

COMPUTERIZED ACCOUNTING SYSTEMS AND FINANCIAL PERFORMANCE OF
COMMERCIAL BANKS IN KAMPALA.
A CASE STUDY OF DFCU BANK- NSAMBYA BRANCH

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DECLARATION

I, Idd Shakila, hereby declare that this research report is my own original work, that all reference sources have been truthfully reported and acknowledged, and that this document has not Previously in its completeness or in part, been submitted to any University in order to obtain an academic qualification.



Signature



Date

APPROVAL

This is to certify that this research report has been submitted in partial fulfillment of the requirements for the award of the degree in Business Administration of Kampala International University with my countersignature as Universal supervisor.

Signed: 

Date: 13/05/2014.

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ABSTRACT

As the intensity of computer use in business has greatly improved over the years, this has helped commercial institutions to improve on their overall financial positions by promoting transparency, accountability and efficiency through faster capturing, processing and communication in information. However, despite the high levels of computerization in place, banks are still un able to deliver real time services to customers which result from high costs of employee training and programming procedures, high initial costs of acquiring hardware and installation of computer systems. The purpose of the study was to evaluate the influence of computerized accounting systems and financial performance of commercial banks in Uganda. The study objectives were 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 as well as to establish the relationship between computerized accounting systems and the performance of the bank. 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.

The study results revealed that in spite of the costs and system failures, computerization of accounting systems has a positive significance on the performance of the bank. These positive impacts include reliability and regularity of reports produced quality information and improved service delivery. Findings revealed that computerized accounting systems lead to a considerable change in reduction of errors hence attaining accuracy, increased business capacity and improved efficiency in terms of service delivery The researcher recommends that accounting systems should be more computerized to a greater extent and there should be proper training of bank staff on modern basic skills in computers and management principles.

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ACRONYMS

AIS	Accounting Information Systems
MIS	Management Information System
CAS	Computerized Accounting Software

CHAPTER ONE

1.0 Introduction

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 and organization of the report.

1.1 Background of the study

Banks are financial institutions set up to provide customers with some specific functions such as receiving deposits from customers for savings and onward money transfer as well as credit services. Banks as defined by Business dictionary.com is an establishment authorized by a government to accept deposits, pay interest, clear cheques, make loans, act as an intermediary in financial transactions, and provide other financial services to its customers. 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.

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 (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.

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).

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) 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). 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 relevant account number appears. Many software packages allow the user to produce a general ledger which shows each transaction included in the balance of each account. This advanced system encompasses implementing an integrated accounting system, processing transactions within the system, maintaining the system, producing reports and ensuring system integrity. The unit has application across all sectors of the financial services sector and has application to job functions such as accounts receivable and payable clerks (Kim 1989)

In 1950, many banks started using computers to help in the execution of accounting functions like production of financial reports. DFCU bank Uganda is a subsidiary of DFCU limited which was started in 1964 by the common wealth development corporation in the United Kingdom. Its main objective was to support long term development projects whose financing needs and risks were not covered by the then financing commercial lending institutions. In 1999 and 2000, DFCU bank acquired Uganda leasing company and gold trust bank thus extending the services of the group to encompass equity finance, long term development finance; leasing and general banking services DFCU limited became a public limited company in 2004 and is now listed on Uganda securities exchange. The bank provides innovative products and superior service levels catering for customer needs which is the rationale behind the organizations development strategy to provide improved convenient services in this dynamic environment. Today, DFCU bank Uganda provides banking and financial services in Uganda and internationally. Its business portfolio includes transactional accounts, savings and investment accounts, foreign exchange and electronic banking for business owners and asset management services for institutional investors.

DFCU bank is a major player in the financial sector with an estimated asset base of nearly US\$394 million as of December 2012 representing about 6.5% of the market share in Uganda. In 2013 the Bank was the 6th largest commercial Bank in Uganda. It

has 30 branches in the country (Bank of Uganda Annual Supervision Report, 2013). This kind of growth has been attributed to the incorporation of computerized systems into daily routine operations in order to improve their customer service delivery, operations efficiency and make timely and informed decisions. It is very important to verify the correctness and validity of the auditors' accounting data and management information, as well as the legality of the auditor's economic activities through reviewing and analyzing electronic data. With the development of computerized accounting systems of the auditors in DFCU bank, most of the accounting and management information are digitalized. Many of the traditional audit methodology are no longer applicable.

However, with computerized system in place, the bank still faces a number of performance problems and these include high costs of employee training and programming procedures, high initial costs of acquiring the hardware and installation of the computer systems which are costly. It's based on this background that the researcher intends to investigate about the performance of commercial banks in relation with computerized accounting systems..

1.2 Statement of the Problem

As the intensity of computer use in business has greatly improved over the years, this has helped commercial institutions to improve on their overall financial positions by promoting transparency, accountability and efficiency through faster capturing, processing and communication in information. However it is still evident that there still exists some performance lags. It is based on this background that the researcher recognized the need to investigate the reasons behind the poor performance despite the use of computerized information systems in the bank and how they can be overcome in order to enable the bank to effectively meet their objectives. 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 purpose of the study was to evaluate 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 financial performance of commercial banks in Uganda.
- ii) To establish the performance of commercial banks in Uganda.
- iii) To examine the benefits of a computerized accounting systems in commercial banks.
- iv) To establish the relationship between computerized accounting systems and the financial performance of the bank

1.5 Research questions

- i) What is the effect of computerized accounting systems on the performance of commercial banks in Uganda?
- ii) How is the performance of commercial banks in Uganda?
- iii) What is the relationship between computerized accounting systems and financial performance of commercial banks in Uganda?

1.6 Scope of the Study

1.6.1 Geographical Scope

The study focused on DFCU bank- Nsambya Branch. The study was carried out mainly on accounting systems in relation to computerized accounting systems and 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 interconnected. The study covered the vivacious aspects of computerized accounting systems and the financial performance. Emphasis was on the extent of computerized accounting systems, its benefits and financial performance management forms.

1.6.3 Time scope

It covered the operations of the bank for a period of 5 years from 2007 to 2012.

1.6.4 Theoretical scope

A computerized accounting system can be referred to as an accounting information system that processes the financial transactions and events to produce accurate accounting results as per the user requirements or guidelines. Every proper accounting system, be it manual or computerized must follow the generally accepted accounting principles and also the framework for maintenance of records and generation of reports must be well defined and easily to be understood. In a computerized accounting system, the process of storage and handling of data, which is normally referred to as operating environment consists of computer hardware and software under which the accounting system operates. Computer hardware and software are interdependent and so one cannot do without the other. The link here is that, the type of accounting system employed determines the operating environment. More so, the nature of software used determines its hardware so selecting computer hardware depends upon several factors like the number of users, secrecy level and the sectional or departmental activities in the bank (Kim 1989)

A computerized accounting system also involves the use of computer hardware and software to perform the recording and reporting functions that would otherwise have been done manually by a staff of a bank or an owner of a business. Prior to technological advancement, accounting records were being kept only on a manual basis whereby the bookkeeper needed to complete a manual basis document for each sale or receipt, and then spend all day or better still a week in writing the records of the day or week into special journals, stock cards, as well as debtors and creditors records. This clearly took some time, time that would otherwise have been spent in managing the business. More importantly, completing the accounting records were sometimes seen as a hurdle to business, rather than a way of making it more profitable. (Simmons, Hardy 2011)

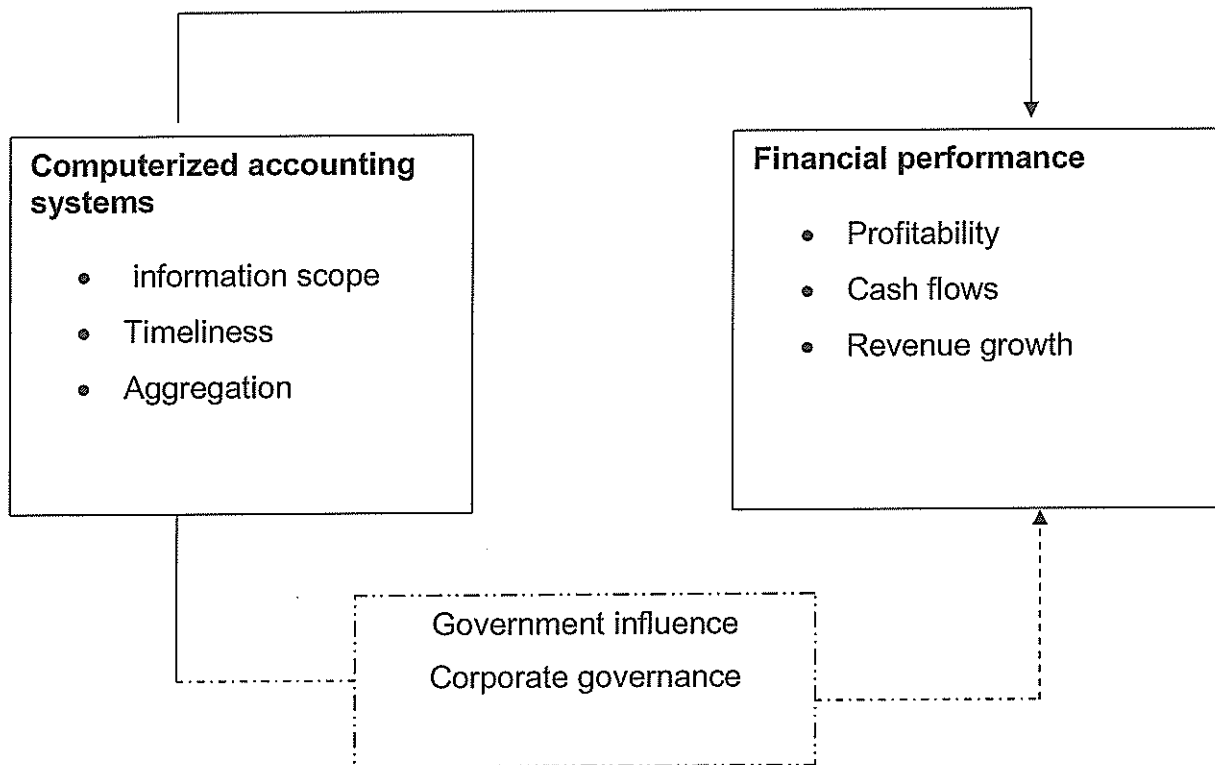
However, the development of computerized accounting systems has transformed the way small businesses kept their accounting records. This has permitted small business owners to simplify the accounting processes, thus leaving them more time to work on their main business. (ICT in Accounting, Simmons, Hardy 2011, 372) The ever-changing

global competitiveness in the services provided by banks has however increased the volume of activities banks perform. This has been made possible through the use of computerized accounting software which has softened the more tedious banking functions through the use of manual banking system. In Uganda, development in information technology (ICT) is drastically changing the way businesses are being organised. Banking institutions coupled with other sections of the financial services industry, continue to face pressure from the considerable change in the regional and global financial meltdown. The onus to transform successfully rest on the technology & operations side of the banks, which must be ready to step up and face the task.

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.
- iv) It is a prerequisite for the partial fulfillment of the award of Bachelor of Business administration degree of Kampala International University.

1.8 Conceptual framework



Source: Development from literature review

Armstrong (1993) appreciated the fact that the financial management is a process of helping organizations to achieve their final objectives. Financial performance management , functions by first establishing shared understanding between financial managers and staff on what is going to be achieved and then creating people in a way which increase profitability that will be achieved in a short period hence improved financial performance which helps in decision making. Effectiveness of accounting information systems can be analyzed on three bases: 1) information scope, 2) timeliness, 3) aggregation Similarly, Bodnor (1993), states that the following indicators of financial performance. If the planned output is equal to or less than actual output, then we talk of good financial performance. Increased profitability: When the profits of an organization increase continuously then we talk of good financial performance in a business.

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 elsewhere in the world was made. 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 systems

Accounting system as defined by business dictionary.com states as

*“an organised set of manual and computerized accounting methods, procedures, and controls established to gather, record, classify, analyse, summarize, interpret, and present accurate and timely financial data for management decisions”
(Business dictionary. com, Quoted 10.12 2012)*

Every organisation must operate accounting system due to the fact that it is generally recommended for companies to report on its financial position to the stakeholders for better decision-making and other policy implementations. The decision to choose whether a company would operate manual or computerized accounting system depends on the company itself.

2.1.1 The Accounting systems used in the Bank

Frank wood (1996) stated that a computerized accounting system is a combination of people, procedures, facilities and controls intended to maintain essential channels of communication and to alert management and other stakeholders about significant internal and external events. In contrast according to Meigs,(1996) an accounting system consist of methods, people, procedures and devices use by an entity to keep track of its financial transactions and to provide information for decision making . It helps to integrate

information in order to cope up with reports in terms of balance sheets, income statements, and cash flow statements so that management and other stakeholders who are interested in them can make use of them.

2.1.2 Computerized accounting systems

Meigs et al (1998) defined a *computerized accounting system* as

“a system that uses computers to input, process, store and output accounting information inform of financial reports”.

He adds that accounting system records all transactions that routinely deal with events that affect the financial position and performance of an entity. Marivic (2009) described a computerized accounting system as a method or scheme by which financial information on business transactions are recorded, organised, summarized, analysed, interpreted and communicated to stakeholders through the use of computers and computer based systems such as accounting packages. He emphasised that it's a mechanized process of facilitating financial information inflows as well as the automation of accounting tasks such as database recording and report generation. McRae (1998) adds that computerized accounting systems are advantageous in consolidating information channels meaning that files that were previously been duplicated by several departments will now be consolidated into single file. 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. 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).

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 User-Friendly computerised accounting Software

Basic accounting software demands not only ICT skills, but also thorough accounting knowledge. By contrast, current accounting software can be run with only a simple understanding of the accounting practice. Nowadays, with in depth help menus and also the vast information that can be sourced online free of charge, resources to assist users in their use of accounting software are easily to come by (Hardy, 2011)

2.2.1 Accounts Receivable Software

The accounts receivable must consists of a detailed listing of customers and the amounts of money each owes the company or bank and other information like the date the debt was incurred, address and phone numbers of each customer. Businesses considering the installation of accounts receivable management software must undertake an extensive research into the available alternative solution to ensure it includes the key potentials that would enable accuracy and integrity of its financial reporting. The right accounts receivable software solution updates the ledger accounts with appropriate transactions automatically. Invoices are added and customer payments in regards to outstanding invoices are also deducted. The software checks that payments have been applied to a specific invoice or identify that it covers multiple invoices. There should be regular reports generated in detailed, such as an accounts receivable aged listing so that customers at risk of defaulting could easily be identified. (Jones, 2012)

2.2.1 Accounts Payable Software

The company or organization considering the implementation of accounts payable software solution must first of all realize that the best ones are the one that provide a rapid return on investment. The main characteristics of accounts payable that increase the payback include early payment awareness that enable the company to make use of discounts offered. More so, the ability to write cheques to suppliers and to have the

correct debits and credits applied to the company account makes balancing the books easy. (Simon, 2001)

2.2.2 General Ledger Software

A ledger account refers to an accounting record that summarizes all transactions affecting each individual item such as Bank, Stock, Creditors, Vehicles or Capital. In the financial statements all items have its own ledger account and so in this case the bank can have so many ledger accounts to manage considering its numerous customers, without computerized accounting system, it would be virtually impossible to locate one ledger account out of hundreds accurately and conveniently (Simmons 2011)

The general ledger software is a very important software solution for all businesses since it is the main accounting record of the business. Key features companies must look for in general ledger accounting software are its ability to trace budget and financial data so as to produce accurate financial statements, detecting fraud so easily, tracking budget and financial data to produce accurate financial statements that can bring out better income statement, balance sheet, and general ledger reportage. When the best general ledger software is chosen, it helps to develop year-end reports and statements quickly and accurately. The general ledger software automatically passes data from subsidiary ledgers such as accounts payable and accounts receivable for quick and accurate double entries as well as balance sheet balance sheet (Hardy (2012)

2.2.3 Accounting Packages and Chart of Account

A number of Software packages have been developed to assist in the accounting field and some of such packages are QuickBooks, Mind Your Own Business (MYOB), Cash flow Manager, Attaché, Econet and Temenos T24. Even though some of this software mentioned here are developed for small businesses, they are also designed specifically for accounting purposes in the banks, especially the Temenos T24 software which is currently in use by Amanano Rural Bank Limited. It functions in such a way that once a customer's data is entered, the accounting records of that particular customer are

updated automatically, and also customers reports pop-up so easily. Links between the bank and its staff, as well as other information are easily accessible and can be produced quickly, accurately and efficiently. These accounting packages that have been outlined here earlier bring out transactions using accounting records such as the general ledger accounts. (Simmons, Hardy 2011) Furthermore, if some of the customers have the same names or similar names it may be very difficult to identify which account they belong to. To tackle these issues, a bank or business can use a Chart of Accounts to arrange its ledger accounts. A chart of accounts is a catalogue of all the accounts, which detects and organizes each ledger account individually by assigning to it an account number or code. (Simmons, 2012)

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 quite a long time; computer systems are very new in countries of the south since they have been in use for a very short time. Boggs (1999), states that modern banks should employ banking computer programs (software) 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:-

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.

Credit cards: These were first introduced in 1960s and have now become increasingly supplanted 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.

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 worldwide interbank 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 24/7 throughout the year to all member banks. With this system therefore, banks on the network have had their performances improve drastically.

(ii) **Fed wire.** 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 24/7 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.

2.3.1 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). 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).

2.3.2 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 The Concept of Financial 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.

Elliot (1997) defines financial performance as the act, process, or manner of doing things or execution of the financial duties. The efficiency of any accounting system is measured by its ability to provide basic services and meet information needs of its customers. Financial performance can be measured in terms of effectiveness of output and costs incurred, also if they can enable business system to prepare monthly and annual reports, projections and management schedules. Armstrong (1993) appreciated the fact that the financial management is a process of helping organizations to achieve their final objectives. Financial performance management , functions by first establishing shared understanding between financial managers and staff on what is going to be achieved and then creating people in a way which increase profitability that will be achieved in a short period hence improved financial performance which helps in decision making. Similarly, Bodnor (1993), states that the following indicators of financial performance.

Cost reduction: When organization activities are carried out at reduced costs, then we say it's a good financial performance.

Reduction of variances: If the planned output is equal to or less than actual output, then we talk of good financial performance.

Increased profitability: When the profits of an organization increase continuously then we talk of good financial performance in a business. The above instances show that the extent of financial performance is measured by preparation and presentation of financial statements whereby income statements are prepared by banks to show whether they have made profits or not which is the key test for financial performance. Armstrong (1993) underlines the basic features of financial performance measurement as listed below:

- Focus should be put on individual contributions to the whole firm as a whole.
- The organization should share its vision with its employees.
- There should be concentration on future performance planning.

2.5 Relationship between computerised accounting systems and financial performance

According to Anderson (1992), there is a positive relationship between computerised accounting systems and financial performance. He consented that computerized accounting systems improve management activities such as decision making and controlling. The system enables production of timely and reliable information on which specific action or plans may be based. This improves financial performance. Computerized accounting departments in business create audit trail by which every transaction can be traced very fast.

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. 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.

2.6 Conclusion

The banking industry in Uganda is becoming increasingly competitive due to increased computerized accounting systems, and it's now extremely hard for banks to favorably compete minus automation. Mechanization 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, and 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.

In conclusion, computerized accounting systems lead to accuracy, reliability and timeliness. All these elements are the key to improvement to financial performance in banks. Information technology is more of a holistic approach towards development. Therefore computerization has led to efficiency in the bank's financial performance through improved service delivery channels. 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. Therefore computerization has led to efficiency in the bank's financial performance through improved service delivery channels.

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 sample size was determined using Slovin's formula. The sample size used was 100 respondents from DFCU bank. 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.

3.4 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 undertake 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 in line 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 were 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 newspapers, 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.

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 DFCU bank –Nsambya 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.

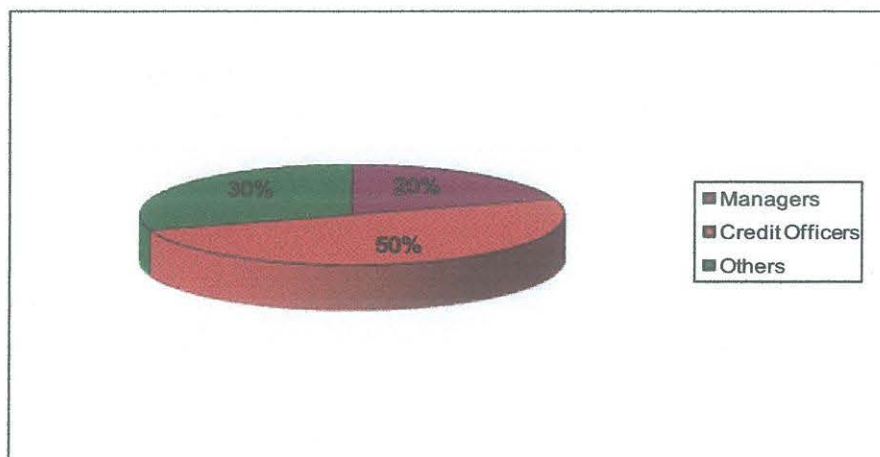
4.1 Background characteristics of the respondents

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 DFCU Bank –Nsambya Branch. The findings are shown in the figures below;

4.2. Respondents' level of education

The biggest percentage of respondents had completed bachelors' degree in different fields as it was revealed by 55% of the respondents, then 30% represented respondents who had completed diploma education in different fields as 15% of the interviewees were Masters' holders, as showed in the figure below.

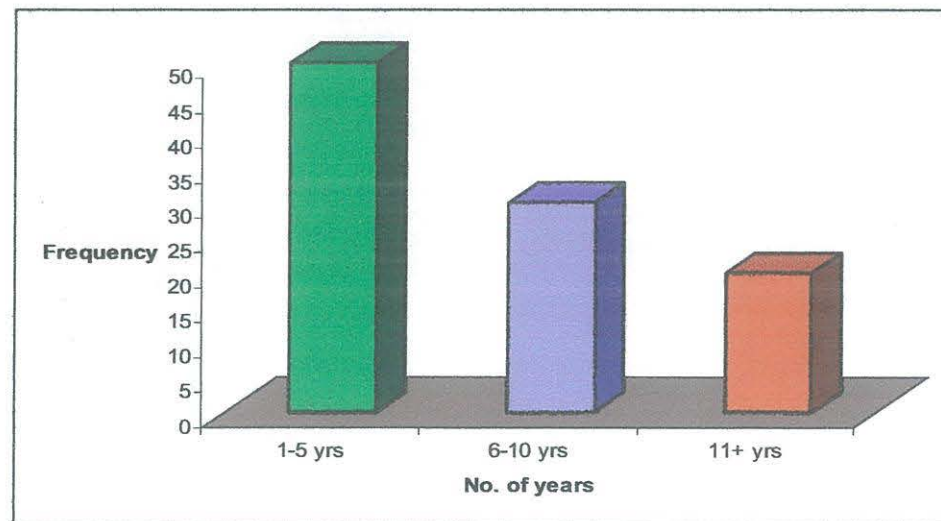
Figure 1: Respondents' level of education



Source: Primary data

4.2.1 Number of years of service of respondents at DFCU Bank

Figure 2: Number of years of service of respondents

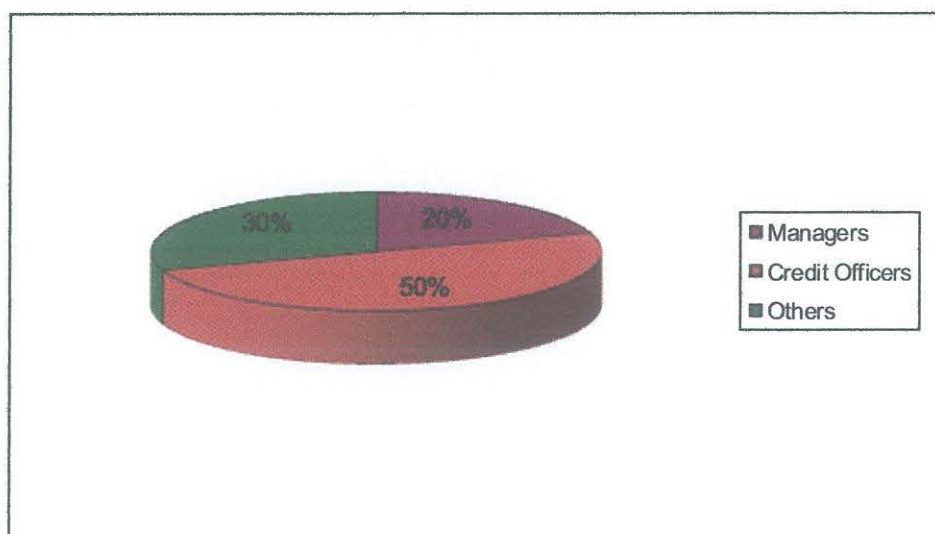


Source: Primary Data

From the figure above, 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 DFCU 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.

4.2.2 Respondents job title

Figure 3: Respondents' job title at DFCU Bank

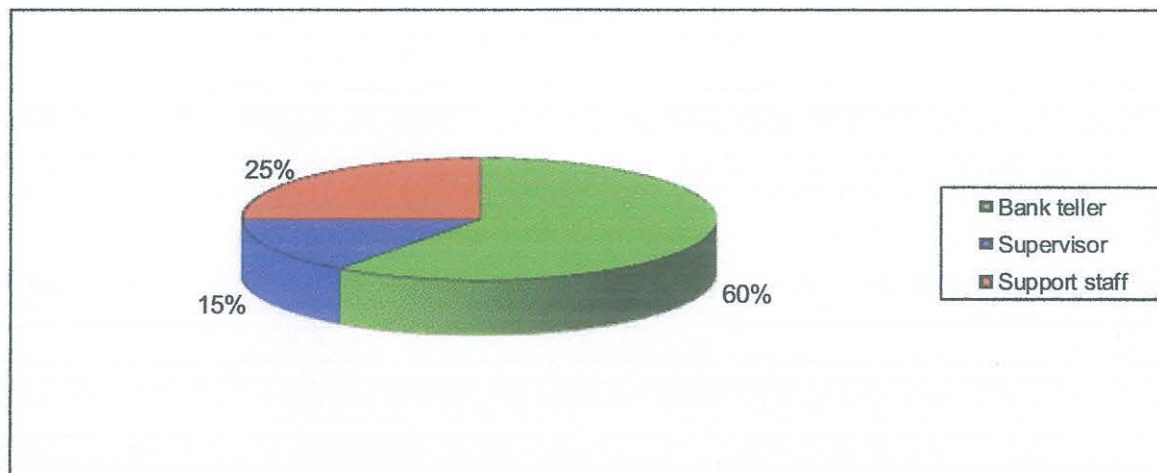


Source: Primary data

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; tellers 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 3 above.

4.2.3 Nature of the respondents who participated in the study

Figure 4: Nature of the respondents who participated in the study



Source: Primary Data

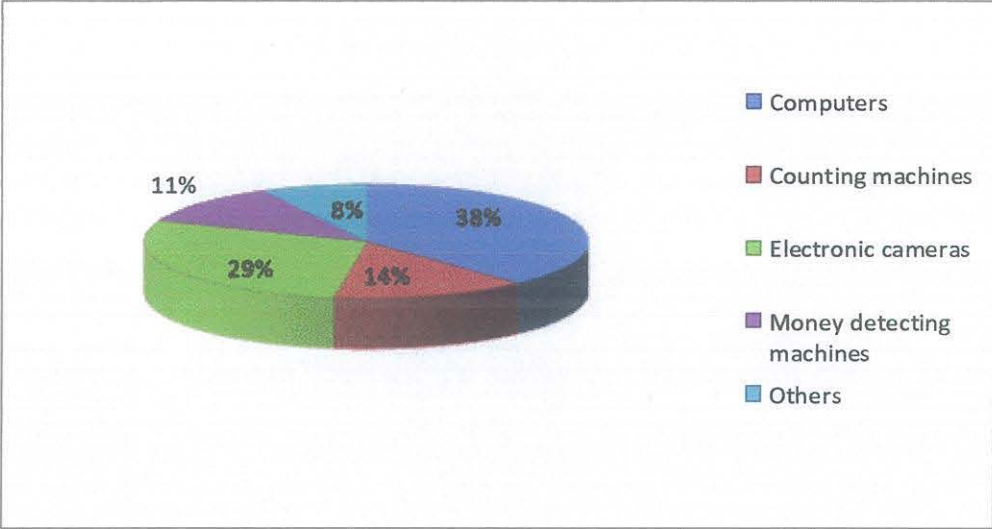
An assessment of the nature of the respondents who participated in the study was as follows; bank tellers took a bigger percentage as far as the field survey was concerned as showed by 60% this was because they are the ones where the study was concentrated on since the researcher's interest was find out whether the access financial services from these banks, followed by support staff represented by 25% and supervisors were showed by 15% as portrayed in the figure above.

4.2.4 Nature of information technology used in DFCU Bank

Numerous responses were put forward when respondents were asked nature of information technology used in DFCU Bank and they were as follows; 38% of the respondents revealed that computers were the most information technology machines used in DFCU Bank these were followed by 29% of the respondents who said electronic cameras are used in DFCU 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%

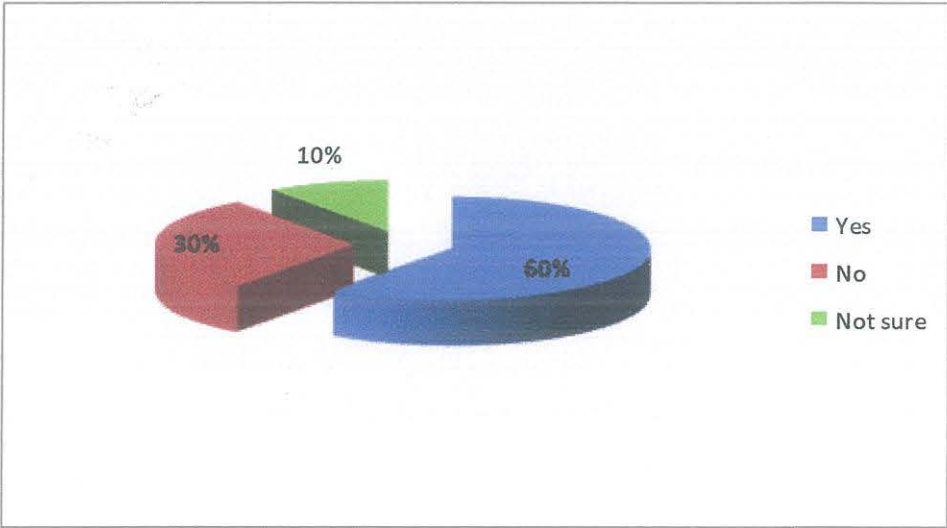
represented with others implying the machines like calculators which are also used in the bank as shown in figure 5 below..

Figure 5: Nature of information technology used in DFCU Bank



Source: Primary data

Figure 6: Responses whether operational and managerial departments in the bank are computerized.

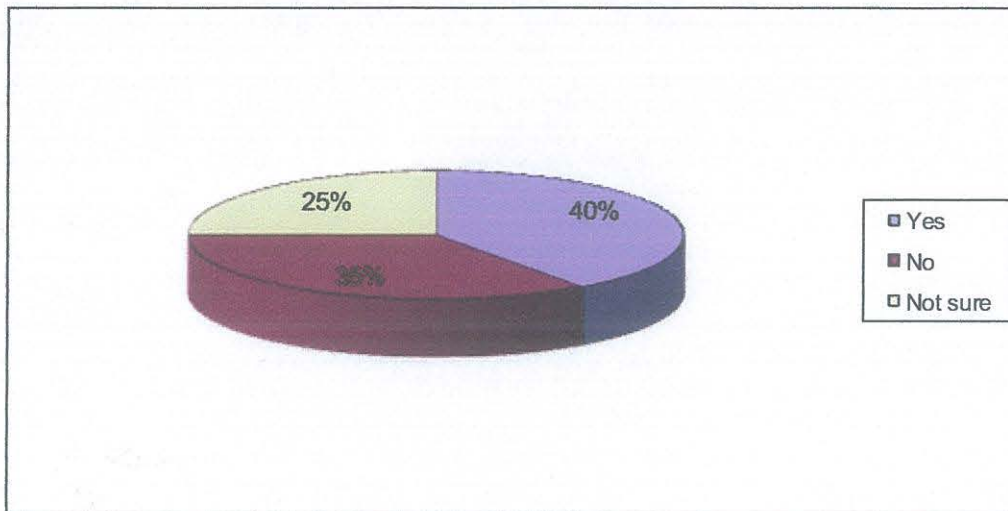


Source: Primary Data

The biggest of respondents represented by 60% said yes they are sure operational and managerial departments in DFCU Bank are computerized whereas 30% of the respondents said they didn't know whether operational and managerial departments in the bank are computerized especially the clients and lastly 10% of respondents said they are not sure operational and managerial departments in DFCU Bank are computerized implying that almost all employees knew most of the operations in the bank as stipulated in figure 6 above.

4.2.5 Costs of information technology are high

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

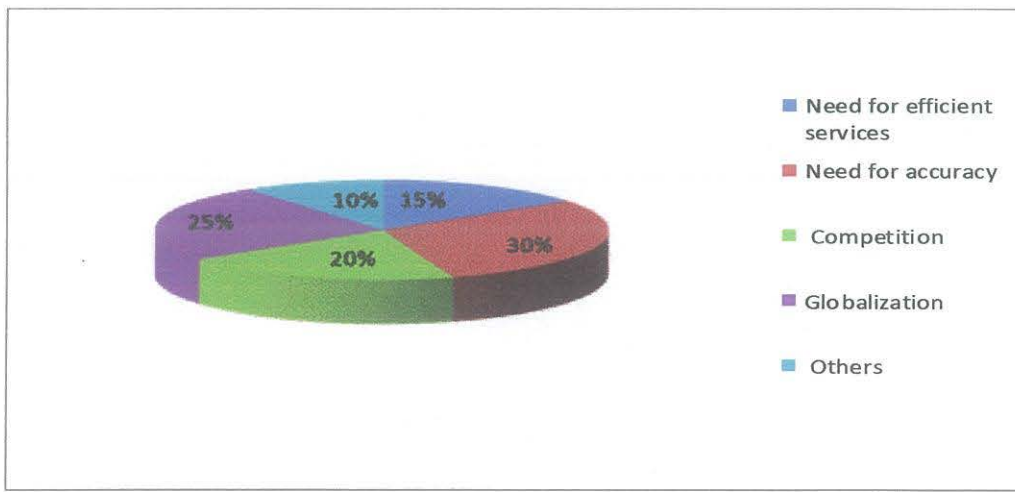


Source: Primary Data

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

4.2.6 Forces that led to the usage of computerization of accounting systems in DFCU bank

Figure 8: Showing forces that led to the usage of computerization of accounting systems in DFCU bank

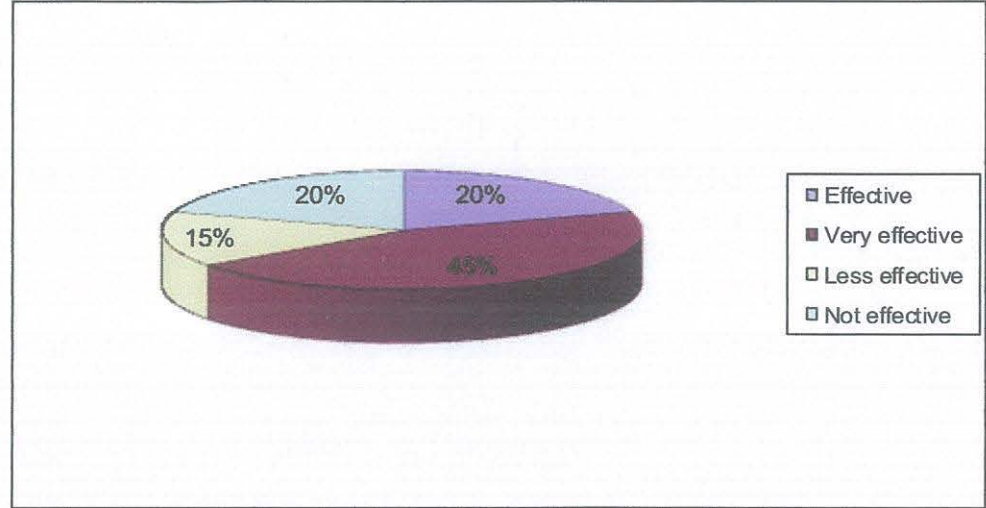


Source: Primary Data

Looking at figure 8 above, majority of the respondents represented by 30% said the forces that led to usage of computerization of accounting systems was need for accuracy. These were followed by 25% of the respondents who said it was because of globalization in the world. 20% of the respondents said it was because of competition among other banks. 15% respondents said it was need for efficient services. Lastly respondents represented by 10% said it was other forces that led to usage of computerization of accounting systems.

4.2.7 Rankings of computerized accounting systems in DFCU bank

Figure 9: Rankings of computerized accounting systems in DFCU Bank

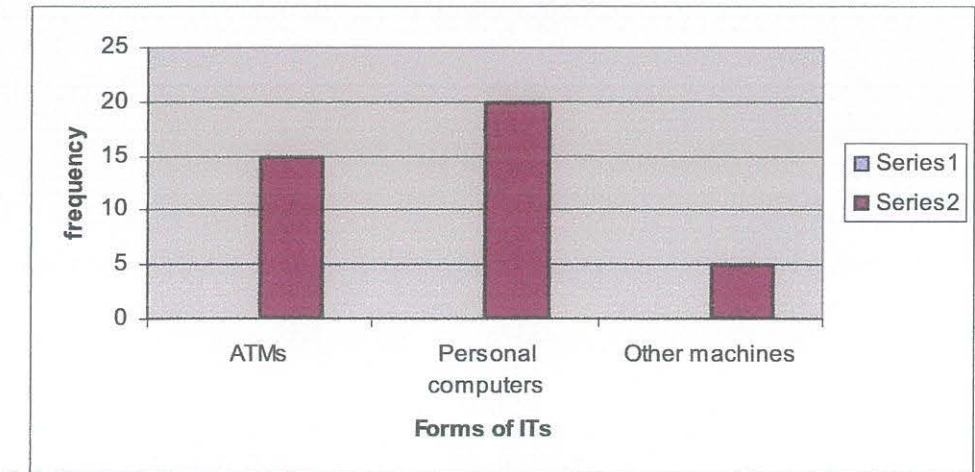


Source: Primary Data

According to figure 9 above, majority of the respondents represented by 45% said computerized accounting systems are very effective. Followed by 20% of the respondents who said that computerization of accounting systems were effective as well as not effective. Lastly surprising only 15% of the respondents said computerization of accounting systems in DFCU bank was less effective.

4.2.8 Major devices used in computerized banking services

Figure 10: Showing the major devices used in computerization of banking services



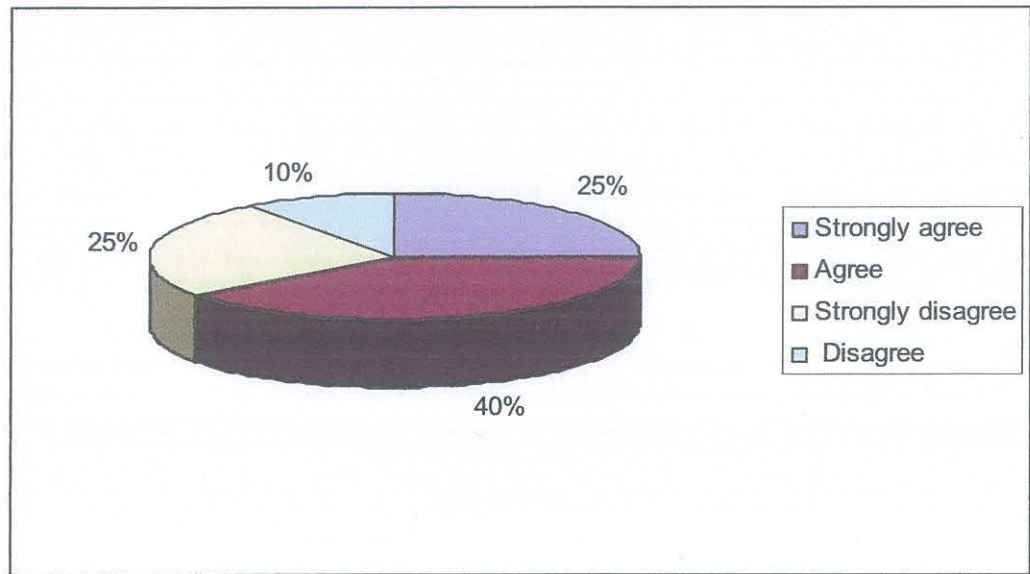
Source: primary data

20% of the interviewees said that, personal computers are the common devices used in banking system, where as 15% of the employees emphasized on the usage of ATMs especially the clients with saving accounts and 10% of the respondents said other machines like the ones used for counting money and detect fake notes.

4.3 Computerized accounting systems have significant effects on the financial performance of the bank

According to figure 11 below, majority of the respondents represented by 40% agreed computerized accounting systems have significant effects on financial performance of the bank, 25% strongly agreed and strongly disagreed respectively. 10% disagreed giving reasons that the computerized accounting systems were costly yet the traditional methods can do the same work.

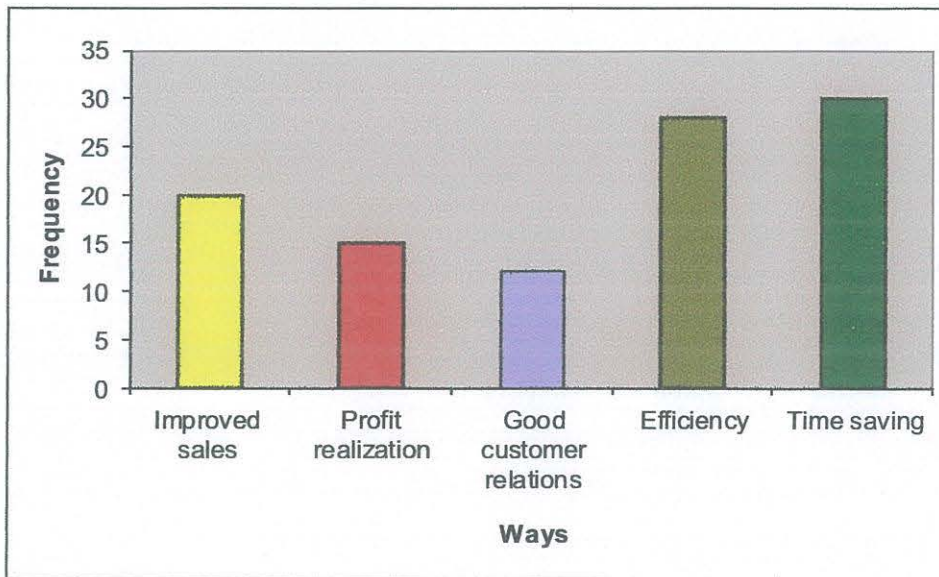
Figure 11: Showing computerized accounting systems and their effects on financial performance



Source: Primary Data

4.3.1 Effects of computerized accounting systems on financial performance

Figure 12: Showing the effect of computerized accounting systems on financial performance of DFCU bank

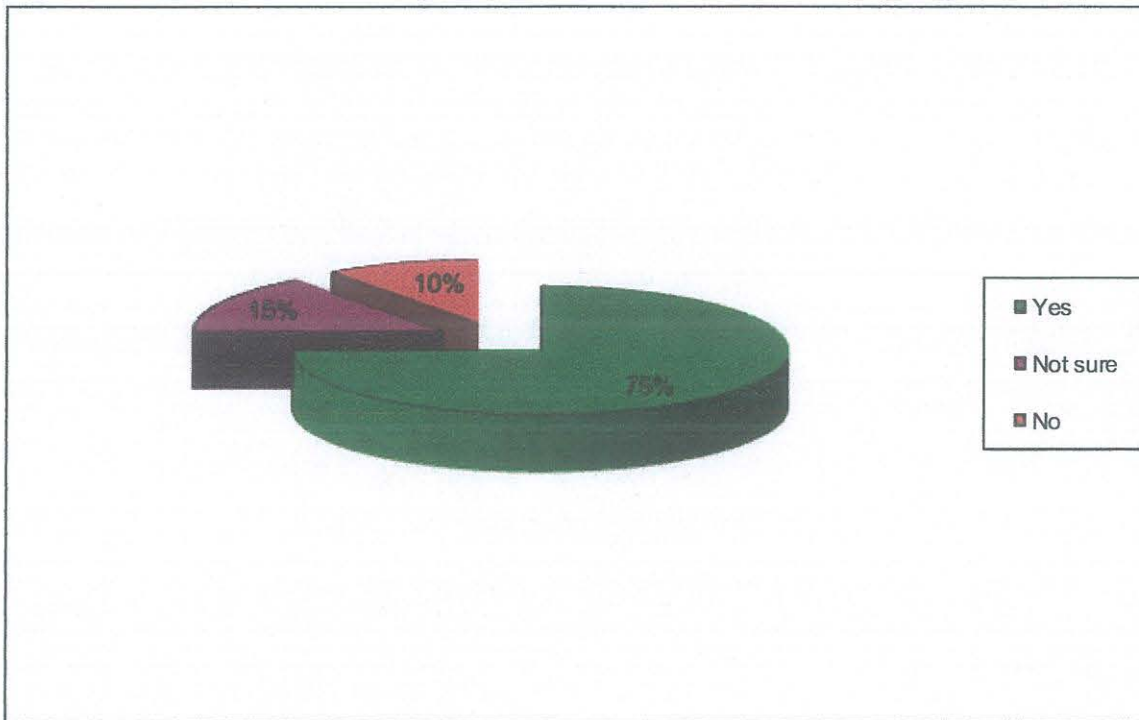


Source: Primary Data

Computerized accounting systems have many uses related to financial performance. Majorly they are time saving, represented by 33 of the respondents, efficient represented by 31 respondents. Computerized accounting systems improve sales represented by 20 respondents while profit realization is represented by 14 respondents. Lastly, 11 respondents said it improved customer relations.

4.4 Effects of computerized accounting systems on management performance in DFCU bank in terms of profitability

Figure 13: Showing whether accounting systems and managerial departments in DFCU bank are computerized

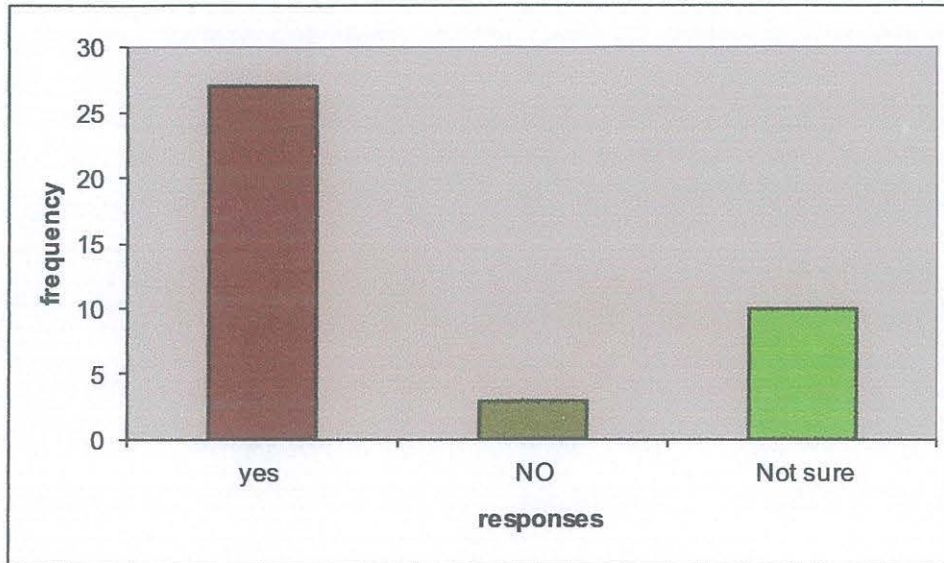


Source: Primary Data

The biggest percentage of the respondents attributed to yes, that accounting systems and managerial departments in DFCU Bank are computerized as represented by 75% where as 15% of them was not sure and the least percentage disagreed with the statement as showed by 10% in figure 13 above.

4.5 Relationship between computerized accounting systems and financial performance in DFCU Bank

Figure 14: The level of financial performance in DFCU bank is positively related to computerized accounting systems



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 1: 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.

4.6 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 2 as shown below.

Table 2: 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

4.7 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 3: 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 3, 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.

4.8 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 4 below was derived.

Table 4: Showing the magnitude of problems faced when using computerized accounting systems

<i>Problems</i>	<i>Frequency</i>	<i>Percentage</i>
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, CONCLUSIONS 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 DFCU Bank 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 be the cornerstone of modern banking sector in developed and developing countries. With the introduction of computerized systems in DFCU 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.

5.1.1 Costs experienced 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.

5.1.2 Computerized accounting systems and financial performance

Also the research wanted to establish the relationship that existed 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 DFCU 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 therefore to conclude that computerization has greatly improved on the organizational performance of DFCU 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 in 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 economic. Therefore the research shows it crucial to 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: QUESTIONNAIRE

My name is Idd Shakila a student of Kampala International University carrying out a study about the influence of computerized accounting systems and financial performance of commercial banks in Uganda using DFCU 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.

Title:.....

(1) Gender

a) Male

☐

b) Female

☐

(2) Age

a) 20 to 29

☐

b) 31 to 40

☐

c) 41 to 50

☐

d) 51 and above

☐

(3) Marital status

a) Single

☐

b) Married

☐

c) Divorced

☐

(4) Education level held

- a. Certificate ☐
- b. Diploma ☐
- c. Degree ☐
- d. Others ☐

5. How long have you worked with DFCU Bank?

- (a) 1-5 years ☐
- (b) 6-10 years ☐
- (c) 11 years and above ☐

SECTION B: COMPUTERIZATION OF ACCOUNTING SYSTEMS IN RELATION TO MANAGEMENT PRACTICES AT DFCU BANK. The following abbreviations are used in the questionnaire sections that follow **SDA**= Strongly Disagree, **DA**= Disagree, **U**=Uncertain, **SA**=Strongly Agree, and **A**=Agree. Please tick as appropriate.

	Particulars	S.A	A	U	DA	SDA
6	That all accounting systems and managerial departments in DFCU bank are					
7	That computerization costs are so high.					
8	The process involves the following costs.					
9	Computerization also involves staff training which increases the costs.					
10	DFCU bank's computerized accounting systems so highly because most of its					
11	ATMs and personal computers are the major devices used to computerize banking					
12	All staff is involved in the computerization of accounting systems					

SECTION C: Relationship between computerized accountingsystems and performance in DFCU Bank.

The following abbreviations are used in the questionnaire sections that follow

SA=Strongly Agree, A=Agree, U=Uncertain, D=Disagree, D.S= Disagree, SDA-Strongly disagree. Please tick as appropriate

	Particulars	S.A	A	U	D.A	S.D.A
14	Timely Service delivery has greatly improved due to computerization of accounting systems					
15	I have a positive attitude towards computerization of accounting systems					
16	Deposit taking and withdrawal of cash has been eased as a result of computerization of accounting					
17	Computerization has save time as a vital resource in this bank					
18	DFCU bank now has a wider market share than before Computerization.					
18	Computerization of accounting systems has increased profits of the bank.					
19	On the whole computerization of accounting systems has improved the performance in DFCU					
20	Computerization of accounting systems has reduced questions at banks					
21	A good number of clients are joining the bank.					
22	That all Bank records are updated once by merely clicking a button on the server computer.					
23	Bank computations today are so efficient and accurate.					
24	Computerization has created customer Loyalty.					
25	That all Bank records are updated once by merely clicking a button on the server computer.					
26	Bank computations today are so efficient and					
27	Computerization has created customer Loyalty.					

Thank you very much for your participation