

**INDRA GANDHI NATIONAL OPEN UNVIERSITY  
DEPARTMENT OF PUBLIC ADMINISTRATION**

**An Assessment of Effect of Management Information  
System (MIS) on the Overall Performance of Organizations,  
the Case of Commercial Bank of Ethiopia (CBE)**

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## **Statement of Declaration**

I Animaw Lulie Chekol, declare that this study, as “an Assessment of Effect of management Information system (MIS) on the overall performance of Organizations, the case of Commercial Bank of Ethiopia ” my own work. I have carried out independently the research work with the guidance and support of the research advisor. This study has not been submitted to any degree or diploma program in his or any other institution.

It is in partial fulfillment of the requirement of the MPA degree at Indira Gandhi national Open University.

Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

I hereby certify that the proposal for the dissertation entitled an Assessment of Effect of management Information system (MIS) on the overall performance of Organizations, the case of Commercial Bank of Ethiopia (CBE) by Animaw Lulie Chekol has been prepared after due consultation with me. The proposal has my approval and has, to my knowledge, the potential of developing in to comprehensive dissertation project. I also agree to supervise the above mentioned dissertation till its completion.

**Signature of the Academic supervisor**

Name \_\_\_\_\_

Designation \_\_\_\_\_

Address \_\_\_\_\_

Certified that the dissertation entitled an Assessment of Effect of Management Information System (MIS) on the Overall Performance of Organizations, the case of Commercial Bank of Ethiopia (CBE) submitted by Animaw Lulie is his own work and has been done under my supervision. It is recommended that this dissertation be placed before the examiner for evaluation.

**Signature of the Academic Supervisor:**

Name\_\_\_\_\_

Address\_\_\_\_\_

Study center\_\_\_\_\_

Regional center\_\_\_\_\_

Date\_\_\_\_\_

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 BACKGROUND OF THE STUDY**

Initially in businesses and other organizations, internal reporting was made manually and only periodically, as a by-product of the accounting system and with some additional statistic(s), and gave limited and delayed information on management performance. Previously, data had to be separated individually by the people as per the requirement and necessity of the organization. Later, data was distinguished from information, and so instead of the collection of mass of data, important and to the point data that is needed by the organization was stored.

Earlier, business computers were mostly used for relatively simple operations such as tracking sales or payroll data, often without much detail. Over time, these applications became more complex and began to store increasing amount of information while also interlinking with previously separate information systems. As more and more data was stored a linked man began to analyze this information into further detail, creating entire management reports from the raw, stored data. The term “MIS” arose to describe these kinds of applications, which were developed to provide managers with information about sales, inventories, and other data that would help in managing the enterprise. Today, the term is used broadly in a number of contexts and includes (but is not limited to): decision support systems, resource and people management applications, Enterprise Resource Planning (ERP), Supply Chain Management (SCM), Customer Relationship Management (CRM), Project management and database retrieval applications (Awad and Gotterer, 1992).

An “MIS” is a planned system of the collection, processing, storage and dissemination of data in the form of information needed to carry out the management functions. In a way, it is documented report of the activities that were planned and executed.

The terms MIS and information system are often confused. Information systems include systems that are not intended for decision making. The area of study called MIS is sometimes referred to, in a restrictive sense, as information technology management. That area of study should not be confused with computer science. IT service management is a practitioner-focused discipline. MIS has also some differences with ERP which incorporates elements that are not necessarily focused on decision support.

The Successful MIS must support a business's Five Year Plan or its equivalent. It must provide for reports based upon performance analysis in areas critical to that plan, with feedback loops that allow for titivation of every aspect of the business, including recruitment and training regimens. In effect, MIS must not only indicate how things are going, but why they are not going as well as planned where that is the case. These reports would include performance relative to cost centers and projects that drive profit or loss, and do so in such a way that identifies individual accountability, and in virtual real-time (Davis, 1974).

Anytime a business is looking at implementing a new business system it is very important to use a system development method such as system Development Life Cycle. The life cycle includes Analysis, Requirements, Design, Development, Testing and implementation.

## **1.2 BACKGROUND OF THE BANK**

According to CBE company profile the present day Commercial Bank of Ethiopia in the successor of Ethiopian Government Bank that started rendering banking service 60 years ago.

Today more than ever before the Commercial Bank of Ethiopia combines a wide capital based with more than 9,000 talented and committed employees.

Commercial Bank of Ethiopia aggressively expanded its presence in all direction of the country. Despite the flourishing of rotate commercial banks, the CBE has remained in the lead in term of assets, deposits, capital, and customer base and branch network. Currently it has 332 branches spanning the entire breadth and width of the country as on June 30<sup>th</sup> 2010 total deposits stood at birr 56.6 billion while total asset and capital of the bank reached birr 3.7 bill and 5.5 billion respectively. It is also the first bank in Ethiopia to introduce ATM service and western union money transfer service. CBE has about 2 million account holders with reliable and long standing relationships with May internationally acclaimed banks throughout the world.

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### **1.3 STATEMENT OF THE PROBLEM**

Obviously through and with Management Information Systems, the company is able to highlight organizational strength and weaknesses due to the presence of revenue reports, employee performance records; identification of these aspects can help the company to improve business processes and operations. And also, the availability of the customer data and feedback can help the company to align their business processes according to the needs of the customers. The effective management of customer data can help the company to perform direct marketing and promotion activities and information is considered to be an important asset for any company in the modern competitive world. The consumer buying trends and behaviors can be predicted by the analysis of sales and revenue reports from each operating region of the company.

A computer system used to process orders for a business could be considered a management information system because it is assisting users in automating processes related to orders. Other examples of modern management information systems are websites that process transactions for an organization or even those that serve support requests to users. A simple example of a management information system might be the support website for a product, because it automatically returns information to the end user after some initial input is provided.

Online bill pay at a bank also qualifies as a management information system when a bill is scheduled to be paid; the user has provided information for the system to act against. The management information system then processes the payment when the due date approaches. The automated action taken by the online system is to pay the bill as requested. Since the bills within an online bill pay system can be scheduled to be automatically paid operation after operation, the user is not required to provide further information. Many times, the bill pay system will also produce an email for the user to let him know that the action has occurred and what the outcome of the action was. Management information systems typically have their own staff whose



function it is to maintain existing systems and implement new technologies within a company. These positions are often highly specialized, allowing a team of people to focus on different areas within the computer system. In recent years, companies have begun offering entire programs devoted to management information systems.

For companies in the financial industry MIS can help to obtain a great benefits and assisting them to achieve business objectives. Every market leading enterprise will have at least one core competency – that is a function they perform better than their committer. By building an exceptional management information system into the enterprise, it is possible to push out ahead of the competition. MIS systems provide the tools necessary to gain a better understanding of the market as well as a better understanding of the enterprise itself. Improved reporting of business processes leads inevitably to a more streamlined operation process. With better information on the service process come the ability to improve the management of the supply chain, including everything from the sourcing of imputes for banking operation to the provision and delivery of the service. As a corollary to improved supply chain management comes an improved ability to react to changes in environment that the bank operates. Better MIS systems enable the bank to react more quickly to their environment, enabling them to push out ahead of the competition.

However, all the facts mentioned above are not satisfactorily applied in the Commercial Bank of Ethiopia due to absence of qualified professionals and despotic system and/or structure of the bank. Due to this reason the bank cannot obtain possible strategic advantage from the system at hand and result existence of provision of distorted information to decision making, and in appropriate application of all other systems may be that might help the bank to get its strategic advantages over banks operate within the industry.

#### **1.4. BASIC RESEARCH QUESTIONS**

In order to come up with investigation of the aforementioned points, the researcher raises basic questions including:

- ✓ How effective is the management information system within the Commercial Bank of Ethiopia?
- ✓ Does Management of the bank possess the appropriate skill to handle the operation?
- ✓ To what extent management information system professionals do adequately handle and apply it in the right way?

- ✓ What kind of factors basically influences effective application of the systems?
- ✓ Is MIS designed and applied in integration with other management systems set for the overall operation of the bank?

## **1.5. OBJECTIVE OF THE STUDY**

The overall aim of this essay is to assess and investigate the effect of management information system and its problem in the overall organizational performance. Whereas the specific objectives of the study include:

- ✓ To examine how effective is the management information system within the Commercial Bank of Ethiopia.
- ✓ To indicate the kinds of role management information system play in achieving overall gales and strategic plan
- ✓ To examine management of the bank whether having appropriate skill or not
- ✓ To what extent responsible bodies for MIS are independent of, compliance with the rule, policy and procedure set by the higher officials
- ✓ To indicate the factors that influence effective application of the systems
- ✓ To identify whether the MIS designed and applied in integration with other management systems set for the overall operation of the bank or not

## **1.6. SIGNIFICANCE OF THE STUDY**

As research any study conducted has its own contribution to various stakeholders in different aspect. This study also has diverse significance to different parties, some of them include:

- ✓ It will enable the Commercial Bank of Ethiopia managers and other concerned bodies to be aware of the importance and use of management information system in achieving the intended objectives.
- ✓ It can be used as an additional reference to the existing literatures and can be used as spring board for other researchers, who wish to conduct research in the similar or related area.
- ✓ It can assist the researcher through provision of various skills and knowledge in research undertaking for future carrier.

## **1.7. SCOPE/DELIMITATION OF THE STUDY**

This thesis would be conducted on the effect of management information system and its related problem in the overall performance of the bank. Since the bank has various operational branches throughout the country, and it is difficult to address these entire branches, the thesis delimit itself only to cover Head of office and additional three grade four branches of commercial bank of Ethiopia. Besides, the study summarizes its findings only the data obtained from sample respondents at the target branch and head office which is located in Addis Ababa.

## **1.8 RESEARCH DESIGN AND METHODOLOGIES**

### **1.8.1 RESEARCH DESIGN**

This study is designed to undertake the effect of management information system and its problem in the overall performance of the bank using descriptive research design.

### **1.8.2 POPULATION AND SAMPLING TECHNIQUES**

The populations of the study were employees and management of the head office and three target branches. From among these populations the thesis selects sample respondents using simple random and purposive sampling technique because it can give equal opportunity for all participants within the bank and enable the researcher to get the concerned person respectively.

### **1.8.3 METHOD OF DATA COLLECTION**

In order to make the study complete and tries to achieve its intended objective, all necessary primary data would be collected. This means first hand data collected only for the research purpose. Where as to keep in touch with the principles and concepts by different expertise in the field, and to attach various literatures secondary type of data would be used. In order to collect the required data to the thesis, the researcher use questioner, interview and document analysis as a data collection tools. Questionnaire is used because it can gather large amount of data and it also keep privacy of respondents. On the other hand interview is used because it can gather direct information to the study. Finally document analysis is also important to the thesis through detailed view and analysis of principle and procedures regarding the system in order to crosscheck with the practical application.

#### **1.8.4 METHOD OF DATA ANALYSIS**

The thesis will use descriptive data analysis method in order to undertake this research. Thus percentage and frequency count enable the thesis to present, analyze and interpret the data.

#### **1.9 ORGANIZATION OF THE THESIS**

Chapter one of the study deals with the introduction part on the study and explains the reader with background of the study, statement of the problem, the research objective, significance of the thesis and the methodology used in conduction the thesis briefly. Chapter two of the thesis contains the literature review part of the research, In this section the reader is be explained with what is meant by the issue in different writers. Chapter three of the research explains briefly the research presentation, analysis and interpretation of the study. Furthermore the last chapter that is chapter four contains the conclusion based on findings and analysis as well as the recommendation based on the conclusion.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **2.1 An Introduction to Management Information systems**

MIS, or management information systems, are used to manage the data created within the structure of a particular business. These systems store the data and allow the business to manipulate, analyze and compile the data through the use of software applications. Reports and analysis pulled from an information system can assist in the directing, Planning and decision making needs of managers.

**Information Management:** Businesses gather information every day in the form of invoices, proposals, daily sales figures and time cards. This information can provide a business insight into their operations, create a platform for decision making and reveal ideas that feed strategic planning. Gathering the information requires a consistent and reliable process in order for the information to be useful. Information management requires a system that supports the business model the information comes from.

**Structures:** Management information structures provide a central location in which to store and manage the information from. The structure or system is fed by people (employees, vendors, suppliers, customers) who input (provide) the data and output the data (creating reports and disseminating the data). Software and hardware supply the equipment needed to process, store and control access to the data. Business rules (how production cost is figured, formulas for vacation time, How accounts payable are processed for payment) dictate how the software should operate (David and Kroenke, 1992).

Data found in information management systems is gathered by hand or electronically. Documents can provide data that is then input in to the system or data can be gathered through conversation and input directly into the system via a form. Data can also be gathered using an electronic device such as a barcode scanner that is then downloaded into the management system. Delivering data into the system can occur from outside the system via customers, vendors or suppliers. Access to data may be controlled via a separate set of rules implemented by the business.

Tools: Software programs designed to fit the business rules and its required documents are the entry points for an information system. Hardware is needed to operate the software and can include large computer networks or a simple single server with a small number of desktops. Each business department may have a separate software program that shares its data with other programs or all departments can enter data through a central software program. Oracle and Microsoft offer management information system software products for medium to large businesses.

Output: Software applications allow the sorting and analyzing of data. Output typically comes in the form of reports. Reports can be disseminated electronically or by hand. A report can provide information about sales figures, production goals or even the financial value of the business as a whole. Annual reports and quarterly sales figures are created from data located in a management information system (Laudon and Laudon, 1998).

## **2.2 The Role of a Management Information System in an Organization**

Management information system, or MIS, is a managerial decision-making tool. A company uses it in all of its business operations and processes. As the management is in complete know of everything transpiring in the company, it leverages on this advantageous position. Using it, a company is able to record and document all facts pertaining to its procedures and methodologies. The basic intent is to manage and control all of the company's employees and material through MIS (Davis, 1974).

## **2.3 How to Plan for Management Information System**

A management information system is a robust series of programs and databases that can run on a variety of computer platforms. System applications are typically financial in nature, and include accounting, human resource and payroll applications among others. In their book, "Management Information Systems: A Contemporary Perspective " by Kenneth C. Laudon and Jane Price Laudon, they state it is "a set of procedures that collects (or retrieves), processes, stores, and disseminates information to support decision making and control" (see References 3). If you are planning to install a new management information system for a small or large business, the complexity of planning is significantly different between the two, but at a high level the steps are similar.

### **2.3.1 Determine the budget**

If it's for a small business, this is a simpler process than for a large corporation, where strategic planning and budget committees are typically involved, and budgets are based on prior-year expenses and budgets. Smaller companies may rely more on trade journals, user reviews and initial phone calls to possible vendors for a ballpark estimate.

### **2.3.2 Identify the business needs**

For small businesses, this may be as simple as purchasing off-the-shelf software that produces reports. Do you need to produce an income statement each month, or a regular report of expenditures for tax purposes? Determine if you want to interface to the Internet, or have other interfaces in mind, such as to a business checking account or to a spreadsheet. In all cases, the business needs are defined by required data input (manual or automated); processes to add, change or delete data; outputs such as reports or data files that are then exported to another system; and interfaces to other systems, so the data include critical data from those systems.

### **2.3.3 Evaluate hardware and Software requirements**

Install this new system on a computer that has the correct configuration. Understand the specifications beforehand to ensure that the destination computer has enough disk space and memory. The new system needs to be compatible with your operating system. If you are running on a network, ensure the version you are getting is compatible with the type of network you have. In many cases, small and large companies are now moving to web-based solutions where these considerations become secondary.

### **2.3.4 Evaluate additional expenditures for support, maintenance, and training**

New systems will not be useful for decision-making if the vendor does not provide reliable support when needed, or if the support is too expensive. There might be regular updates required to keep the tax tables current for instance, or extra expenses for training. When you do proper planning before making a decision on a management information system, the end result is more likely to be one that best helps you solve your business needs (Keen and Morton, 1978).

## **2.4 Role of Management Information Systems**

Management Information Systems (MIS) provide regular information to managers to allow them to make decisions based on data rather than guesses. Certain data and analysis can play a very

useful role in making good decisions about where and when to use human and other resources to achieve the mission of an organization. Managers with quality MIS are able to make decisions from an informed stance rather than a haphazard one. MIS can answer questions such as: Would it be better to add staff at the beginning or end of a manufacturing process? How do we choose the most efficient way to use our space? Do we need more patient exam rooms or a bigger lab? How much inventory should I store and when do I order more stock? What hours have the most customers, so I'll have an adequate staff to serve them?

The world is developing an increasingly global market and economy. Managers know that one tool they need is regular, clear and consistent information to help them in guiding their organization. This does not happen by chance. A system needs to be thoughtfully created with the purpose of providing useful information in the simplest and most elegant way possible. The basic management information system measures inputs and/or outputs, allowing managers to analyze the relationship between them and make decisions based on the outcomes they desire (Srivastava, 2004).

## **2.5 MIS and the organization's Purpose**

Organizations exist for reasons. Legislators review the needs and demands of the citizens to decide how to allocate tax revenues to promote the sometimes competing economic and social goals of the state. Perhaps the reason for the legislature is to seek the greatest good for the greatest number; some others operate from the position that the goal is to assure that the needs of the most vulnerable in the population are not ignored.

Airlines exist to get people to distant locations efficiently and safely and make a profit for the shareholders. The balancing of those three goals is critical. For example, in the desire for higher profits, or even fiscal solvency, the airlines have created closer seating arrangements and annoyingly cheap snacks. It is essential that the information system designed for management helps them support the organization's purpose. Toyota is legendary for its management system in which any employee can stop the assembly line to make an improvement to the process.

Management steers the organization to achieve the organization's purpose. To have the information necessary to make changes in resource allocation or personnel use, management needs key indicators as to how the process is working. A management information system



provides regular information about the health and function of the organization. The MIS needs to provide timely, accurate, clear and consistent information that gives managers a view of the entire organization.

## **2.6 The Importance of Management Information System**

Businesses worldwide make extensive use of management information Systems (MIS). MIS designed by the top management of an organization is a tool for assembling and accumulating facts and figures about all the important business processes. The information so collected is tabulated and presented in the form of meaningful reports. The MIS particularly aims at controlling the technologies, work force and the policies, procedures and practices of the business.

The Development of Management Information Systems almost happened in parallel with the development of computers. Both of these have been successfully in practice since 1960. MIS aids the organization in effective and efficient decision making. The organizational data, like information on the processes, standard operating procedures and audit preparation methodology, are all tabulated and presented in the forms of reports. Also the internal controls for each department that list the flow of work between employees, the authority-responsibility relationships; all are listed by the MIS.

The advantages of using an MIS are manifold. An organization that uses MIS is able to record, process, route and tabulate all important business transactions. As and when need arises, the organization is able to incorporate necessary changes and improvements to its areas of concern. For example when an organization sees that the actual and projected sales figures are not in tune with each other, it can take steps to make changes and thus align the two figures. MIS facilitates informed decision making. MIS usually represents a number of options from which the organization usually picks the best trade-off for sales, operations and other strategic area. The top management also analyzes whether its resources are being utilized optimally.

A two-way communication flow is greatly enhanced by MIS. The management freely tells its employees their jobs, and the ways and means in which they are to accomplish the tasks entrusted to them. The employees also in turn discuss their doubts, concerns and problems. Organizations use four types of MIS. The Transaction Processing System or TPS is the most

basic and elementary form of MIS. TPS processes recurring and routine business transactions, such as customers' orders or orders for raw material. The Operations Information System, or OIS, collects comprehensive data and tabulates it for operations managers. Using this, the managers are able to maximize production and minimize losses. Decision Support Systems, or DSS, and Expert Systems, or ES, are two forms of MIS that the top management uses extensively. Both forms use modeling techniques and data bases for presenting their reports.

The businesses need to allocate a chunk of their yearly budgets for building, maintaining and sustaining a sound MIS system in place. Technological up gradations cost money and salaries have to be paid to the developers of the MIS. Also organizations outsource the task of developing the MIS to outside consultants. The consultants must be carefully and diligently made aware of all the organizational policies and procedures. (Kotter, 1996)

## **2.7 Advantages & Disadvantages of Information Management Systems**

Modern businesses have been leveraging management information systems (MIS) to manage order, organize and manipulate the gigabytes and masses of information generated for various purposes. MIS helps businesses optimize business processes, address information needs of employees and various stakeholders and take informed strategic decisions. However, budget allocation and monitoring issues can affect the efficacy of MIS. It has its advantages and disadvantages depending on organizational deployment and usage.

### ***2.7.1 Advantages***

Management information systems have changed the dynamics of running businesses efficiently. Decentralization is one of the biggest advantages; it allows monitoring of operations at low levels and free up resources for departmental managers to devote time to strategic activities. Coordination of specialized projects and activities is much better and decision makers in the organization are aware of issues and problems in all departments. Another advantage of MIS is that it minimizes information overload, which can be quite common with conventional businesses in the modern era (Marchionini, 1995).

#### ***2.7.1.1 Better planning and Control***

MIS has to be designed and managed in such way that it aggregates information, monitors the company's activities and operations and enhances communication and collaboration among

employees. This ensures better planning for all activities and better ways to measure performance, manage resources and facilitate compliance with industry and government regulations. Control helps in forecasting, preparing accurate budgets and providing the tools and vital information to employees, top management and business partners.

### ***2.7.1.2 Aid decision making***

The purpose of MIS is to generate synthesized and processed information from computerized/automated and certain manual systems. Information distribution to all levels of corporate managers, professionals and key executives becomes quite seamless with streamlined MIS. Managers are able to make quick, timely and informed decisions. Top management and board members can take strategic decisions, plan future growth and business expansion activities based on the data and information generated by MIS.

### ***2.7.2 DISADVANTAGES***

Depending on organization deployment, usage and extraneous factors, some disadvantages related to Management Information Systems can come to the force. Allocation of budgets for MIS upgrades, modifications and other revisions can be quite tricky at times. If budgets are not allocated uniformly or as per immediate requirements, key functionalities might get affected and benefits might not be realized consistently. Integration issues with legacy systems can affect the quality of output and vital business intelligence reports.

#### **2.7.2.1 Constant Monitoring Issues**

Change in management, exits or departures of department managers and other senior executives have a broad effect on the working and monitoring of certain organization practices including MIS systems. Since MIS is a critical component of an organization's risk management strategy and allied system, constant monitoring is necessary to ensure its effectiveness. Quality of inputs into MIS needs to be monitored; otherwise consistency in the quality of data and information generated gets affected. Managers are not able to direct business, operational and decision-making activities with the requisite flexibility.

## **2.8. How to Use a Management Information System**

A Management Information Systems (MIS) is the name given to computer systems which provide metrics in line with the goals and objectives of an organization. The development of an MIS consists of assembling the right tools to assist management in making the best business decisions related to achieving organizational objectives. These systems are especially helpful when used in conjunction with financial data which can then be analyzed for regular reporting. Use MIS to support strategy decisions. Tactical decision making has always been more difficult than strategic planning due to the lack of knowledge about future business events. MIS and business systems allow companies to use metrics and forecasts to spot trends in business data.

Create regular financial statements. MIS can be used to improve the accuracy and integrity of financial statements and performance reports. This helps with monitoring implementing strategic decisions. Collate massive amounts of data. By having access to business data, managers and key decision makers can identify patterns and trends that may go unnoticed in raw data. MIS also helps to run simulations based on key drivers of business performance. This allows managers to run scenarios on business data without having to commit to a particular plan of action. Use MIS to save time by providing a central location for all information and data. Having a central location to store business data cuts back on the number of organic spreadsheets and databases which hinder communication can provide a common language. MIS must provide data in a single format; that is, all reports must use the same basic methodology. This methodology becomes the dominant way in which managers share and access information making the ability to communication with a common “data” language more efficient.

## **2.9 Objectives-Setting and Performance Evaluation**

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## **2.10 Objectives of Management Information Systems**

Management Information Systems (MIS) were the hot new corporate tool back in the 1980s. As computer systems became smaller, more powerful, and more cost efficient, developers created more—and less expensive –software options.

Although great strides in MIS systems were made in the 1980s, the core designs were created in the 1960s, after President Kennedy challenged the United States find a way to send an American to the moon and return him safely. His dream was realized before the end of the decade, as the Apollo program accomplished the goal. IBM, at the time the undisputed leader in the computer industry, faced the challenge by designing the first major MIS system to help the MASA achieve its objective. Originally titled ICS (information control system), it was renamed IMS (information management system) in 1968. Shortly after NASA implemented the system, IBM released it to the IT and business community.

True database management and MIS systems were born and, although expensive, were available to business, government and other entities.

The function of all MIS systems is identical: manage, massage and manipulate data (or groups of data) in a fashion that enables good decision-making. In the first half of the 20<sup>th</sup> century, businesses managed information on paper, with detailed filing systems and hand calculated reports (Laudon and Laudon, 1998).

Contemporary MIS systems involve one or more computers, working in concert, to achieve the stated goals of an organization. The function is always the same, but the desired results fluctuate with the specific foals and needs of individual organizations. Since the universal language of commerce is numbers, using the incredible speed of computers, MIS systems achieve their function amazingly well.

There are as many types (and subtypes) of management information systems as there are business functions. Some of the most popular types of MIS are as follows:

- Customer relationship management
- Marketing, particularly target marketing efforts, directed at specific groups of potential customers or selling niche products
- Financial management
- Strategic plan development
- Inventory management systems
- Optimal investing strategy creation
- Projected sales volume
- Projected operating expenses and cost control

Other types of MIS systems calculate projected tax revenue for governments; statistical evolutions of all types for business, researchers and universities; scientific purposes in all disciplines; and cost/benefit relationships for decision-making purposes. The benefits of MIS systems to businesses, governments, scientists, universities, students, nonprofits and all other entities are diversified. Some examples of the most often realized benefits include the following:

Implementation of Management by Objectives (MBO) techniques: MIS allows all participants, both management and staff, to view, analyze, and interpret useful data to set goals and objectives.

Generates competitive advantages: Businesses succeed or fail based on how they face competitive challenges. MIS, if implemented properly, provides a wealth of information to allow management to construct effective plans to meet, and beat, their competition.

Fast reaction to market changes: The victory often goes to the quick, not necessarily the best. MIS can deliver facts, data and trends to businesses with lightning speed. Having this information allows companies to react quickly to market changes, regardless of the type (positive or negative) of volatility.

The most important features of contemporary MIS systems involve flexibility and reasonable cost. In the world of business, it matters little what industry you are in, how large or small the company may be and how computer savvy the management is. There are MIS systems that are easy to use, affordably priced and immensely reliable available to all businesses.

Unlike earlier MIS systems, an entity does not even need to make a large investment in computer hardware or exotic software. Whether a company is in the Fortune 200 or the mom-pop category, it can take advantage of an MIS system that fits its budget and needs.

The objective of an MIS system – to provide useful information, data and analysis – remains constant, but the features and uses are customizable to suit the preferences and needs of every business, individual or government.

## **2.11 Types of Management Information Systems**

Management Information System (MIS) is a computer-based system that provides the information necessary to manage an organization effectively. An MIS should be designed to enhance communication among employees, provide an objective system for recording information and support the organization's strategic goals and direction.

### ***2.11.1 Transaction-Processing Systems***

Transaction-processing systems are designed to handle a large volume of routine, recurring transactions. They were first introduced in the 1960s with the advent of mainframe computers. Transaction-processing systems are used widely today. Banks use them to record deposits and payments into accounts. Supermarkets use them to record sales and track inventory. Managers often use these systems to deal with such tasks as payroll, customers billing and payments to suppliers.

### ***2.11.2 Operations information systems***

Operations information systems were introduced after transaction-processing systems. An operations information system gathers comprehensive data, organizes it and summarizes it in a form that is useful for managers. These types of systems access data from a transaction-processing system and organize it into a usable form. Managers use operations information systems to obtain sales, inventory, accounting and other performance-related information.

### ***2.11.3 Decision Support Systems (DSS)***

A DSS is an interactive computer system that can be used by managers without help from computer specialists. A DSS provides managers with the necessary information to make informed decisions. A DSS has three fundamental components database management system



(DBMS), which stores large amounts of data relevant to problems the DSS has been designed to tackle; model-based management system (MBMS), which transforms data from the DBMS into information that is useful in decision-making; and dialog generation and management system (DGMS), which provides a user-friendly interface between the system and the managers who do not have extensive computer training.

#### ***2.11.4 Expert Systems and Artificial Intelligence***

Expert systems and artificial intelligence use human knowledge captured in a computer to solve problems that ordinarily need human expertise. Mimicking human expertise and intelligence requires the computer to do the following: recognize, formulate and solve a problem; explain solutions; and learn from experience. These systems explain the logic of their advice to the user; hence, in addition to solving problems they also can serve as a teacher. They use flexible thinking processes and can accommodate new knowledge.

A potential problem with relying on electronic communication and processing of information is the loss of the vital human element. Sometimes, because of the complexity of information, an MIS report cannot effectively summarize it. Very rich information is needed to coordinate and run an enterprise, and certain classes of information cannot be quantified. For example, it might be wrong to evaluate an employee's performance solely based on numbers generated by an MIS. Numbers can indicate a performance problem, but a face-to-face meeting is necessary to discuss the nature of the problem.

### **2.12 How to Develop a Management Information System**

Management information systems (MIS) provides company data needed by boards of directors, senior administrators and lower-level managers. MIS identifies strategic personnel and operational and financial accomplishments and shortfalls, monitors progress toward goals and assesses changes that might be needed. An effective management information system gathers, organizes, analyzes, evaluates, and communicates useful data in a timely manner to the people who require it. Information is the cornerstone of effective management, but data for management use must be carefully selected and appropriately presented to be effective.

Describe the areas of information and the items in each you will collect data for. Make a list of your company's departments, such as human resources, marketing, finance, including accounts

payable and receivable, purchasing, sales, inventory, risk management, information technology, customer service and manufacturing. Select the data from each that managers need to know in order to make reasoned decisions. Present those data in ways that make them easy to understand and use. Use a variety of charts, lists, spreadsheets, statistical comparisons and other formats for communicating the information. From a group of stakeholders, including policy makers, administrators, managers, and information technicians, to review and modify the form and substance of the items to be collected. Input from this group is critical because they help you determine what data will be collected, how they will be collected and by whom, how they will be presented and who will receive the information. They can also help you weed out data that is not needed (Lucas, 1990).

Finalize a detailed operational plan that describes what you intend to collect, how, how often and by what means the data will be processed, secured from unauthorized intrusions and stored. Indicate what equipment and supplies the system requires and what personnel are necessary, including their training, maintenance and supervision requirements. Prepare a detailed budget and a schedule for getting the system operational. Obtain the needed approvals for your plan and budget. Describe a plan to overcome the obstacles you are likely to face. Determine the level of cooperation you can expect from the system developers and users. Develop a plan for training the end-users. Measure the efficiency of the information output. Determine the extent to which the users find the information helpful in decision-making and easy to use. Put in place a monitoring procedure to ensure the system's continuing effectiveness (Kotter, 1996).

### **2.13 Duties & Responsibilities of a Bank Management Information Systems Manager**

Information systems manager has direct supervisory responsibilities over the information systems analysts who work underneath her. While preserving security is important at all IT jobs, it is critical and paramount at a banking IT job, where a breach of security by a hacker could be devastating. In addition to security concerns, bank IT managers must also supervise analysts trying to build processes and systems that aid in efficiency and operational flow.

### ***2.13.1 Client Needs***

Unlike the information systems analysts and programmers who carry out the work, an information systems manager must lead the project by first deciding what kind of work needs to be done. While the bank's clients will know what problems they need addressed, you as a systems manager must be able to envision the solutions to those problems and formulate a plan for how the analysts and programmers can build a solution. System security must be paramount within your proposed solution.

### ***2.13.2 Project Stages***

Once you've identified a solution for the bank's client, you must create an operational plan for how your team will build the solution. This may include writing job descriptions for the team members, creating deadlines, and working with the bank's finance department to stay within budget. Additionally, you will need to write – or oversee the writing of – the project specifications. The project specifications are the cornerstone documents which outline exactly what criteria must be met by your team. It sets the expectation and the goal.

### ***2.13.3 Communication***

Unlike information systems managers in other industries, your role within the banking industry means you must be able to communicate intelligently with clients about insurance, accounting, finance, mergers and acquisitions, and small business loans. Having a solid understanding of these industries will help you better understand the needs and problems of your clients and will enable you to create specific, cutting-edge systems solutions within these fields.

### ***2.13.4 Systems Testing***

As the manager of the systems project, you must develop the metrics by which you test your systems to ensure they are performing in the desired way. Once you develop these metrics, you must oversee testing the system and fix any deficiencies within your system platform. You must also proactively monitor and oversee the system to ensure that you can prevent defects before they form.

## **2.14 Problems Faced by a Bank Manager**

A bank manager, commonly called a branch manager, has the responsibility as the on-site expert for all operations of the bank. Of the duties, problems that may arise in any single part of the

daily operation of the branch fall squarely on the desk of the manager. Knowing the potential problems will enable the bank manager to prepare for dealing with them or avoiding them altogether.

#### ***2.14.1 Customer Service***

Bank managers embody the highest level of the bank as a whole to the customers. Any customer service issue that is not accurately and satisfactorily handled by the tellers, officers and other staff, will become the responsibility of the manager. Oftentimes, explaining the bank's terms and conditions to a customer will be required. The explanation needs to be interpreted from the legal jargon used in the bank's various disclosures of terms into consumable terms for a person unfamiliar with banking. Sufficiently answering inquiries and smoothing over issues with disgruntled account holders will keep customers satisfied and continuing to bank with the company.

#### ***2.14.2 Hiring Bank Employees***

Hiring bank tellers and credit officers is sometimes handled at the corporate level for many large banks. For smaller banks, the duties to recruit and hire employees are a part of a bank manager's duties. Hiring employees to work in a financial institution entails many of the same challenges as hiring for other positions, but the added necessity to find, vet and hire bank employees come with the responsibility of trust and accuracy. Bank managers need to know what details of an applicant's background would not only prove the candidate's ability to perform the job, but which past issues would prevent them from trusting the applicant with the sensitive account information to which they would have access.

#### ***2.14.3 Training Staff***

Accuracy is among the most important attributes of a bank's staff. Employees must exemplify precise accounting skills as well as fluency in the bank's terms and policies. The bank manager is responsible for making sure each of the staff members is current in their knowledge of operational standards, abreast of bank promotions and recent changes, as well as the employee's customer service duties. Identifying and correcting employee incompetency is the job of the branch manager. Her or his ability to rectify any issues through training saves the hassle of having to deal with an unsatisfied or misinformed customer later.

#### ***2.14.4 Corporate Departments***

As the highest ranking officer on-site, the bank manager has the duty to correspond with entities within the corporation outside of the branch. A customer with a concern may elect to call a corporate phone number or send a letter or email message to a corporate site versus contacting the branch directly. Handling the customer's issue will likely take action at the branch level. The bank manager will be charged with fielding the customer's inquiry and following up with the customer inside the branch. In other cases, loan applications and other matters that require approval by a group outside of the branch will need to be in communication with the bank manager to keep the customer apprised of the progress.

### **2.15 Type of Business Information Systems & Modern Organization**

Modern information systems represent a set of computers and software that electronically transfer information between various business functions. Companies use these information systems to improve and enhance their business tasks and activities. Advancements in the information technology field allow both small and large businesses to implant computerized information systems in their operations. The type of information systems used depends on a company's size, scope of operations and number of users.

#### ***2.15.1 Enterprise Resource Planning***

Enterprise resource planning is a large-scale computer-based system that organizations use to create information systems in all of their departments.

Large organizations use these systems because it creates a single computer system that can integrate various tasks and activities. A common downside in business is using too many hardware or software applications in business operations, which can create redundancies in the company. Enterprise resource planning can also use an Internet-based system that allows multiple regional or international locations to access this information system.

#### ***2.15.2 Accounting***

Accounting information systems are common in many companies that need a way to track financial information. These systems process financial transactions from various departments and allow accountants to access the information to input it into the company's general ledger. An accounting information system typically uses a specific software application that focuses solely

on financial transactions. Business owners and managers rely on this system to provide support information for making business decisions and measuring financial performance.

### ***2.15.3 Data***

Data systems allow for the internal or external transfer of business information. Operational managers take advantage of these systems to review data or figures not related to a company's accounting information. Employee productivity, production output and resource waste are all pieces of information that operational managers will review. Outside companies often use data information systems to electronically order or process information relating to the company. This creates a shorter lead time for ordering raw materials and products for the production process or increasing sales to consumers.

### ***2.16 Design of a MIS in organization***

The following are suggested steps to follow when designing a MIS for a system.

#### ***Step One: Assessing Information Needs for planning, Monitoring, and Evaluation***

An investigation needs to be conducted into the types of decisions that extension managers have to make. For example, village extension workers (VEWs) seek solutions to their problems from their supervisors. In turn, supervisors need to be in a position to resolve these problems and to document how problems were solved for future reference.

State-level managers also need information to resolve problems. They are concerned with implementing extension programmers district by district. They need information on staffing, transport, research-extension linkages, staff training activities, and successes (or lack of them) in solving technical problems. Feedback is needed from field staff and farmers on farmer problems and on which recommended practices are helpful. State-level managers need to know something about the amount, kinds, and combinations of media support (i.e., print, radio, television) that have been used for various efforts. They need to know if external factors have limited the success of particular efforts such as supply of credit or farm inputs and they need some assessment of farmers' responses to extension programmers (Raheja & Krishna, 1991: 84).

### ***Step Two: Deciding the Levels of Information Groups, Information Frequency, and Content***

The number of information groups within an agricultural extension organization has to be decided because each group potentially will require a different type of information. Data processing consists of identifying each item of data and systematically placing it within a scheme that categorizes data items on the basis of some common characteristic or feature. Data not organized into a meaningful pattern can serve almost no useful purpose to those who must use them to make decisions. A computer can help in processing the data effectively. (Rao, 1985) suggested the use of computers in agricultural extension in India. He proposed that computer programmers be focused on district and sub divisional levels. Documentation (storage and retrieval) involves storing items of information in an orderly manner. Storing information means recording it on storage media from which it can be made available when needed.

Storage media are materials such as ordinary office paper, magnetic tapes, magnetic disks, microfilms, film strips, and a few other devices. Once the information is recorded on these storage media, the system can generate, on demand, information required for making decisions, solving problems, or performing analyses and computations. Information retrieval refers to the ability to take different types of data in the storage media and to array information in some desired and meaningful format. A properly designed storage and retrieval system matches the related variables efficiently and accurately. In some cases, it even suggests alternative courses of action for management to take.

Presentation of information should be in a form and format suitable to the needs of extension managers. Generally, information is presented in reports, statistical summaries, analyses, and so forth in the form of text, figures, charts, tables, and graphs. The presentation of information should be precise, clear, and appealing.

### ***Step Three: Ensuring System Flexibility and Adaptability***

Flexibility means the ability to retrieve information from a system in whatever form it may be needed by decision makers. Therefore, data need to be collected in some detail so that they can be rearranged or summarized according to the needs of managers. But system design should not be too complex because it must first serve the needs of the lowest levels of management (i.e., sub district) that are likely to be instrumental in collecting important components of the original data.

In addition, the system also must serve the needs of the district, regional, state or provincial, and national levels. Therefore, considerable care must be taken in assessing what types of information are required by management at the different levels. At the same time, effort must be made to ensure that the information collected meets acceptable standards of accuracy, timeliness, and coverage for each level.

### ***2.16.1 Need for automation***

An automated MIS system contains data just as a manual system does. It receives input, processes input, and delivers the processed input as output. Some input devices allow direct human-machine communication, while others require data to be recorded on an input medium such as a magnetizable material (specially coated plastic flexible or floppy disks and magnetic tapes). The keyboard of a workstation connected directly to a computer is an example of a direct input device. Use of automation makes it possible to store immense quantities of information, to avoid many of the errors that find their way into manual records, and to make calculations and comparisons that would be practically impossible in a manual system.

### ***2.16.2 Organization of a database***

Data are usually generated at the field level through transaction-processing systems, but once the data are captured, any echelon along the organizational hierarchy may use them, provided that information requirements have been well defined, appropriate programmers have been implemented, and a means has been arranged for the sharing of the data. This would imply that the same data can be used by different sets of programmers; hence we distinguish between the database (a set of data) and the applications (a set of programmers). In a decision support system (DSS), this set of programmers is the model base (Keen & Morton, 1978).

The term database may refer to any collection of data that might serve an organizational unit. A database on a given subject is a collection of data on that subject that observes three criteria: comprehensiveness (completeness), non redundancy, and appropriate structure. Comprehensiveness means that all the data about the subject are actually present in the database. Non redundancy means that each individual piece of data exists only once in the database. Appropriate structure means that the data are stored in such a way as to minimize the cost of expected processing and storage (Awad & Gotterer, 1992).



### ***2.16.3 Networking and interactive processing***

The two principal blocks that facilitate development and use of MIS are DBMS and telecommunications. The former makes data integration possible, while the latter brings information closer to the end users, who constitute nodes in a telecommunication network. The notion of telecommunications implies that some geographical distance exists between the computer site and the users' locations and that data are electronically transmitted between them. Remote applications may be executed between two floors in the same building, two offices in the same city, two offices on the same continent, or two places on opposite sides of the globe (Martin, 1990).

### ***2.16.4 System alternatives and evaluation: Centralization versus decentralization***

A completely centralized information system handles all processing at a single computer site, maintains a single central database, has centralized development of applications, provides central technical services, sets development priorities centrally, and allocates computer resources centrally. The system's remote users are served by transporting input and output data physically or electronically.

A completely decentralized system may have no central control of system development, no communication links among autonomous computing units, and stand-alone processors and databases at various sites. Each unit funds its own information-processing activities and is totally responsible for all development and operation. An advantage of centralized information systems is that they provide for standardization in the collection of data and the release of information. There also are some economies of scale. A centralized system reduces the need for multiple hardware, software, space, personnel, and databases. It may be possible to recruit more qualified personnel in a central facility.

Observations indicate that user motivation and satisfaction are increased under a decentralized environment. This is attained because users feel more involved and more responsible, systems are better customized to their specific needs, and they usually get better response time in routine operations as well as requests for changes. It is likely that for national agricultural extension systems, neither a completely centralized nor a completely decentralized system is desirable. While it may be useful to decentralize hardware and software resources at different locations, the development of applications and provision of technical services may better be centralized.

### ***2.16.5 End-user computing***

The widespread use of personal computers and computer-based workstations has brought with it the age of end-user computing. End-user computing is a generic term for any information-processing activity performed by direct end users who actually use terminals or microcomputers to access data and programmers. The manager as end user may be provided with powerful software (like DBMS) for accessing data, developing models, and performing information processing directly. This has brought computing directly under the control of the end users and eliminates their dependence on the information systems specialist and the rigidities of predesigned procedures. They may now make ad hoc queries of information and analyses it in various ways. They may write programmers, or may often use ready-made programmers stored in the computer, using the computing power of a local PC or the mainframe to which it is connected.

## **CHAPTER THREE**

### **DATA PRESENTATION, ANALYSIS AND INTERPRETATION**

This chapter deals with analysis and interpretation of the study based on the data gathered from the respondents. All the data were obtained through questionnaire containing close ended and open-ended questions and through interview with information management system department managers and supervisors working in commercial bank of Ethiopia.

180 copies of questionnaire were distributed to respondents and interview question were held with the remaining 7 management bodies. Out of 180 questionnaire distributed, 160 (88%) have been completed and returned. Thus, the data were analyzed and interpreted using frequency count and percentage computation.

#### **3.1 General Characteristics of Respondents**

In order to be sure about the response accuracy and/or reliability the researcher collect and analyze facts related to the general characteristics of respondents, accordingly Table 1 shows the general characteristics of respondents, which includes their age, sex, educational status, and occupation.

**TABLE 1 SEX, AGE, EDUCATIONAL STATUS AND OCCUPATION OF THE RESPONDENTS**

S.N	Items	Frequency	
		No	%
1	Sex		
	Male	105	66
	Female	55	34
	<b>Total</b>	<b>160</b>	<b>100</b>
2	Age		
	19-25	44	28
	26-32	30	19
	33-39	64	40
	40-46	10	6
	Above 47	12	7
	<b>Total</b>	<b>160</b>	<b>100</b>
3	Educational status		
	Below 10 <sup>th</sup>	-	-
	Certificate	32	20
	Diploma	39	24
	Degree	72	45
	2ed degree	17	11
	<b>Total</b>	<b>160</b>	<b>100</b>
4	Position		
	Section head	10	7
	Data administrator	29	18
	IT assistant	50	31
	Information analyst	15	10
	Other	55	34
	<b>Total</b>	<b>160</b>	<b>100</b>

As can be seen in table 1 item 1 above, 105(66%) of the respondents are male and 55(34%) of them are female. These show that the study addressed both gender streams which are very important to reflect facts from different view point.

Regarding item 2 of the same table 64(40%) of the respondents belongs to the age group of 33-39. The remaining 44(28%), 30(19%), 12(7%) and 10(6%) fall in the age group of 19-25, 26-32, above 47 and 40-46 respectively. This implies that, majority of the respondents can easily understand and explain about the topic under study.

Concerning educational status of respondents 72(45%) of them are degree holders and the rest 39(24%), 32(20%), and 17(11%) of them are diploma, certificate, and second degree holders respectively this might assist the study to obtain rational ideas from them.

With respect to their job position as shown in table one item 4 above, 10(7%), 29(18%), 50(31%), 15(10%) and 55(34%) of the respondents are working as section head, data administrator, IT assistant, information analyst and other position respectively. From this, one can understand that, respondents are working in variety of job position which is significantly support addressing problems in different area related to the study topic.

### **3.2. ANALYSIS AND INTERPRETATION OF DATA**

The following section deals with presenting analyzing and interpreting the data directly related to the study which was collected from respondents.

**TABLE 2 PRACTICES OF MIS WITHIN THE BANK**

S.N	Item	Alternatives	Frequency	
			No	%
1	How do you rate the bank's MIS practice?	Very good	31	19
		Good	48	30
		Medium	-	-
		Low	81	51
		Very low	-	-
		<b>Total</b>	<b>160</b>	<b>100</b>
2	Do you think that the system is functional enough?	Well functional	-	-
		Functional	15	9
		Moderately functional	67	42
		Poorly functional	65	41
		Not at all	13	8
		<b>Total</b>	<b>160</b>	<b>100</b>

As can be observed from the above table, item 1 indicated that the level of MIS practice of the organization under study, majority of the respondents i.e. 81(51%) replied that the bank's management information system practiced in at lower level. Whereas the remaining 48(30%) and 31(19%) of them replied that they the level of MIS practice with in the bank is good and very good respectively. This implies that, Commercial Bank of Ethiopia practice it management information system not satisfactorily level.

On the other hand, item 2 of the same table shows that, majority of the respondents i.e. 67(42%) said, the management information system of the bank is moderately functional. In addition to this, significant number of respondents i.e. 65(42%) replied the system is poorly functioned. While the rest 15(9%) and 13(8%) of them said that the information management system of the bank is can be seen al functional and not at all respectively. From this anyone can understand that the functionality of the information system is doubtful since majority of the respondents testify it.

### 3.3 Role of Management Information System

The world is developing an increasingly global market and economy. Managers know that one tool they need is regular, clear and consistent information to help them in guiding their organization. This does not happen by chance. A system needs to be thoughtfully created with the purpose of providing useful information in the simplest and most elegant way possible. The basic management information system measures inputs and/or outputs, allowing managers to analyze the relationship between them and make decisions based on the outcomes they desire.

**TABLE 3 ROLE OF MANAGEMENT INFORMATION SYSTEM**

Item	Alternatives	Frequency	
		No	%
To what extent the system played significant role in the day to day operation?	To very great extent	-	-
	To great extent	59	37
	To some extent	101	63
	To lower extent	-	-
	To very lower extent	1	-
	<b>Total</b>	<b>160</b>	<b>100</b>

Table 3 above indicated that, majority of respondents agree with to some extent the bank management information system played greater role in the day to day operation. i.e. 101(63%), while the remaining 59(37%) of the respondents said to garret extent the management information system of the bank is going to played grater role in the day to day operation of the bank. This implies that, there is agape in full operationally of the bank management information system this might hinder utilization of company capacity in delivering its banking service operation.

### 3.4 Utilization of MIS in organizational operation

The development of an MIS consists of assembling the right tools to assist management in making the best business decisions related to achieving organizational objectives. These systems are especially helpful when used in conjunction with financial data which can then be analyzed for regular reporting. Use MIS to support strategy decisions. Tactical decision making has

always been more difficult than strategic planning due to the lack of knowledge about future business events. MIS and business systems allow companies to use metrics and forecasts to spot trends in business data.

As indicated in Table 4 below, the researcher asked the respondents in relation to utilization rate of the system in the service operation. Accordingly the table below depicted that 87(54%) of the respondents testify that the bank utilize the management information system to some extent. Whereas the remaining 73(46%) of the respondents replied that, the bank utilized its management information system at lower level. Thus, one can easily understand that, the even if the bank develop and make it operational it management information system in its day to day operation there is no place to use it well.

**Table 4 MIS utilization rate within the operation**

Item	Alternatives	Frequency	
		No	%
To what extent the bank utilize it MIS in the service operation?	To very great extent	-	-
	To great extent	-	-
	To some extent	87	54
	To lower extent	73	46
	To very lower extent	-	-
	<b>Total</b>	<b>160</b>	<b>100</b>

### 3.5 Handling Capability of MIS Mangers

An information systems manager must lead the project by first deciding what kind of work needs to be done. While the bank’s clients will know what problems they need addressed, you as a systems manager must be able to envision the solutions to those problems and formulate a plan for how the analysts and programmers can build a solution. System security must be paramount within your proposed solution.

Preserving security is important at all IT jobs, it is critical and paramount at banking IT job, where a breach of security by a hacker could be devastating. In addition to security concerns, bank IT managers must also supervise analysts trying to build processes and system that aid in efficiency and operational flow.



In this regard respondents were asked to give their rate handling ability of managers within the bank. Accordingly they provided their response and it is summarized & presented in the table on following table.

**Table 5 HANDLING CAPABILITY OF MIS MANAGERS**

S.N	Item	Alternatives	Frequency	
1	How do you rate the handling capability of your manager in managing MIS?	Very high	-	-
		High	30	18
		Medium	46	29
		Low	84	53
		Very low	-	-
		<b>Total</b>	<b>160</b>	<b>100</b>
2	How do you rate technical ability of your bank MIS manager?	Very high	-	-
		High	-	-
		Medium	111	69
		Low	31	19
		Very low	18	12
		<b>Total</b>	<b>160</b>	<b>100</b>

Item 1 in the above table shows that, 84(53%) i.e. majority of the respondents said the managers are not well equipped with all the necessary capabilities to handle MIS operation within the bank. The remaining 46(29%), 30(18%) of them replied that handling capability of managers within the bank rated medium and high respectively. From this one can easily realize that, the effective functionality of the system of the bank is questionable.

Item 2 in the same table indicated that, 111 (69%) i.e. majority of the respondents replied that the MIS management of the bank is technically qualified at medium level. The rest 31(19%) and 18(12%) of them said that the technical quality of the manager within the bank satisfactory at low and very low level respectively. This signifies that the technical performance of MIS managers lack some sort of ingredients to handle the system well.

### 3.6 Operational Benefits of MIS

MIS aids the organization in effective and efficient decision making. The organizational data, like information on the processes, standard operating procedures and audit preparation methodology, are all tabulated and presented in the forms of reports. Also the internal controls for each department that list the flow of work between employees, the authority-responsibility relationships; all are listed by the MIS.

**Table 6 Benefits of Management Information System**

S.N	Item	Alternatives	Frequency	
			No	%
1	To what extent the bank obtained appropriate benefit from its MIS in handling is organizational operation?	To very great extent	-	-
		To great extent	<b>81</b>	<b>51</b>
		To some extents	<b>66</b>	<b>41</b>
		To lower extent	<b>13</b>	<b>8</b>
		To very lower extent	-	-
		<b>Total</b>	<b>160</b>	<b>100</b>

As can be seen in table 6 above, majority of the respondents i.e. 81(51%) of them replied that the bank obtained significant benefit from the management information system. However, significant number of the respondents i.e. 66(41%) said to some extent commercial bank of Ethiopia consume the benefit from its MIS. The rest 13(8%) said low. This implies that management information system, significantly assist the overall operation of the bank. Beside this according to the data obtained in the open ended question the system is support the operation basically in recording, processing, and route and tabulate all important business transactions.

### 3.7. Management Information System Alternatives and Evaluation

A completely centralized information system handles all processing at a single computer site, maintains a single central database, has centralized development of applications, provides central technical services, sets development priorities centrally, and allocates computer resources centrally. The system's remote users are served by transporting input and output data physically or electronically. A completely decentralized system may have no central control of system

development, no communication links among autonomous computing units, and stand-alone processors and databases at various sites. Each unit funds its own information-processing activities and is totally responsible for all development and operation.

An advantage of centralized information systems is that they provide for standardization in the collection of data and the release of information. There also are some economies of scale. A centralized system reduces the need for multiple hardware, software, space, personnel, and databases. It may be possible to recruit more qualified personnel in a central facility.

**Table 7 System Alternative and Evaluation**

Item	Alternatives	Frequency	
		No	%
What kind of MIS exists within the bank?	Centralized	41	26
	Decentralized	119	74
	Hybrid	-	-
	Total	160	100

As can be observed in table 7, above the researcher raised questions to the respondents in relation to whether the system used centralized or decentralized or a combination of two, accordingly the responses are summarized and presented in the above table. Majority of the respondents i.e. 119(74%) of them said that bank used centralized management system. While the rest 41(26%) of respondents replied that, the bank used decentralized management information system. This indicated that, the bank creates some opportunities for all other functional units to access data links easily for making decisions.

### **3.8. Factors Affecting the Functionality of MIS**

A management information system is a robust series of programs and databases that can run on a variety of computer platforms. System applications are typically financial in nature, and include accounting, human resource and payroll applications among others. In their book, "Management Information Systems: A Contemporary Perspective" by Kenneth C. Laudon and Jane Price Laudon, they state it is "a set of procedures that collects (or retrieves), processes, stores, and disseminates information to support decision making and control" (see References 3). If you are

planning to install a new management information system for a small or large business, the complexity of planning is significantly different between the two, but at a high level the steps are similar.

**Table 8 Factors Affecting the Proper Operation of MIS**

Item	Alternatives	Frequency	
		No	%
Which factors mostly affect the effective operation of MIS?	Better Planning and Control	84	53
	Constant Monitoring Issues	-	-
	Unqualified staff	76	47
	Lack of job commitment	-	-
	<b>Total</b>	<b>160</b>	<b>100</b>

Table 8 above indicates that, majority of the respondents. i.e. 84(53%), replied that absence of better planning can be considered as factor that can affect the proper operation of MIS. While the remaining 76(47%) of the respondents replied that existence of unqualified staff also be another factor affecting proper operation of the system since the can not handle there responsibility if they are not qualified. This implies that, during development of the system the bank dose not consider all circumstance for effective operation of the system.

On the other hand, the researcher pose question to the management of any problem they observe and/or expect about the management information system of the bank in the open ended questions. According to their response, even if the bank develops well networked and organized management information system they cannot functioned well. This seriously affects the value obtained from the system they develop.

Beside this, since the factory produce products to satisfy the customer it should be in lined with the ever changing preference of customer and strive to take part from it.

Like customer respondents, the researcher provided different interview questions to the management information system department mangers. And the responses obtained from the interview analyzed and interpreted are as follows.

According to the manger, Commercial Bank of Ethiopia is one among the biggest financial institutions here in our country. The management of the bank deigned and practiced before long period but it does not mean that no more change is make in the overall feature of the system. The work form the management of the bank indicated that, since the demand of the banking industry frequently require the support from the information technology, out bank frequently seen all the changes make in the service requirement of the customers at whole.

On the other hand, according to the data obtained from interview indicates that the bank properly plan and execute MIS in well manner but due to dynamic change in service requirement and frailer to go through the change and upgrading capacity of staffs the MIS somehow not effectively operational.

For the questions rose in relation with customer demand, the manager replied as much as possible the factory produce its product in the intention with touching customer preference but the demand of the product by the customer is not as such satisfactory.

Regarding factors that might have influential factors in the efficient functionality of the system, the manger said that, due to various un foreseen reason proper conversion of MIS in to the practical action make the system fully operation and can accelerate the service rendering as well as decision making process of the bank.

## **CHAPTER FOUR**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

This study was aimed to assess the management information system of commercial bank of Ethiopia. To this effect, all the necessary data were gathered, analyzed and interpreted in the preceding chapter. Based on the analysis done, findings of the study are summarized, conclusions were drawn and possible recommendations are forwarded by the student researcher.

#### **4.1. FINDINGS OF THE STUDY**

- Majority of the respondents i.e. 81(51%) replied that the bank's management information system practiced at lower level.
- Majority of the respondents i.e. 67(42%) said, the management information system of the commercial bank is somehow functional.
- Majority of respondents agree with to some extent the bank management information system played greater role in the day to day operation. i.e. 101(63%).
- 87(54%) of the respondents testify that the bank utilize the management information system to some extent
- 84(53%) i.e. majority of the respondents said the managers are not well equipped with all the necessary capabilities to handle MIS operation within the bank.
- 111(69%) i.e. majority of the respondents replied that the MIS management of the bank is technically qualified at medium level.
- Majority of the respondents i.e. 119(79%) of them said that bank used centralized management system
- Majority of the respondents. i.e. 84(53%), replied that absence of better planning can be considered as factor that can affect the proper operation of MIS.
- Majority of the respondents agreed on management information system is key for taking advantage over competitors but the bank is not in a position to use it well.

## 4.2. CONCLUSIONS

Based on the findings summarized from the analyses part, the researcher drawn the following conclusions to the study.

- ❖ Commercial Bank of Ethiopia practice its management information system not satisfactorily this may lead the bank producing efficient information to its day to day operation.
- ❖ The functionality of the information system is doubtful which affect effective service delivery operation of the bank is badly.
- ❖ There is agape in full operationally of the bank management information system this might hinder utilization of company capacity in delivering its banking service operation.
- ❖ Even if the bank develop and make it operational it management information system in its day to day operation there is not place to use it well.
- ❖ The effective functionality of the system of the bank is questionable, which might create problem in customer service and cause watching somewhere else.
- ❖ The technical performance of MIS managers lack some sort of ingredients to handle the system well, this indicates that is a gap in provision of training to the staff to make them updated.
- ❖ The bank create some opportunities to all other functional unites to access data link easily for making decision, which is the base for speed up the job done by functional unites.
- ❖ During development of the system the bank does not consider all circumstance for effective operation of the system, which can easily expose the system for familiarity during change, occurred in operation.

### **4.3. RECOMMENDATIONS**

Based on the conclusions drawn, the following recommendations are given by the student researcher.

- ❖ Commercial Bank of Ethiopia strongly recommended to make its management information system well functioned, in order to produce efficient information for service requirement.
- ❖ The bank advised to emphasize factors affecting its MIS functionality in order to ensure efficient service rendering operation.
- ❖ The bank recommended conduct evaluation of the level of benefit obtained from the system, in order to clearly aware about the integration between the bank operations with it.
- ❖ In order to fastening the service operation of the bank and satisfying customers, it is recommended to review its system development practice.
- ❖ In order to maintain the customers through producing quality service, the bank recommended amending features in its MIS system.
- ❖ In order to maintain on the spot response for problems at the counter, the bank recommended enhancing its staff technical performance.
- ❖ In order to enhance the free flow and communication of data between departmental units, the bank recommended to further enhance its information accessibility internally.
- ❖ In order to obtain appropriate output from the system, the bank recommended setting proper development of its management information system.
- ❖ The bank recommended reviewing its overall management information system, in order to go with the current environmental demand of the banking industry.



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