview results were coded on frequency tables which were calculated in terms of percentages and presented in this study as illustrated below.

4.1 Background characteristics of the respondents

The background information of the respondents was important because they comprised of both sexes but of different marital status and age groups from various settings. This was intended in order to get a variety of views and unbiased responses which made the study a reality. The respondents were divided into the administrative and general staff of Centenary Bank –Entebbe Road Branch. The findings are shown in the figures below;

epartments respondents work in Centenary Bank –Entebbe Road Branch where the udy was confined

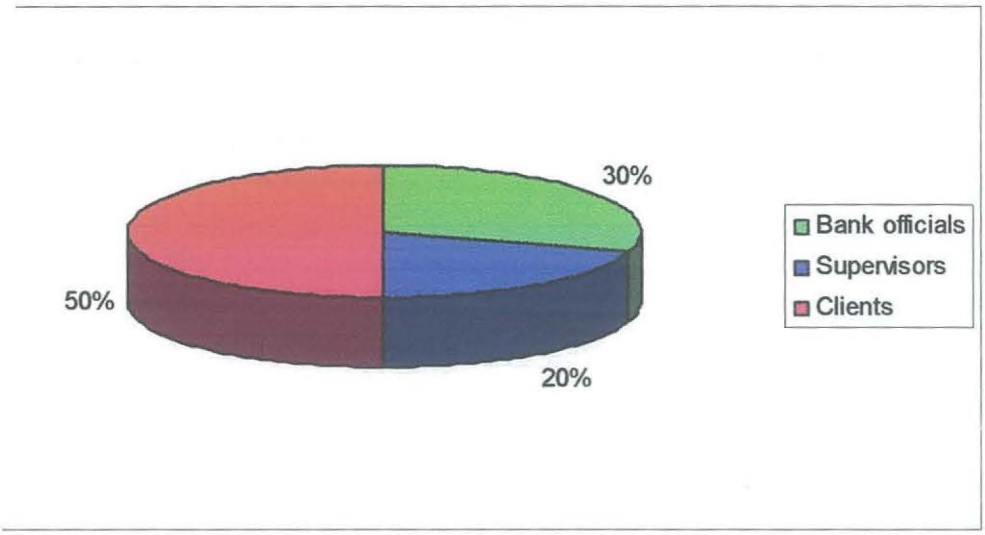
igure 1; Respondents' job title at Centenary Bank



Source: Primary Data

During the field survey, it was found out that; the biggest percentage of the respondents were credit officers as represented by 50% followed by 30% who portrayed others who included; ellers and authorized bank staff then 20% of the respondents were managers, implying that; credit officers to a greater participated in the study because they are the ones concerned with credit facilities in these banks as illustrated in figure 1 above.

ɡure 2; Nature of the respondents who participated in the study

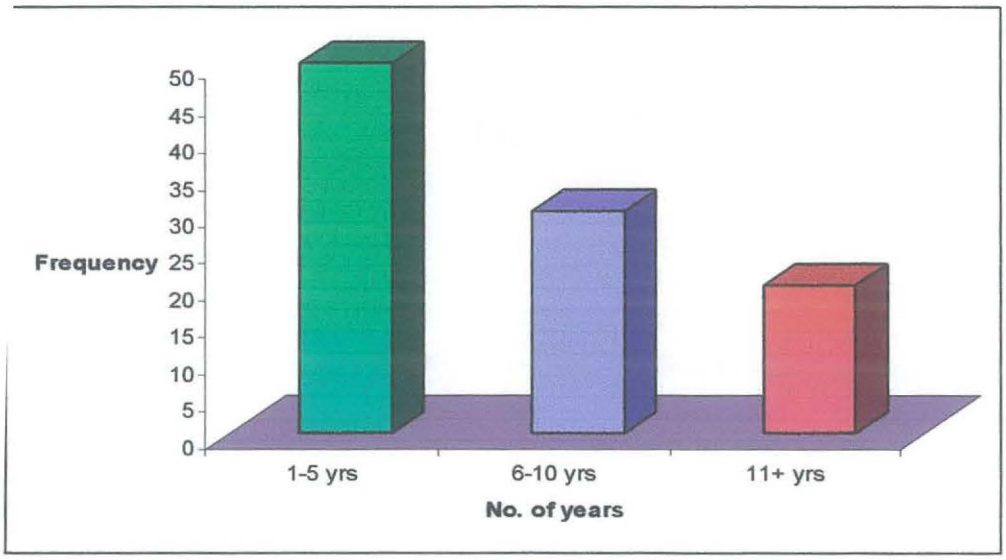


ɔurce: Primary Data

n assessment of the nature of the respondents who participated in the study was as follows; lients took a bigger percentage as far as the field survey was concerned as showed by 50% this ras because they are the ones where the study was concentrated on since the researcher's ıterest was find out whether the access financial services from these banks, followed by bank fficials represented by 30% and supervisors were showed by 20% as portrayed in the figure bove.

umber of years of service of respondents at Centenary Bank

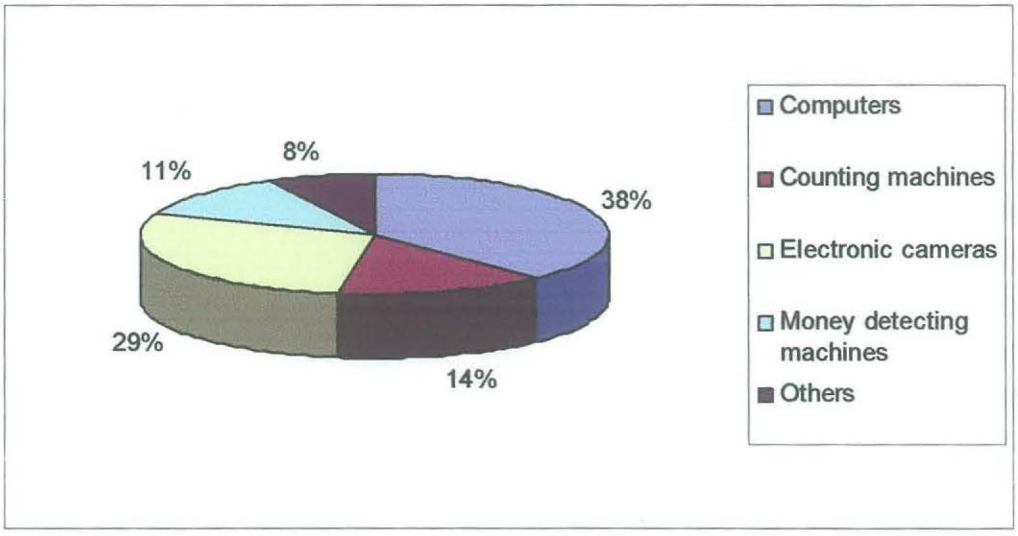
igure 4: Number of years of service of respondents



Source: Primary Data

From the figure below, it was found out that the biggest percentage of the respondents had worked with the bank for a period between 1-5 years as represented by 50% whereas 25% shows respondents who had worked with the bank the period between 6-10 years, 15% represents interviewees who had worked with Centenary Bank for the period of 11 years and above, implying that they have been employees for a long time, thus possessing a lot of experience.

igure 5; Nature of Information Technology used in Centenary Bank

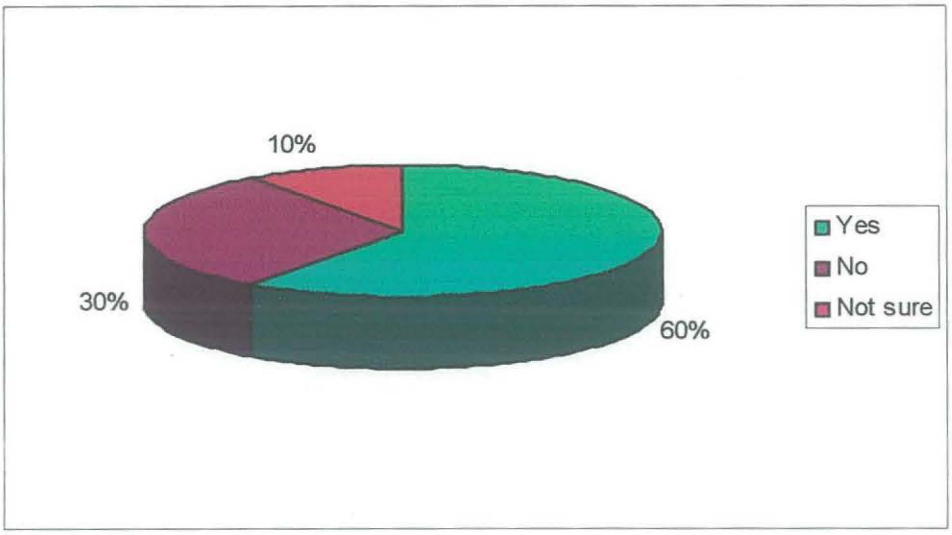


Source: Primary Data

Numerous responses were put forward when respondents were asked nature of information technology used in Centenary Bank and they were as follows; 38% of the respondents revealed that computers were the most information technology machines used in Centenary Bank these were followed by 29% of the respondents who said electronic cameras are used in Centenary Bank whereas 14% of respondents said counting machines are also used in the bank, 11% of respondents alleged that money detecting machines are used in the bank mostly to avoid fake notes to circulate around and lastly 8% represented with others implying the machines like calculators which are also used in the bank as shown in figure 6 above.

igure 6: Responses whether operational and managerial departments in the bank are

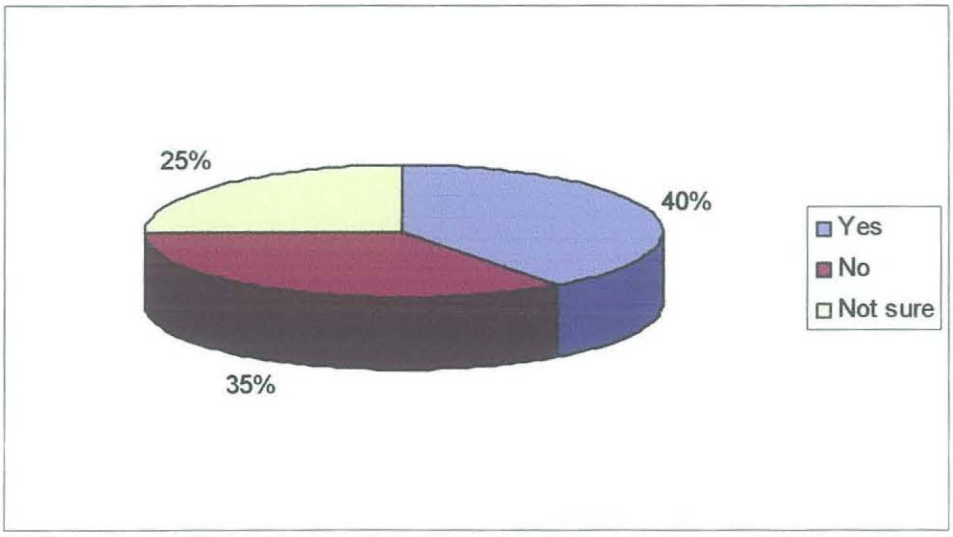
›mputerized.



'ource: Primary Data

'he biggest of respondents represented by 60% said yes they are sure whether operational and nanagerial departments in Centenary Bank are computerized whereas 30% of the respondents aid they didn't know whether operational and managerial departments in the bank are :omputerized especially the clients and lastly 10% of respondents said they are not sure)perational and managerial departments in Centenary Bank are computerized implying that ılmost all employees knew most of the operations in the bank as stipulated in figure 6 above.

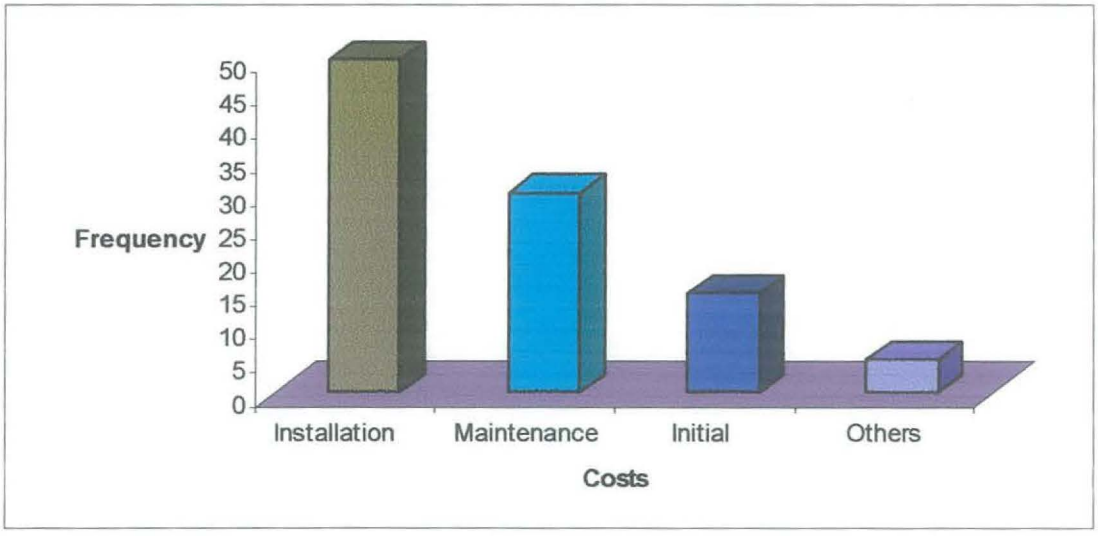
Figure 7; Responses on whether the costs of information technology are so high



urce: Primary Data

:cording to figure 7 above, majority of the respondents represented by 40% said yes that the sts of information technology are so high these were followed by 35% of the respondents who id that they didn't know anything concerning the costs of information technology and lastly rprising only 25% of the respondents said they were not sure of the costs of information chnology whether they are high implying that most respondents are aware .

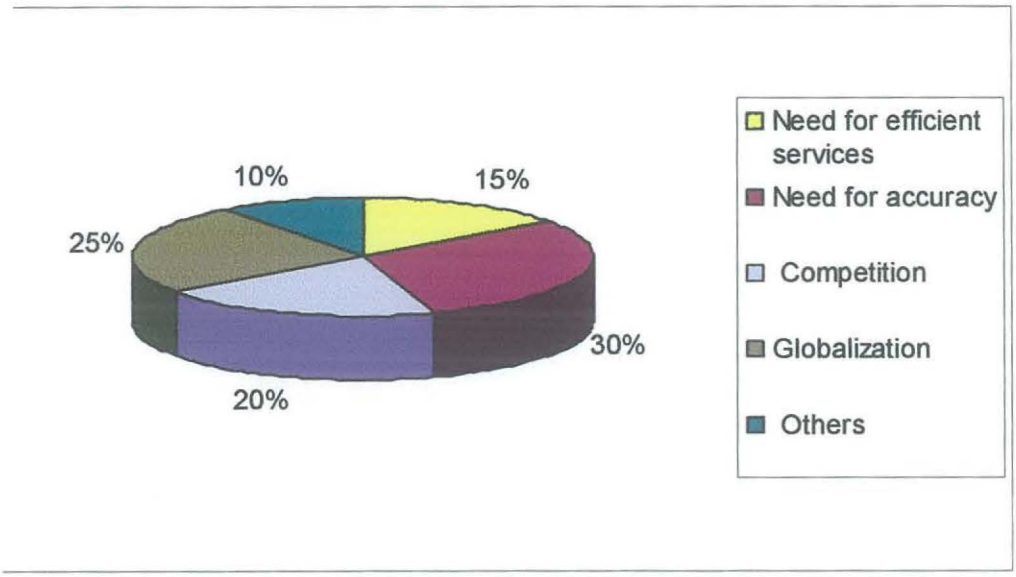
igure 8; The following costs are incurred in the process of computerization of accounting ystems by Centenary Bank



Source: Primary Data

According to figure 8 above, the biggest percentage of interviewees represented with 50% said during installation a lot of costs are incurred in the process of computerization of accounting system in Centenary Bank where as 30% of interviewees said maintenance cost are also incurred during the computerization of accounting lastly but not the list 10% of interviewees revealed that initial costs are also incurred and lastly 5% said that other costs are also incurred.

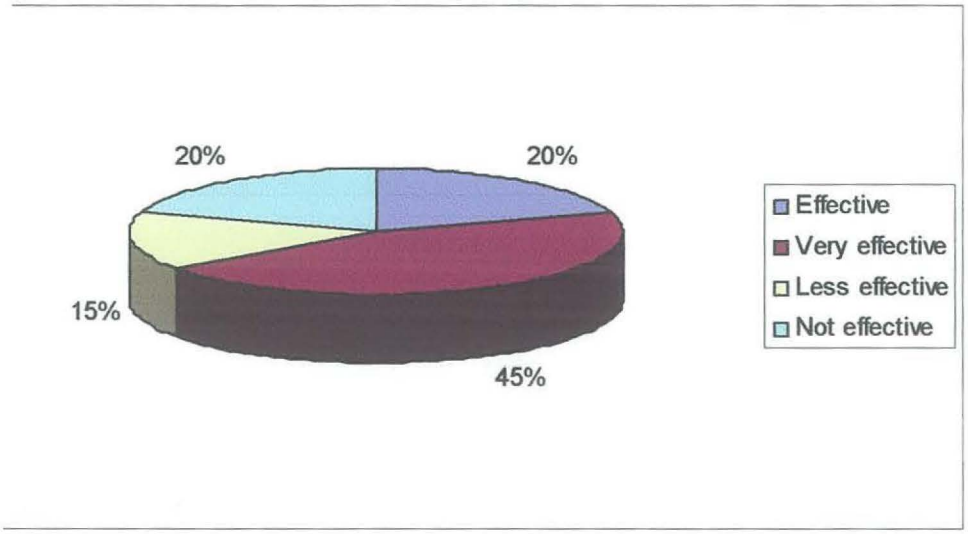
gure 9; Forces that led to the usage of computerization of accounting systems in ntenary bank



ource: Primary Data

lumerous responses were put forward when respondents were asked the forces that led to the sage of computerization of accounting systems in centenary bank and they were as follows; 0% of respondents said due to the great need for accuracy at centenary Bank computerization of ccounting system was used whereas 20% of respondents said its because of competition omputerization was used at Centenary Bank, 25% of respondents said its because of ;lobalization which has led to computerization of the accounting system at Centenary Bank also ıot was 15% of respondents who said that the need for efficient services at Centenary Bank :omputerization of the accounting system at Centenary and lastly 10% of respondents said other 'orces have also led to the computerization of the accounting system at Centenary Bank.

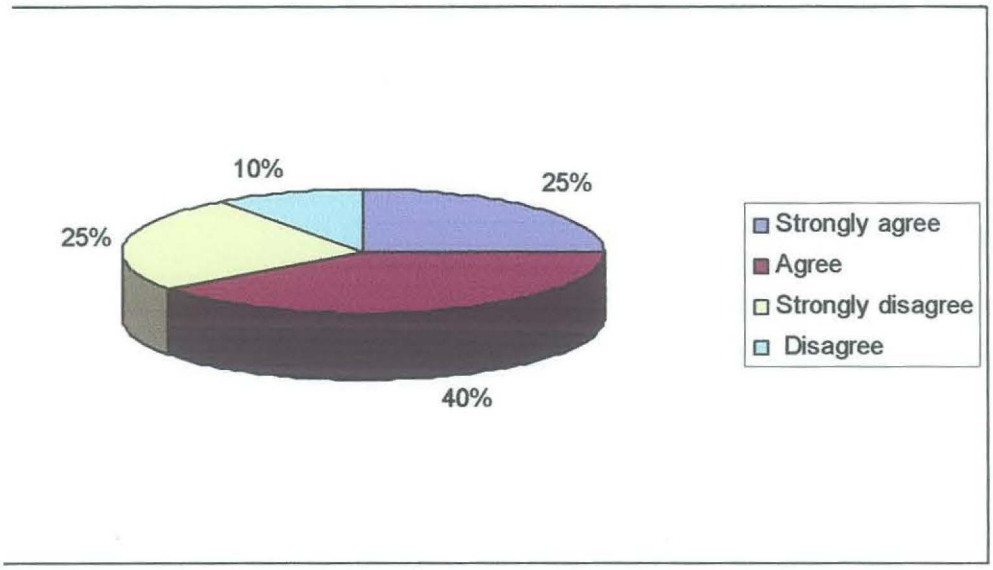
gure 10; Rankings of computerization of accounting systems in Centenary Bank



ource: Primary Data

'uring the field, it was found out that the biggest percentage of respondents represented by 45% ıid computerization of accounting system in Centenary Bank was very effective whereas 20% f respondents said computerization of the accounting system at Centenary Bank was effective nd surprisingly 20% said the system was less effective, lastly 15% revealed that the system was ot effective as clearly showed in figure 10 above.

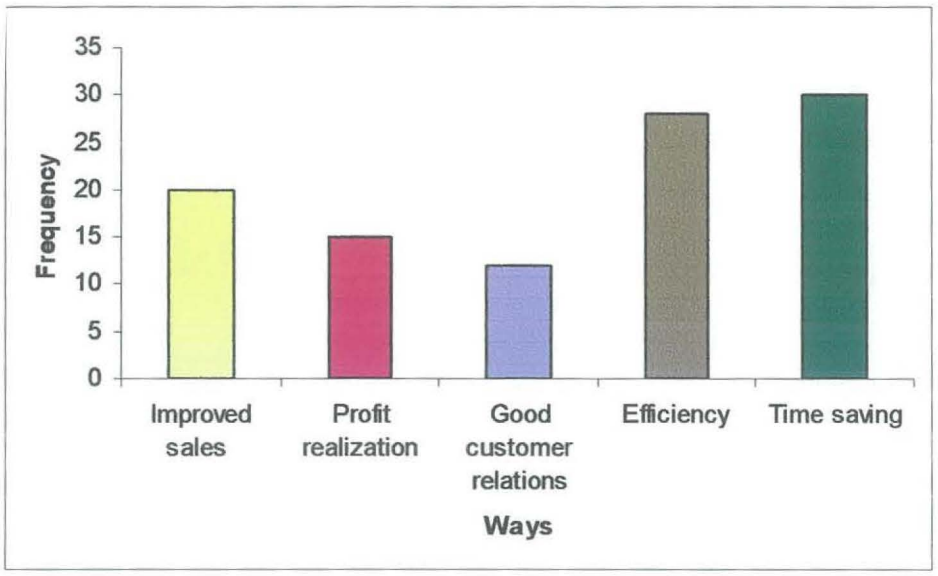
;ure 11; Computerized accounting systems has significant effects on the financial rformance of the bank



)urce: Primary Data

ccording to the field questionnaires from the field, 40% of the interviewees agreed that)mputerized accounting system has a significant effect on the financial performance of the ank where as 25% of interviewees strongly disagreed with the statement and in the similar way 5% of interviewees agreed with the statement that computerized accounting system has gnificant effects on the financial performance of the Bank and lastly only 10% of interviewees isagreed with the statement as showed in figure 11 above.

ɡure 12; Computerized accounting systems has increased the financial performance of ɪntenary bank

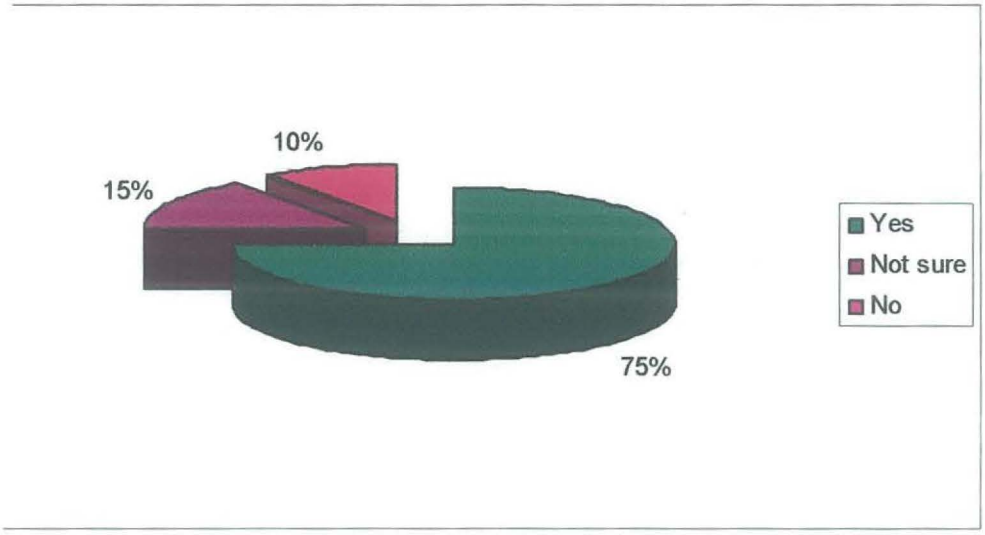


ɔurce: Primary Data

umerous responses were put forward when respondents were asked about whether ɔmputerized accounting system has increased the financial performance of Centenary Bank and ıey were as follows; the biggest percentage of the respondents represented with close to 35% ıid its time saving besides that 30% of respondents said its efficient whereas 20% revealed that ıe system improves sales, lastly but not the least 15% said the system has enabled the Centenary ank to realize profit and lastly close to 15% said the computerized accounting system has laid a ood customer relations with the Centenary Bank management as showed in 12 above.

; EFFECTS OF COMPUTERIZED ACCOUNTING SYSTEMS ON MANAGEMENT ERFORMANCE IN CENTENARY BANK IN TERMS OF PROFITABILITY

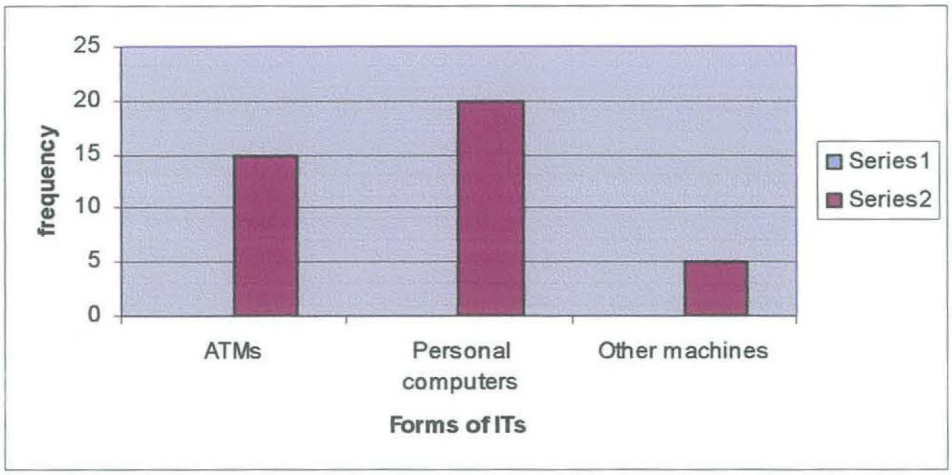
gure 13; Respondents' view on whether accounting systems and managerial departments centenary bank are computerized



ource: Primary Data

he biggest percentage of the respondents attributed to yes, that accounting systems and anagerial departments in Centenary Bank are computerized as represented by 75% where as 5% of them was not sure and the least percentage disagreed with the statement as showed by 0% in figure 13 above.

'igure 14; Major devices used to computerize banking services



'ource: primary data

.0% of the interviewees said that, personal computers are the common devices used in banking ystem, where as 15% of the employees emphasized on the usage of ATMs especially the clients vith saving accounts and 10% of the respondents said other machines like the ones used for :ounting money and detect fake notes.

1.4 RELATIONSHIP BETWEEN COMPUTERIZED ACCOUNTING SYSTEMS AND FINANCIAL PERFORMANCE IN CENTENARY BANK

Figure 15; The level of financial performance in centenary bank is positively related to :omputerized accounting systems

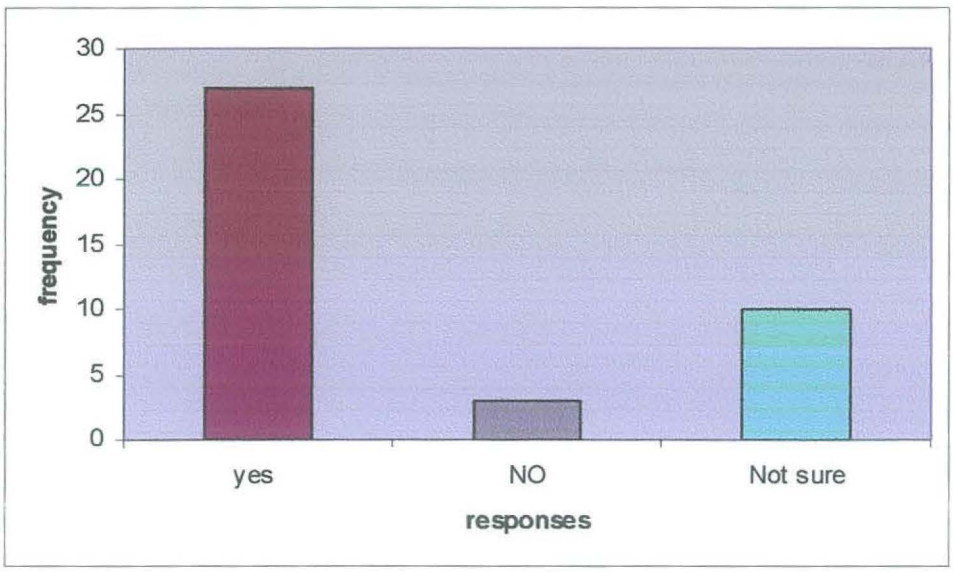


Table 1; Showing type of bank account held by respondent

Types of bank account	Frequency	Percentage
Current	23	28.33
Saving	29	48.33
Fixed deposit	-	-
Investment	2	3.33
Other(s)	6	10.00
Total	60	100.00

Source: Primary data

Table 4 above reveals that saving account holders use computerized facilities quite often. however no customer on fixed deposit account use computerized accounting, this is because of the reason or purpose of the type of account its self. Fixed deposit accounts are supposed to be accessed after a certain point of time not regularly as other account types.

Going by this explanation, then it is inconsistent for the point for the table to reveal that saving account holders accessed their accounts more often than current account holders.

Most respondents had one account in centenary bank which accounted for over 90% and the rest had more than one bank account in this very bank. When asked about the number of accounts respondents owned else where, the study established that most people did not have accounts else where, which revealed the confidence or loyalty they had in this bank. The reason for asking this question was to establish how frequently they (respondents) visited other banks as well.

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Source: primary data

Close to 30% of the respondents attributed to yes since most of the bank's accounting systems are computerized, while 10% of the interviewees said they are not sure and close to 5% of the employees emerged reserved as they had no response.

The study was intended to find out the effects of computerized accounting systems on financial performance, so it was important to look at this in reference to before computerized accounting systems were introduced and after their introduction. 57% of the respondents revealed that they had their bank accounts before the computerized accounting systems were introduced and 80% of them agreed that they had less bank account balances now that they are using computerized accounting systems than before. Of the respondents who did not have bank accounts before computerized accounting systems were introduced, 48% accepted that they withdraw money more than they would have loved to. The reason for this was increased expenditures although others accepted that because they have more access to their accounts than before through computerized accounting systems.

These results, therefore shows that computerized accounting systems have led to fewer saving because people now keep on their bank balances than they can do. To supplement the above findings, it was important to find out the number of times, people accessed their bank accounts in a month using their computerized accounting systems to establish if it was worthwhile.

Table 2; Information on how respondents utilize Computerized Accounting Systems (CAS) in month

C.A.S	No. of times utilized in a month	Percentage
Cash withdrawal	490	45.58
Cash deposit	285	26.51
Mini bank statement	300	27.91
Others	-	-
Total	60	100

Source: primary data

During the field survey, it was found out that the biggest percentage of the respondents use their Computerized Accounting Systems (CAS) for cash withdrawal as represented by 45.58% especially using ATMs while 26.51% and 27.91% use their Computerized Accounting Systems for cash deposit and mini bank statement respectively, this implies that people use their cards more on withdrawing than depositing or other service.

4.4 Counter service preference in relation to those ones which are computerized

Some respondents preferred counter services to computerized ones when they are depositing, when their cards have been withheld by the machine, and when they needed some information not provided by the machine for example one expects more money than what the machine can currently provide. The data was presented in table 7 as shown below.

Table 3; Shows incidences when counter services is preferred

Incidence	Frequency	Percentage
Need more information	11	18.33
Card held	24	40.00
Depositing	16	26.67
Withdrawing	5	8.33
Need change	4	6.67
Total	60	100

Source: primary data

4.5 Need for bank counter service

Respondents were asked when they did they prefer being served at the bank counters than the ATMs. Findings were tabulated and frequencies drawn as shown in the table 3 below;

Table 4; Showing situations in which respondents prefer counter services to computerized accounting systems

Reason for counter preference	Frequency	Percentage
Depositing	13	21.67
Complaint	28	46.67
Inquiry	15	25.00
Money transfer	3	5
Withdrawing large sums of money	1	1.67
Total	60	100

Source: Primary Data

From table 4, above it is evident that respondents prefer being served by human tellers to answer their complaints. This may explain the fact that computerized accounting systems may never completely eliminate human tellers despite their abilities.

Although some services are rendered by the computerized accounting systems, some respondents prefer counter services for example cash depositing, inquiries among others, there seems that some people do not know how to use computerized accounting systems for such services.

4.6 Problems customers face when using computerized accounting systems

There are problems which customers face when using computerized accounting systems, some of these were given by the respondents from which table 5 below was derived.

Table 5; Showing the magnitude of problems faced when using computerized accounting systems

Problems	Frequency	Percentage
ATM failure (jam)	21	35.00
Long lines	14	23.33
Security	9	6.67
Accessibility	12	15.00
ATM withholding card		20.00
Total	60	100

Source: Primary Data

These problems tally very well with those generally experienced by the computerized accounting systems users world wide as given by Mears (1985), however their magnitude here is still very

small and therefore insignificant for example there has not been any cases of robbery at computerized accounting systems especially ATM so far since they were installed.

The long lines on ATMs are clear testimonies that there are yet enough of them in the country and possibly the user also need to rethink on the time they need to visit ATMs since they are related to computerized accounting systems avoid the long lines.

To further analyze the effects of computerized accounting systems and service delivery, it was important to seek answers on whether customers felt that they withdrew more money using ATMs than they felt they would have done without their ATMs.

CHAPTER FIVE

SUMMARY OF KEY FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter mainly deals with summary, conclusion and recommendation related to the effects of computerized accounting systems and financial performance of commercial banks in Uganda using Centenary Bank –Entebbe Road Branch as a case study all being drawn from the findings and analysis made after conducting the study. The effects of computerized accounting systems' aspect were characterized by accessibility to Information technology usage such as; ATMs, computers, money counting machines among others while financial performance was characterized by profitability, employees' willingness to work among others.

5.1 Summary of Key Findings

Establishing the effects of computerized accounting systems on management performance was one of the major objectives of the study. The findings on the effects established that computerized accounting systems has proved to the cornerstone of modern banking sector in developed and developing countries. With the introduction of computerized systems in centenary bank, general organizational performance has tremendously improved as indicated in chapter four. Findings showed that efficiency, accuracy and effectiveness were all achieved while paperwork; time wastage and losses were also cut down. Computer technology in the banking sector has helped banks establish new banking services, which have improved on service delivery to clients. These include use of ATM and international banking among other services.

5.1.2 Costs Incurred in Computerization

Finding on the costs incurred in the process of introducing and implementation of computerized systems established that the bank uncounted different kinds of costs , These include ; initial costs , installation , maintenance costs , systems failure and resistance from other stakeholders among other costs. It was established that in the short run computerization costs were very high as evidenced by a multiple of costs listed above however in the long run computerized systems have proved to be much cheaper than before when all banking systems were manual. With computerization all kinds of expenditures such as expenses on employees have been cut down as the number of employees needed in banking has reduced.

5.1.3 Computerization and Performance

Also the research wanted to establish the relationship that exited between computerization and performance of the bank under study. Finding discovered that the relationships that existed between the two variables were strongly positive. Computer technology and performance of banks in the modern competitive financial sector are inseparable if banks are achieving their set objectives. There is no doubt that computerized accounting systems have improved on the general performance of centenary bank.

5.2 Conclusions

Computer technology is here to stay. Since its upcoming in the global scene of all forms of human activities especially in the banking sector, rapid transformations have been experienced. Tradition and all upcoming small banking institutions' respective stakeholders response to this modern computer are in an unpredictable environment in developing countries has of recent been

to adopt and cope with the changes so as to improve on the organizational performance of their institutions.

According to the findings established by research, the introduction and implementation of these computer based systems is very costly in the short run. However in the long run, computerized systems in a bank will create efficiency, accuracy, convenience, cut down work overloads thus cutting down all operational and managerial costs leading to improve performance. There is no doubt there fore to conclude that computerization has greatly improved on the organizational performance of centenary bank.

5.3 Recommendations

- Computer technology in the banking sector is here to stay. Traditional and upcoming small banks that have not yet responded to this must accept this fact and take relevant action towards computerization. It's therefore sought important by the researcher that the following recommendations be studied and followed by respective people at management levels in the banking sector.
- Banking management should always invest n research to find out new developments in computer technology such as new banking packages and if discovered be established internally as they could value on service delivery.
- Calculated investment in computerization should be emphasized so as not incur too much costs that could put the bank's liquidity at risk.
- Routine upgrading of these systems should be emphasized, as they are very sophisticated and delicate.

- Through training has been in place, it was found out that it was not adequate. So adequacy in training should be put in place for all stakeholders in the bank including clients like on use of ATM to reduce on card retention.
- Computer security should be observed and intrusion to avoid as puts the bank at high risk.
- On recruitment of new employees, management should always put emphasis on those with some computer knowledge to cut down training costs.
- Management should be aware of the environmental, social economic challenges association with computer use and attempts to overcome such challenges laid down in advance.

5.4 Areas of further study

The researcher has not been able to comprehensively and sufficiently cover all the areas of study about the subject due to limited resource which were both social and economical. Therefore the research show it crucial t o note down the following recommended areas for further study.

- Limitations to full computerized accounting systems in the Ugandan perspective together with the recommended way forward.
- The effectiveness and adaptability of various computer packages and managerial challenges in the banking sector.
- The relationship between computer availability, internet and development together with all associated evils of internet in the Ugandan perspective.

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APPENDIX I

QUESTIONAIRE TO THE MANAGEMENT AND STAFF

OF CENTENARY BANK

My name is Bakosoro Dodo Viveline a student of K.I.U. Am carrying out a study about ***the influence of computerized accounting systems and financial performance of commercial banks in Uganda using Centenary Bank as a case study.*** The study is aimed at establishing how computerized accounting systems affect financial performance in commercial banks. The outcome of this study will be for academic purpose only. You have been selected to participate in this study. Kindly spare some time to answer these questions.

SECTION A: BACKGROUND INFORMATION

Please tick the most suitable answer.

(1) Gender

Male ☐

Female ☐

(2) Age (i) 20 to 29 ☐

(ii) 31 to 40 ☐

(iii) 41 to 50 ☐

(iv) 51 and above ☐

(3) Marital status

Single ☐

Married ☐

(4) Education level held

(i) Certificate ☐

(ii) Diploma ☐

(ii) Degree ☐

(iv) Others ☐

5. How long have you worked with Centenary Bank?

(a) Less than 1 year (b) one year

(c) 1-2 years (d) More than 2 years

SECTION B: COMPUTERIZATION OF ACCOUNTING SYSTEMS IN RELATION TO MANAGEMENT PRACTICES AT CENTENARY BANK

	Particulars	**S.A**	**A**	**N.S**	**D**	**D.S**
1	That all accounting systems and managerial departments in centenary bank are computerized.					
2	That computerization costs are so high.					
3	The process involves the following costs.					
4	Computerization also involves staff training which increases the costs.					
5	Centenary bank's computerized accounting systems so highly because most of its clients are computer literate.					
6	ATMs and personal computers are the major devices used to computerize banking services					
7	All staff is involved in the computerization of accounting systems					

SECTION C: RELATIONSHIP BETWEEN COMPUTERIZED ACCOUNTINGSYSTEMS AND PERFORMANCE IN CENTENARY BANK

	Particulars	**S.A**	**A**	**N.S**	**D**	**D.S**
1	Timely Service delivery has greatly improved due to computerization of accounting systems					
2	I have a positive attitude towards computerization of accounting systems					
3	Deposit taking and withdrawal of cash has been eased as a result of computerization of accounting systems					
4	Computerization has save time as a vital resource in this bank					
5	Centenary bank now has a wider market share than before Computerization.					
6	Computerization of accounting systems has increased profits of the bank.					
7	On the whole computerization of accounting systems has improved the performance in centenary Bank.					
8	Computerization of accounting systems has reduced questions at banks					
9	A good number of clients are joining					

	the bank.					
10	That all Bank records are updated once by merely clicking a button on the server computer.					
11	Bank computations today are so efficient and accurate.					
12	Computerization has created customer Loyalty.					

10	That all Bank records are updated once by merely clicking a button on the server computer.					
11	Bank computations today are so efficient and accurate.					
12	Computerization has created customer Loyalty.					

(6) That bank Profitability in Centenary Bank is positively related to computerization

Yes☐ No☐ Not Sure ☐

Thank you very much for your participation