
WOLKITE UNIVERSITY
COLLAGE OF BUSINESS & ECONOMICSS
DEPARTMENT OF MANAGEMENT



**The Role of Management Information System in Organizational Decision
Making (A Case Study at Ethio-Telecom, Wolkite Branch)**
**A RESERCH PAPER SUBMITTED TO PARTIAL FULFILLMENT OF BA
DEGREE IN MANAGEMENT**

PREPARED BY: SAMUEL TSIGE

ID NO : SSR/1212/14

ADVISOR: Mr DEMELASH S. (MBA)

April, 2025
Wolkite, ETHIOPIA

ACKNOWLEDGMENT

First of all, I would like to thank My GOD, for his unlimited willingness and the almighty and the most pass not to finalize and perform this study.

Secondly my deepest gratitude goes to my ADVISOR DEMELASH S.` for his wonderful consultancy and effective advisory role throughout this study.

Finally, my acknowledgment goes to different individual's including the manager of Ethiopian Telecommunication Wolkite branch and the employees for giving information and providing different support for the study.

ABSTRACT

The study focuses on identifying the Role of MIS in organizational decision making in Ethiopian Telecommunication Wolkite branch. The objective of this study was to analyze the role of management information system in organizational decision making in Ethiopian telecommunication Wolkite branch. In order to answer the basic Question of the study used both primary and secondary sources of data. The primary data was obtained using questionnaires, while the secondary data sources were cited from published books, Interest, articles through observing those documents. Sample size of the study was determined on the basis of probability sampling technique from which stratified sampling was employed. In order to analyze of the collected data from various sources, the researcher used descriptive type of data analysis tools. Among those tools, the researcher used tables, pie charts, bar graph and percentages. Finally the researcher forward conclusion and recommendation based on the study findings

Table Content

ACKNOWLEDGMENT	I
ABSTRACT	II
CHAPTER ONE	1
INTRODUCTION	1
1.1. Background of the study	1
1.2 Statement of the problem	3
1.3 Basic Research Questions	4
1.4 Objective of the study	5
1.5 Significance of the study	5
1.6 Scope of the study	6
1.7 Limitation Of the study	6
1.8 organizations of the study	6
CHAPTER TWO	7
LITERATURE REVIEW	7
2.1 Definition of information, system & information System	7
2.2 Management information system	10
Data and data base administration	11
Figure 2. 1: relationships between information and decision	15
2.3 Information Decision making	15
2.4 Telecommunication	18
CHAPTER THREE	20
RESEARCH METHODOLOGY	20
3.1 Research design and strategy	20
3.2 Data source and type	20
3.3 Sample and sampling techniques	20
Table 3. 1 sample size determination	21
3.4 Methods of data collection and instrumentations	21
3.5 Methods of data analysis & interpretation	21
CHAPTER FOUR	22
RESULT AND ANALYSIS	22
4.1 Data Analysis, Interpretation and Presentation	22
4.2 Demographic Characteristics of Respondent	22
Table 4. 1 Distribution of respondent demographic characteristics	22
Figure 4. 1: Respondent Current position	24
4.3 Analyses of Part II questionnaires	24
Table 4. 2: use of MIS in decision Making Process	24
Table 4. 3: Individual's Impact on the flow of information	25
Capacity of data base	26
Figure 4. 2: response on the capacity data base center	26
Management information system practice	26
Table 4. 4: current MIS practice and lower level management	27
Table 4. 5: MIS to make helps to make reliable and fast decision	28
Table 4. 7: response on the system to store data	31

CHAPTER FIVE	33
CONCLUSION AND RECOMMENDATION	33
5.1 Conclusion	33
5.2 Recommendation	34
Reference	36
Appendix	37



CHAPTER ONE

INTRODUCTION

1.1. Background of the study

The development of advanced electronic equipment realized that organizations cause Computer based for information system for planning, controlling, decision making and problem solving rather than waiting report of traditional method. This new types of information usage in organizational decision making comes to be known as management information system (MIS) or computer information system (CIS). Each consists of five related components hardware software procedure and data base. The goal of management information system is to enable managers to make better decision by providing quality information. (O, Brien, 1996, P5).

In many Ways managers exert a lot of efforts in making decision or collecting information to make decision. More over in many organization day to day decisions embodied in the methodology, rule of philosophy of the company manager is encouraged to collect data and follows the decisions that resulted from experience. Decision process problem involves collected data, identified problems, making choice and implementation (post and Anderson, 1997 p.6)

MIS helps to decide structured or programmable decision and non-structured or non-programmable decision makings

Structured decision involves a decision needed and that can be specified in advance. While unstructured decision involves situation where it is not possible or desirable to specified in advance most of the procedures to follow (O Brien, 1996)

The development and usage management information system is modern and recent phenomena in all organization particularly Ethio- telecom is related to use appropriately information that will lead the corporation to have better planning decision and result.

Decision making is the process of identifying and choosing alternatives choice on the value and performance of decision maker. Making decision implies that there are alternatives based on the values and preferences to be considered, and in such a case we want not only

identified as many as of the alternatives as possible but to choose one that has the highest probability of success. And that best fits with our goals, desired, life style, values and so on.

A meaningful decision making requires that workers are able exercise some influences over their work and condition under which they work. There are two forms of employee involvement in decision making. The first one is direct involvement refers to those forms of participation where individual workers are involved in decision making process that affect their everyday works particularly where respective decision of the main body of workers participation in strategic decision making (O Brien,1996).

Background of the case area After invasion of Italian and Ethiopia gets its independent in 1934 there was a postal, telegraph, telephone including radio transmission which was administered by telephone minister and after that the expand all the connection network throughout the country.

1.2 Statement of the problem

Management information system plays a crucial role In decision making and other activities in living world, we are living in emerging global information society with global economy, that increasingly dependent on the creation management and distribution of information is a basic in a today society, people & many nations no longer live in agricultural society, Where majority of the work force consist factory workers (O Brien, 1996)

MIs are important in such atmosphere for decision making for public and private, as well as government organization.

It assists or helps managers in decision making and problem solving ([Academia](#) /2014)

MIS examine obstacles that limit the role of MIS in decision making during crisis (Citesesrx/2014)

MIS performs vital roles in any types of organization: support business operation and it helps store management where better decision and attempt to gain strategic competitive advantage for example, decision on what lines of merchandise need to be added or discontinued or on what lines of merchandise need to be added or made after an analysis provided by MIS. This is not only the ways to gain an advantage over other retailers in the completion for customers. (O Brien, 1996)

The MIS department headed by a single manager that person often is called the chief information officer (CIO). The CIO position might be advice president or one level below that. A major portion of this job involves searching for many ways in which the information system can help the company. In particular, the CIO searcher for and advocates strategic use of MIS.

The goal is to use the computer in some way that Affects customers to provide an advantage over the competitors. CIO is although responsible for organizing MIS department to fit the need the company. If there is no one in this advocacy who evaluates the existing system and comparing them to new products, an organization is probably not often going to get new equipment. Even when many users are dissatisfied with an existing system, they Would have better chance to acquiring new technology if they can voice their complaints through on highly place person. A long these lines, the CIO is responsible for long run planning in terms of information technology (Anderson1997)

In many organizations massive data is stored on centralized computer. This basic data is often mentioned by them MIS department users that lead this data for various reports. In terms of hardware the MIS department is responsible for providing the Physical connections between the machines. Besides the initial installation considerable effort can be required to maintain these networks. Modern local area networks have many components scattered throughout the firm's buildings, maintenance and correct the problem that arise. In terms of software, the MIS department has to make sure who that the information is providing information that can be certain the users are authorized to access the data (Anderson1997)

Throughout the organization, management information system faces a lot of constraints to play a role in decision making. For example, lack of awareness in using MIS, Lack of Skilled man power, MIs requires a huge amount of costs, Lack of enough computers, using manual and traditional system, less adaptation with latest technologies and poor interdepartmental relationships.

Regardless to this, obtain basic information with the role of MIs in organizational decision making is found to be critical. Therefore, this study was analyzed the role of management information system in organizational decision making in case of Ethiopian telecommunication Wolkite branch.

1.3 Basic Research Questions

- How does information flow in each department to support decision making?
- How does the corporation know whether the decision is held effectively or not?
- What are the challenges and prospects of MIS practices in the branch?

1.4 Objective of the study

1.4.1 General Objective

The main objective of this study is to analysis the role of management information system (MIS) in organizational decision making of Ethio- telecom Wolkite branch

1.4.2 Specific objectives

The specific objectives of this study are

- To identify the challenges and prospects of MIS practice in the branch
- To identify how information flow in each department to support decision making
- To assess how the organization know whether the decision is held effectively or not

1.5 Significance of the study

This study has pivotal role for Ethiopian telecom Wolkite branch as well as different corporation owners. The finding of this study may help the corporation to undertake appropriate measures in dealing with problem related to use MIS in organizational decision making. Moreover this study may contribute a piece of knowledge to literature on the role of MIS in organizational decision making. Furthermore, the finding of this study might be helpful for policy makers and practitioners in their attempt to promote the use of technology in organizational decision making. Finally this study may also serve as a reference for other researchers who were interested in related topics. In general this study in used for the following bodies

- For the government
 - The ability of respond quickly to unexpected situation.
 - The ability to save time and cost.
 - For policy making.
- For the society
 - It is important for the society to get valuable, timely and accurate information.
- For the different researchers as reference
 - It is important for other researchers as a reference, guidance and base for conducting other related researches.
- For the researcher

- It is important for getting knowledge, experience, skill and ability...about research. Moreover the researcher translates theoretical knowledge in to practice.

1.6 Scope of the study

This study had the geographical, the conceptual and methodological delimitation. This study was conducted on Ethio Telecom Wolkite branch, with specific title of the role of MIs in organizational decision making. The required information was limited to show the role of MIS in organizational decision making in Ethio Telecom Wolkite branch. Methodologically this study was intended to use the cross sectional survey in attempt to achieve its objectives.

1.7 Limitation Of the study

Like other studies this study is also not without its limitation. One of the limitations was from its design. In a sense, the cross sectional survey design in which the data to be used for the study was gathered at one point in time from employees of Ethio telecom Wolkite branch. Because of the time and financial constraints, it was better to employee longitudinal survey design to collect data from employees of Ethio telecom Wolkite branch at different times during their stay in the organization may vary.

1.8 organizations of the study

The study will be categorized in the five chapters. Chapter one will consist of the introduction part that include back ground of the study, statement of the problem, researchers questio, significance of the study, objective of the study, limitation of the study and organizational study. Chapter two will consist of literature review, Chapter three William consisting research methodology. Chapter four data analysis and presentation. Chapter five consists conclusions and recommendation.

CHAPTER TWO

LITERATURE REVIEW

2.1 Definition of information, system & information System

2.2.1 Information

Information is a data that has been processed in to a form that is meaningful to the recipient and is of real perceived value in current perspective decision, Information is more than raw data (luicas, 1999:p.23) Information is a data that has been processed a great use. That purpose might be to affect the information for values or causes be statutory requirements but in variability it is to aid save kind of decision (Zwass, 1998:p.5)

2.1.2 System

A system is a group of interrelated components working together towards a common goal by accepting input and producing output in an organized transformation process such system save times called dynamic system which has three components or functions. In put involves capturing and assembling elements that enter the system to be processed. For example, row material, energy, data and human effort, must be secured and organizes for processing. Processing involves information process that converts inputs into out puts. Examples are manufacturing process, human Breathing process. Output involves transforming elements that has been producing at transformation process that ultimate destination. For example finished products and management information must be transmitted to their human users. Feed back is a data about the performance of a system. For example a data about sales performance (Oberlin, 2003:p8)

2.1.3 Information System

An information system is an organized combination of people, hardware & software, communication networks, and data resources that collects, and disseminates information in an organization. People have relied on information system to communicate channels or networks and stored data or data resources) since the down of civilization. (A.O, Brien, 1996:p.6)

2.1.4 Information system resources

Basic information system shows that an information system consists of give major resources, peoples, hardware, software data & Networks.

1. People resource: People are required for the operation of all information system. These people resource include end users is specialists.

- End users also called users or clients: are people who use information system of the information it produces. They can be accountants, sales persons, engineers or managers. Most of us are information system end users.
- Is a specialist are people who develop and operate information system they include system analysts, programmers, computer operators and other Managerial, technical and clerical IS personnel.

2. Hardware resource: hardware resources include al physical device and materials used in information processing specialty it includes not only machines such as computers and other equipment, but also data media that is tangible objects on which data are recorded from sheets of people to magnetic or optical disks. Examples of hardware in computer based information system are

- Computer system: - which consists of central processing units containing microprocessor and Variety of inter connected peripheral devices
- Computer peripherals: - which are devices such as kea board electronic mouse for input of data and commands, a video screen or printer for output of information and magnetic or optical disk for storage of data resources

3. Software resource: all set of information processing instruction. This generic concepts of software includes not only the set of operation instruction called programs which direct and control hard ware, but also the set of information processing instructions needed by people, called procedures

4. Data resources:- data is more than raw materials of information systems. Managers and information system professionals here broadened the concept of data resources.

5. Network resources telecommunication networks like the internet, intranet and extranet have become essential to the successful operation of all types of organization and their computer based information systems. Tele communication networks consist of: computers, communication processers and other devices interconnected by communication, media and controlled by communications software. The concept of network resources emphasizes that communication networks are fundamental resource components of all information system.

6. Communication media:- Example includes twisted pair wire, coaxial cable, fiber optics cable, microwave systems, and communication satellites systems.

7. Network support: This includes all of the people, hardware, software and data resources that directly support the operation and use of communication network. The concept of network resource emphasizes that communication technologies and network are a fundamental resources components of all information system (A.O, Brien, 2003:p.11-14)

2.1.5 Types of information system

Operational support system (OSS) information systems have always been needed to process data generated by and used in operations. Such Operations Support system produces a variety of information of products for internal and external use .However, they do not emphasize on producing for the specific information products that can best be used by managers. The role of a business firm's operation support system is to efficiently process business transaction, control industrial process, support enterprise communication and collaborations_ and update corporate data base.

Transaction operation system (TOS) an important example of operation support system or OSS that record and processes data resulting from business transaction. They process transaction in to two basic ways. In batch processing transaction data are accumulated over period of time and process periodically. In real time or on line processing data are processed immediately after a transaction occurs.

Process control system (PCS) Monitor and control physical process for a Example petroleum refinery uses electronic sensors linked to computers to continually monitors chemicals process and make instant or real time adjustment that control the refinery process.

Management support system (MSS) it provides and support for decision making by all types of management or mangers and business professionals is complex risk: Conceptually several major types of information system support a variety of decision making responsibility.

Management information system provides information in the form of reports and displays to managers and many business professionals.

Decision support systems (DSS) give direct computer support to managers during the Decision making process.

Executive information system (EIS) provides critical information from a wide variety of internal and external sources in easy to use displays to executives and managers. (A, O' Berline, 1996)

Other classification of information system

Expert system: the frontiers of information system are being affected by development in artificial intelligence (AI). Artificial intelligence is an area of computer science whose long range goal is to develop computer that can think as well as see, hear, walk, talk and feel. One of the most practical applications of AI is the development of expert system is knowledge based information system; that is uses its knowledge about specific area to action an expert consultant to users

Knowledge management system many organizations are developing Knowledge management system KMS to manage organizational learning and business know how KMS helps knowledge workers create, organize and share important business knowledge where ever and whenever it is needed.

Strategic information system: the strategic role of information system involves using information technology to develop products, service and capabilities that give a company strategic advantage over the competitive forces it faces in the global market place. This creates strategic information system, information system that supports or shape the competitive position and strategies of an enterprise.

Business information system: as feature managerial and end user, it is important for you to realize that information system direct support both operations and management activities in the system direct support both operations and management activities in the business function of accounting, finance , human resource management and marketing, marketing & operation management . Such business information system is needed by all business functions.

2.2 Management information system

A management information system (MIS) is a system that provides information to manage organizations effectively. MIS are regarded to be a subject of the overall internal control procedures in a business, which cover the application of people ,document, technologies, and procedures used by management accountants to solve business problems such as costing a product, service or business wide strategy

Management information systems are distinct from regular information system in that they are used to analyze other information system in that they are used to analyze other information

system applied in operational activities in the organization ([http://en.wikipedia.org/wiki/management information system](http://en.wikipedia.org/wiki/management_information_system))

Now a day the term is almost exclusively reserved for computerized system. This consists of hardware and software that accept data and store, process and retrieve information. (Curtis and CObham 2002 p.24)

2.2.1 Role of management system

Management Information system roles Information systems don't magically appear in the organization. Considerable efforts, time and resources must be devoted to building and maintaining information systems. One of the most important considerations in designing information system is to solve the right problem. Identifying business problem and potential solution is main purpose of system analysis.

Good information system does not simply materialized from thin air providing timely, accurate and relevant information requires careful planning and support. Creating effective information involves maintaining hardware, providing software training and support, supporting and user development, defining and controlling access to databases, establishing corporate standards, and researching the competitive advantage of new technologies.

The basic roles of MIS are Hardware administration Managers should not have to be computer expert to use their computers considers the work involved in buying new computer. The computer industry has been changing rapidly. Both with personal computers and large computers major changes occur in computer hardware continually

Software support Software generally requires more support than hardware. Is staff can help users decide which software to purchase and can install it. Users need to be trained to use various software features. Whenever workers change jobs or a company hires new worker they need to be trained similarly commercial software versions changes almost every year implying more training for use. Additionally someone has install the new copies on the machines, manuals have to be distributed, and data files sometimes have to be converted.

Data and data base administration

Data base is critical to the operation of any company keeping the data base up to date the accurate does not happens by chance large organization employ a data base administrator (DBA) to be responsible for maintaining the corporate data base. The DBA is responsible for

maintaining the data base, Monitoring performance of the data base management system, and solving day to day problems that arise with the data base.

If there is no one in this advocate role who evaluates the existing systems and comparing them to new products, an organization is probably not often going to get new equipment. Even when many users are dissatisfied with an existing system, they can voice their complaints through one highly place person. Along these lines, the CIO is responsible for long run planning in terms of information technology. (Post Anderson, 1997; p615-618)

2.2.2 Data base management system (DBMS)

Data base management system is considered an important system software packages that controls the development, uses and maintenance of the data base of computer using organization. ADBMS program helps organization uses their integrated collection of data records and file known as data base. It makes easy for an employee data base to be accessed by payroll, employee benefits and other human resources programs. It also amplifies the process of retrieving information from database in the form of displays and reports (MC Leod 1998:P-345)

2.2.3 Decision support system

It is described as the next evolution's are step after management information system. MIS support decision making is both structured and unstructured problem environment. It supports decision making to be implemented at all level of organization. (Indienmba / 2014)

Decision support system is designed to support semi structured decisions in a situation in which information is complete and were satisfying is a goal. A DSS should enable the decision maker to apply the right decision rules to a problem rather using standard rules that may not apply because of changing conditions.

2.2.3.1 The benefit of decision support system (DDS)

Investment in DSS technology development efforts and support are grown substantially. Because new version of DSS are constantly involving, their costs are difficult to quantify measuring the benefits of DSS also is Difficult because many of some of these benefits are qualitative. Some of the benefits are

- The ability to examine more alternatives
- The ability to achieve a better understanding of the business
- The ability of respond quickly to unexpected situation
- the ability to carry out ad hoc types of reporting and analysis

- The ability to provide timely information for control of the operation
- The ability to save time and cost
- The ability to make better decision. (schulthiesand sumner,1998:p477)

2.2.3.2 Decision Support system (DSS) objectives

Major Objectives of DSS are

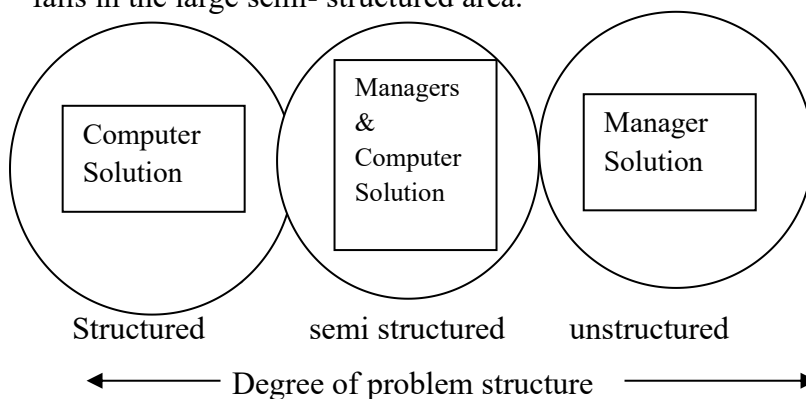
- Assist managers in making decision to solve semi structured problem
- Support the manager's judgment rather than try to replace it
- Improve the managers' decision making effectiveness rather than its efficiency

These objectives are correlated with three fundamental principles of DSS concepts: problem structure, decision support, and decision effectiveness.

Problem structure: it is difficult to find problem that are completely structured. The vast majority are semi structured this means that the decision support system is aimed at the area where most problems are found.

Decision support the DSS is not intended to replace the manager. As the figure below shows the relationship between problem structure and the degree of support that the computer can provide the computer can be applied to the structured portion of the problem, but the manager is responsible for the structured portion applying judgment or institution and conducting analyses.

The manager and the computer work together as a problem solving team in solving problem that falls in the large semi- structured area.



Decision effectiveness: The objective of DSS is not to make decision making process as efficient as possible. The managers time is valuable and shouldn't be wasted but the minimum benefit of using a DSS is better decision (Mc leod, 1998: p390).

2.2.3.3 Group decision

A deferent type of group ware tool is designed specifically to help group (teams) make decisions. Many business decisions involve a group of people. Often, one person might be responsible for the final decision but meetings are used to enable everyone to have a say, analyze the potential effects on each areas, and pursued other to accept a decision. Decisions that involve group of people have additional completions. Someone has to organize and control the meeting.

During the meeting people compute to make comments and getting their opinions heard. Someone has to take not on the meeting and votes have to be counted.

Bulletin boards can be used to lets every one express opinion and evaluations. In 1980s an additional tool known as a group decision support system (GDSS) was defined A.GDSS is designed to help managers and reach a consensus during the meeting. Post Anderson, 1997 p.335)

Information and decision making

According to Hebert A. simon nobles prize winning economist and scholar of management decision making process devices in to four activities

- Intelligence activities: search the environment and identify events and condition requiring decision.
- Design Activities Develop and evaluate possible course of action
- Choice activities select a particular course of action
- Implementation Activities: Implement the decision and monitoring its success.

Decision Information Characteristics Ad hoc unscheduled

Unstructured	wide scope
Semi structured decision on permanent	Narrow scope
Structured Specified	Detailed

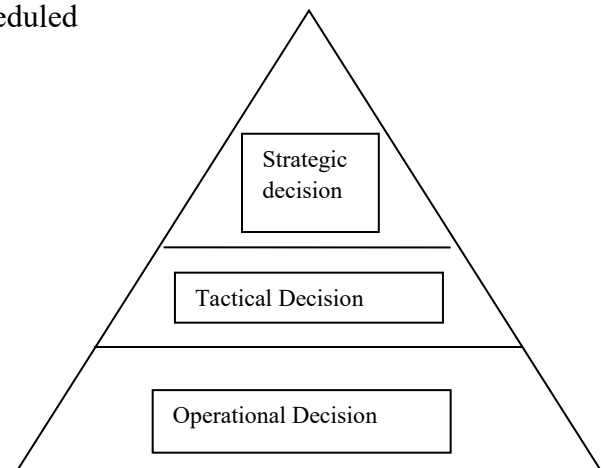


Figure 2. 1: relationships between information and decision

2.3 Information Decision making

2.3.1 Decision making

Making decision is not a simple activity that takes place all at one. It consists of several different activities that take place at different time once a problem occurred have to be perceived and understood, once a perceive solution must be designed, choices have to be made about a particular solution, finally the solution has to be carried out and implemented (cemnthic and Tone p.133)

Decisions are made to solve a problem. While solving a problem the problem solver may make many decisions. Decisions are courses of action that are taken to avoid or reduce effects or to take advantage of opportunity. Decision making is a process of sufficiently reducing uncertainty and doubt about alternatives to allow reasonable choose to be made from among them these definition stresses the information gathering function of decision making. It should be noted here that uncertainty is reduced rather than eliminated. Very few decisions are made with absolute certainty because complete knowledge about all the alternatives is seldom possible. Thus every decision involves a certain amount of risk. If there is no uncertainty, you do not have a decision. You have an algorithm asset of steps that is followed to bring about a fixed result. (Harries, 2009)

2.3.2 Types of decision making

According to Norbert Asimov decision exist on a continuation, with programmed decisions at one end and non-programmed decisions at other. Programmed decisions are “repetitive and routine to the extent that definitive procedures have been worked out for handing them. So that they do not have to be treated Donavon (as anew) each time they occurs”McLeod, 1998:p356)

2.3.3 Levels of managerial decision making

Operational level:- consists of day to day operation can decisions. IT at this level is used to collect data and perform well defined computation. Most of the tasks and decision are well structured in the sense that they can defined by asset of rules or procedures. An important task of the operation level is to collect data on transaction and operations: hence transaction processing system is crucial component of the organization Is.

An important characteristic of transaction process system is ability to provide data for multiple users at the same time. As special class of TPS software designed for factory operation is called process control software. This is concerned with the decision made in the norms day to day

operations within business. Decision in this area is designed to ensure the effective and efficient use of existing resources to realize budget objectives.

These decisions may involve the treatment of personnel (pre-exam, Hiring and firing, the control of inventory and production levels, pricing decision and aspect of credit control over customer and other forms of accounting and cash control. Information for operational planning and control is detailed and immediately relevant. (Ulritis and Cobham 2002p5-9)

Tactical level decision typically involves time frames of less than year these decisions usually results in making decision relatively major changes but stay within the existing structure of the organization

Most of the information for making decision which is tactical comes. From that transaction records that existing structure of the organization and that have been stored in computer.

This is a managerial activity normally associated with the middle echelons of management. Tactical management may involve the allocation of resources within the departments' budgets edition on medium term work scheduling and forecasting and planning medium term cash flows. Information for decision at the tactical level refers to the medium term between now and the next few months or year. It will be mainly generated internally within the organization, although some external information may be necessary (Curtis and Con ham 2002:p8-9)

Strategic level:- top executives develop over all organizational goal strategies policies and objectives through long range strategic planning. They also monitor strategic performance of organization and its overall direction (A, O' Berline, 1996:p359)

This carried out by the most senior management and well deal with broad issues concerning an organization development over the long term. In order to make strategic decision senior management needs information because strategic planning has long term time horizon. Much of this information will relate to the future rather than the present. The characteristics of information is strategic planning are external sources, highly uncertain and summarized rather than highly detailed. (A, O' Berline, 1996)

2.3.4 Characteristics of decision making

2.3.4.1 Phase of decision making

According to Simon (1960) and minzbereg, laising rhani and Theoget(1976) decision making involves three phases during the first phase, sales agency decision maker reaches for condition cashing for decision. The decision maker may be reacting to problem or may recognize

opportunities. In either case a gap between the existing state and assigned state is necessary condition for existing of decision problem.

Design is the second phases of decision making during design the decision maker develops and analyze alternative course of action by either researching for readymade alternatives or developing accustom made solution.

The third phase of decision making is choice during this phase the decision maker selects the best alternatives.

For decision situation to occur the decision make must be aware of the gap between the existing and the desired state must be monitored to solve the problem and must have the resources to do so.

The type of decision problem and attribute of the decision make both influence the decision making strategy. (Schulte's and summer, 1998:p.461)

2.3.4.2 Attributes of decision making

The attributed of decision makers also affect the type of decision strategies used. These attributes include perceptual ability, information capability, risk taking propensity and operation level.

Perceptual ability many decision makers perceive a decision problem. If a decision maker his experiences dealing with a similar problem solving situations will not see as complex and as uncertain as in the care where her background with similar situation is limited.

Achieve an optimal standard and prior experience of success or value and knowledge of results influence this standard. Training young people and employee them is one way to achieve the organizations objectives because in long term these people will challenge different obstacles. (schuite's and summer , 1998:.461)

2.3.4.3 Strategies of decision making

The type of decision problem and attributes of the decision maker influence whether the decision maker use maximize satisfying or incremental zing strategy.(mac grimman and Tylor.1976)

Maximizing without comes of decision is clear and the alternatives are well established the decision maker will make the decision that maximizes the desired outcome.

Satisfying because many decisions are made in situation of uncertainty, Decision makers are willing to settle for less than minimum utility. According to Simon, decision making display rationally busy while future limits purposed by experience, background and awareness of

alternatives in a given decision situation level. A decision maker will setup a reasonable organization level & search for possible alternatives until the final one that achieves this level. Incrementally the decision makers attempted to take small steps away from the existing state toward a desired state.

This approach may reflect important outcomes because alternatives considered are generally familiar to the decision maker. (Schulte's and summer 1998:p.46)

2.3.4.4 Process of decision making

A significant part of decision making knowing skill is knowing and practicing good decision making techniques. One of the most practical decision making techniques can be summarized in those simple decision making steps.

1. Identifying the purpose of role decision. What is exactly the problem to be solved? Why it should be solved?
2. Gather information. What factors does the problem involve?
3. Identifying the principles to judge the alternatives. What standards and Judgment criteria should the solution meet?
4. Brainstorm & list the different possible choices, Generate ideas for possible solutions see more an extending your option for your decision on my brain storming tips page.
5. Evaluate each choice interview of its consequences.
6. Determine the best alternatives.
7. Put the decision in to action.
8. Evaluate the outcome of your decision & action steps.

2.4 Telecommunication

Telecommunication is highly technical, rapidly changing field of information system technology. The communication network is any arrangement where sender transmits in message to a receiver over a channel of consisting of some types of medium.

Telecommunication Network consist of five basic categories

- Terminals: - such as a radial play terminals, & others and user.
- Telecommunication processer who support data transmission and reception between terminal & computers.
- Telecommunication channel and media over which data are terminated and received.

- Telecommunication channels use combination of media such as copper wires, coaxial cables, fiber optic cables, Micro wave systems and communication satellites, to inter connect the other components of telecommunication network.

Computers of all sizes and types are interconnected by telecommunication networks So that they can Carrey out their information processing assignments. (A, O' Berline, 1996)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research design and strategy

Based on basic purpose of the study, the major focus of the study was on description of data related to the role of MIS in organizations decision making so; the research design method most appropriate for this study was descriptive type of research for fully answering research questions. From different methods of descriptive research the study was employ cross sectional type of survey research design in which data were collected at one time for the purpose at hand. The study was also employed quantitative and qualitative or mixed approaches in order to attain the objective of the study.

3.2 Data source and type

The study intends to use both quantitative and qualitative types of data which were collected from primary & secondary sources. The primary data were obtained using questioners. While the secondary source likes books, internet and published articles were used as reference to substantiate the primary data collected. And also secondary sources information is required more for addressing the adjectives of the study since it is basis for constructing conceptual frame work of the study and questionnaire design.

3.3 Sample and sampling techniques

In order to draw sample respondents from total population the study were intended to census or total sampling techniques. From sampling techniques the study would be used total sampling technique means used all employees of Ethio telecom Wolkite branch. The sample size for the study would be determined based on assuming the sample 100% sure. A sample was 34 Ethio telecom Wolkite branch employees are used for data collection

The total population of the study was stratified based on department in Ethio telecom Wolkite branch. To end, the department divided in to three which were considered as three strata. Then to ensure the responsiveness of each stratum, take total size of population in each stratum.

Therefore the sample size in different strata (department) will be shown in the following table.

Table 3. 1 sample size determination

NO	Department	Total	Sample would be drawn an
1	MIIs	20	20
2	Marketing	10	10
3	Finance	4	4
	Total	34	34

3.4 Methods of data collection and instrumentations

Data and information in this research were gathered from two main sources such as primary and secondary source of data. Primary data were collected by using self-administered questionnaires. Self-administered questionnaire was selected because it has advantageous of low cost, saving in time; respondents have adequate time to give well through answers, validity and accuracy. The self-administered questionnaire has both open and close ended questionnaires. Open ended questions offer the advantage that the respondents were given their own words. Close ended questions are very convenient for collecting factual data and easy to analysis; since the range of potential answer is limited.

The secondary sources of data were acquired from the existing document and publisher materials within the organization. The procedures for administering the above tools of data collection were systematically managed by researcher.

3.5 Methods of data analysis & interpretation

The analyzing parts were done based on the source of data. After gathering the data, the study arranged the collected data in the form of group and summarized the data by using descriptive technique. The collected data were represented in the form of tabulation, figures, pie charts, bar graph and simple percentage. The study were used both qualitative as well as quantitative method of data analysis.

CHAPTER FOUR

RESULT AND ANALYSIS

4.1 Data Analysis, Interpretation and Presentation

This chapter is developed to analyze the data gathered through questionnaires to assess the actual situation and to gather Opinions of respondents with regard to the role of management information system in organizational decision making in Ethio telecom Wolkite branch. Questionnaires were distributed for employees under deferent department or staff of the organization MIS unit, and Data base officer. To get additional data 34 questionnaires were distributed to the employees and all have been fully completed and returned timely. The collected data are briefly analyzed and interpreted using table, bar graphs, pie chart and percentages in the following section.

4.2 Demographic Characteristics of Respondent

The demographic information of sample respondent who compiled the questionnaire in this study is illustrated in the table and pie chart bar graph and percentage. Demographic characteristics of a given organization are very important for the success of an organization, for example if a given organization has more adult than other, the organization become more successful than other.

Table 4. 1 Distribution of respondent demographic characteristics

No	Item		Respondent	
			Number	Percent
1	Sex	Male	20	58.82
		Female	14	41.18
		Total	34	100
2	Age	18-25	6	17.65
		26-30	13	38.23
		31-40	11	32.35
		Above 40	4	11.76
		Total	34	100
3	Education	Grade 10 ^t h& 12 th		

	Level	completed		
		Diploma		
		First Degree	24	70.59
		2 nd Degree & above	10	29.41
		Total	34	100

As it can be shown from table 4.1, item 1 regarding the sex of the sample respondent. Out of 34 respondent 58.82 %(20) of the respondents are males and the rest 41.18 %(14) are female employees.

Therefore, this data indicates that Ethio telecom Wolkite branch has more male employees than females. From the same table item No 2 concerning the age of respondent,6(17.65%) of the respondents have an age from 18-25 years,13(38.23%) of respondent are between26-30 ,11(32.35%) of them are between 31-40 years and 4(11.76%) of the respondents have been within the range of above 40 years. This table informs us that the majority of the employees are young enough to produce and improve the performance of the organizations so as to achieve its objective. According to (shelties and Sumner, 1998), if organizations give opportunity and empower the young people in the long term, the organization was beneficiary; because young people are highly motivated than the old one as we know.

From the given item No 3 regarding educational level of respondent 0(0%)of them are 10th and 12th Completed ,0(0%) of them are diploma certified ,24(70.59%) of them are first degree holders

and 10(29.41%)of them are second degree. Therefore, it is possible to say most of employees of Ethio telecom Wolkite branch are first degree holders and within some second degree certified.

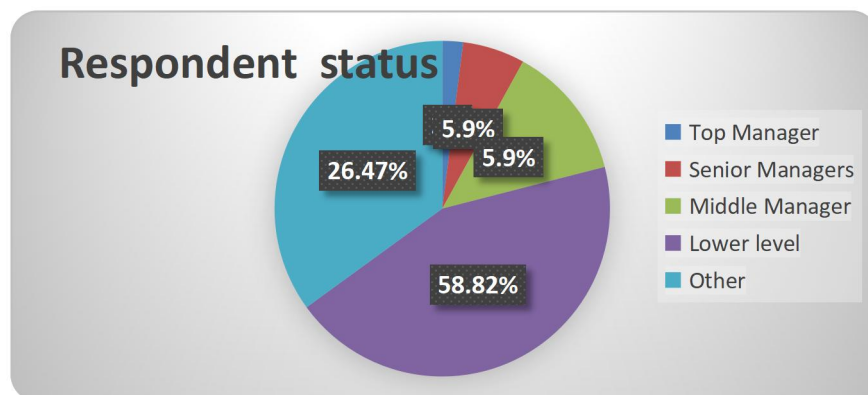


Figure 4. 1: Respondent Current position

The above pie Figure 4.1 shows as the respondent status 1(2.94%) of the respondent is top manager in Ethio telecom, 2(5.9%) of the respondents are senior manager, 2(5.9%) of them are currently middle managers, the majority means 20(58.82%) of the respondents are line or lower level managers and the remaining 9(26.47%) reply for the question their current position is out of the alternatives. From this data we can say that majority of the respondent are line or lower level manager.

4.3 Analyses of Part II questionnaires

MIS is a system that provides information needed to manage organizations effectively. MIS is regarded to be a subset of the overall internal control procedure in the business. MIS provides information for decision making on planning, initiating, organizing and controlling the operation of the sub system and to provide a synergetic organization in the process.

“Very few decisions are made with absolute certainty because complete knowledge about all the alternatives is seldom possible. Thus every decision involves uncertain amount of risk. If their no uncertainty, you do not have a decision. You have an algorithm asset of steps that is followed to bring about a fixed result (Herris: 2024)

Table 4. 2: use of MIS in decision Making Process

No	Item		Respondents	
			Number	Percent
1	How you measure the Ethio telecom Wolkite branch in using MIS for organizational decision making	Very good	5	14.70
		Good	11	32.35
		Not Satisfactory	15	44.12

		Cannot say(Poor)	3	8.82
		Total	34	100

Source: Own Computation (2024)

Table 4.2 depicted above item No 1 concerning with to what degree the corporation use MIS in its decision making process. From all sample respondents 5(14.70%) response the corporation uses MIS very well in its decision process, 11 (32.35%) reply good, the majority 15(44.12%) of the respondents replies the usage of MIS in decision making process is not satisfactory and the remaining 3(8.82%) say poor. According to this data that is possible to say that the application of MIS in decision making is not satisfactory.

Individual impact of information flow

In dividable can be considered as information system recourse, they are required for the operation system or the information they produce.

Table 4. 3: Individual’s Impact on the flow of information

No	Item		Respondent	
			Number	Percent
1	Do You think that the flow of information is affected by individual participation?	Yes	21	61.76
		No	13	38.24
		Total	34	100

The above table 4.3 may simplify, the question of do you think that an individual participation have an impact on the flow of information? 21(61.76%) of the respondent replied that individual participation have an impact on the flow of MIS. Some of the respondents answered for the question, is the individual participation influence the flow of information? 13(38.24%) respondents replied “No”

Capacity of data base

Data base is crucial to the operation of any company, keeping that data base up to date accurate does not happen by chance larger organization. Employee data base administrator to be responsible for main in the corporation data base, monitoring performance of the data base management system and solving day to day problems that arise with the data base.

“An information system is an organized combination of people, hardware and software communication networks and data resources that collects, and disseminates information in an organization. People have relied on information system to communicate channels or networks and stored data or data resources since the dawn of civilization (A.O Brien;.2014).

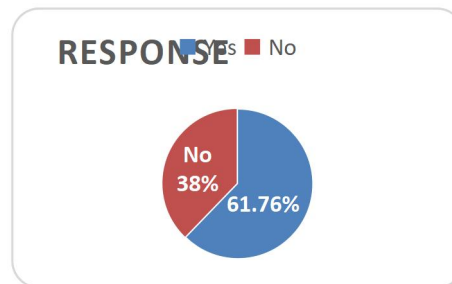


Figure 4. 2: response on the capacity data base center

Source: Own survey (2024)

The above pie chart(Figure 4.2) is concerning with the current capacity of data base center in the corporation, most of the respondents 21(61.76%) response the capacity and adequacy of the data base center is good and the remaining 13(38.24%) answers the corporation’s data base is capable and adequate.

Management information system practice

Management information System is comprehensive and coordinated set of information sub system which is rationally integrated and transform data in to information in variety of ways to enhance productivity in conformance managers style and characteristics on the basis of established quality criteria (Scott, 1986) Employee’s, lower level manger, system analysts, programmer, computer operator and other and other manager, technical and clerical is personal develop and operate information system.

Table 4. 4: current MIS practice and lower level management

No	Items		Respondent	
			Number	Percent
1	Do You think that the current MIS practice is satisfactory?	Yes	18	52.94
		No	16	47.06
		Total	34	100

ts half of them 18(52.94%) replied for question is the current MIS practice is satisfactory, and the remaining half 16(47.06%) replied the current practice of the corporation is not satisfied. This data indicated the current practice of MIS must be improved so as to ensure effective operations. When the respondents reply for the open ended question what factors are hinder satisfactory MIS practice in the corporation? Currently Ethio-telecom is on the transition period; due to th

2	Do You think that the participation of lower level manager have an impact on the process of decision making?	Yes	21	61.76
		No	13	38.24
		Total	34	100

Table 4.4, No 1 regarding with current practice of MIS in the corporation, out of 34 respondents the current MIS practice is not well defined. In addition

- Lack of well-organized way of gathering processing information
- Lack of skilled man power
- Lack of information system (DSS)
- Lack of sufficient budget etc

From the same table No 2, 21(61.76%) replied that the participation of lower level managers in decision making have its own impact, and the remaining 13(38.24%) said no impact. There for, it is possible to say that lower level management participation has its own impact on the process of decision making.

“The goal of MIS is to use the computer in some way that attract customer to provide advantage over the competitors.” As DuPont (Reality Bites, 13-3), and also CIO (Chief Information Officer). Responsible for organizing the MIS department to fate the need of the company.

MIS helps to make reliable and fast decision

Making decision is no single activity that takes place at one. It consists of several different activities that take place at different time. MIS helps to make reliable and fast decision by providing appropriate information.

Table 4. 5: MIS to make helps to make reliable and fast decision

No	Item		Respondents	
			Number	Percent
1	Do MIS help the corporation to make reliable and fast decision?	Yes	34	100
		No		
		Total	34	100

Source: own computation (2024)

Regarding to table 4.5 all respondent 34(100%) replies MIS helps the corporation better, reliable and fast decision. This implies MIS have high influence on decision making process.

“MIS support decision making is both structured and unstructured problem environment. It supports decision making to be implemented at all level of organization. ([.INDIAN MBA.COM | FACILITY COLUMN /2014](#)).

“Decision support system or DSS is one branch or part of MIS that is the way or the ability of making better decision. (Schulthiesand Sunner ,1998:p477)

“The objective of decision support system (DSS) is not decision making process as efficient as possible. The manager time is valuable and should not be wasted but the minimum benefit of using a DSS better decision (MC Leod, 1998:p390).

Skilled man power and equipment

Skilled man power play significant role in order to apply MIS appropriately in decision making, like computer, database management system become important to make reliable decision.

Table 4. 6: response on the corporation skilled man power and equipment

No	Items		Respondents	
			Number	Percent
1	Would you say that the corporation has enough skilled man power to operate the data base center?	Yes	12	35.29
		No	22	64.71
		Total	34	100
2	Can you say that the corporation has enough computers or other equipment that are necessary to use MIS?	Yes	13	38.24
		No	21	61.76
		Total	34	100

Source: own computation (2024)

- From Above table 4.6 No1, it is possible to see out of the respondents 22(64.71%) replied
- Recruit skilled people from outside I.E chief information officer (head of MIS) who has advocacy role means responsible for organizing the MIS department to fit the need of information to the company (Post Anderson, 1997)
- Assign responsible body for the flow of information

In the same table No 2 relates with the corporation's capability of necessary equipment in order to run MIS effectively. Out of 34 sample respondents 13(38.24%) of the replies the corporation does not have enough skilled man power to operate the database center, were as the remaining 21(61.76%) replied that there is enough skilled man power depend on the respondents answer what should do the corporation to fill such gaps are:

- Train existing employees

corporation has enough computers and other equipment so as to run MIS effectively, the remaining 21(61.76%) respondents the corporation do not have enough such equipment. From this table that is possible to say that the corporations, equipment are not enough as it needed to operate MIS efficiently.

How the corporation can know either the decisions are made effectively or not? The respondent replied that the corporation knows through the following ways of evaluation.

- Report
- Observing the actual work
- Looking the result of decisions
- Making clear and participatory meeting
- Assessing the database management system frequently etc: are among the ways to know either the decision made correctly or not.

How does information flow in each department to support decision making?

As the respondents replied that, in most of the departments information flow is important to support decision making. Since, information and decision have a linear relationship, they are interdependent. If the information is full, the decision is certain and if it is some or fifty percent, the decision is under risk and if it is few or having below fifty percent, the decision is uncertain. From this we can infer that information and decision have appositive relationship.

Bar graph 4.

The attitude of employee play significant role in order to apply MIS effectively in organizational decision making i.e. if Employee have good attitude it is easy to apply MIS in the organization.

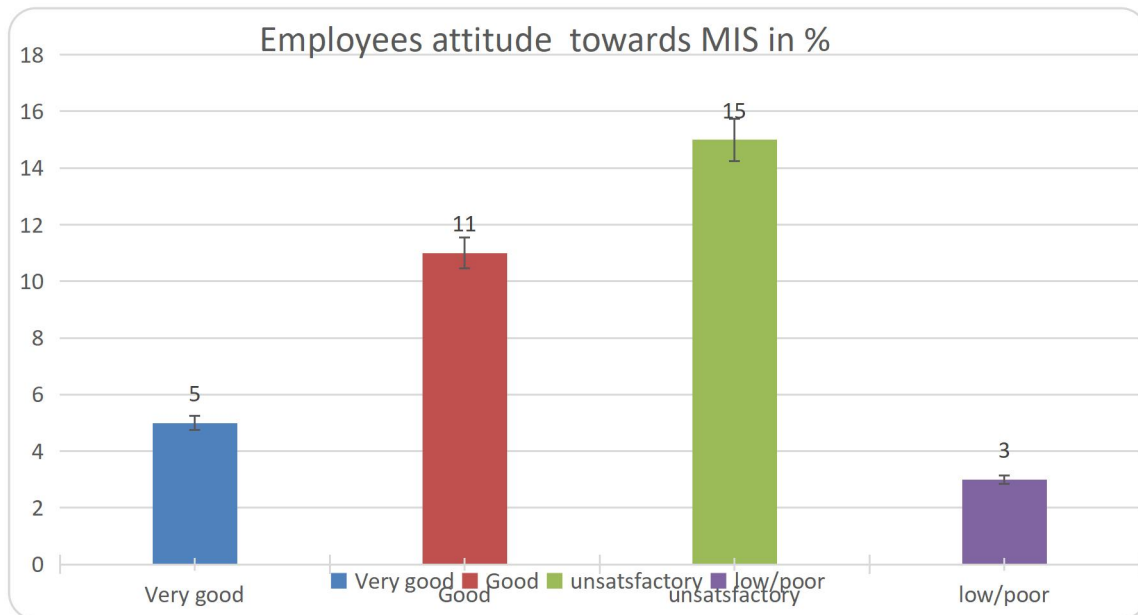


Figure 4. 3: Employee attitude towards MIS
Source: own survey (2024)

As shown in the above graphical 3.1 presentation of employees attitude towards MIS in the given corporation.3 (8.82%) of the total sample size replied that their attitude is poor attitude

towards MIS, because most of the employees lack of knowledge, accessibility of latest information in the organization is poor and the employees less skilled about modern way information management 15(44.12%) of respondent replied that there is satisfactory level of attitudes towards MIS. Whereas, 11(32.35%) of respondents said that there is good attitude towards MIS and other 5(14.71%) of the sample population has very good attitude towards MIS. Data base management system is considered an important system software package that control the development, use and maintenance of the data base of computer using organization. A DBMS program helps organization uses their integrated collections of data base records and file know as data base.

Table 4. 7: response on the system to store data

No	Item		Respondents	
			Number	Percent
1	Which of the following system the corporations use to store different decisions?	Manual File system		
		Data base Management System	12	35.3
		Both	22	64.70
		Other	0	
		Total	34	100

Source: own computation (2024)

As it mentioned in the above 4.7 No 1 respondents are asked to give their responses on the mechanisms to store decisions. Accordingly out of 34 sample respondents none of the respondents replied the corporation used manual file system, 12(35.3%) of respondents said that the corporation uses data base system only and 22(64.70%) of respondents respond that the corporation uses both manual file system and data base system to store decisions. It is possible to say the corporation uses both manual file system and a database system to store decisions.

“Data base management system makes easy for an employee data base to be accessed by pay role employee benefits and other human resource programs. It also amplifies the process of retrieving information from data base in the form of displays and reports (MC Leod 1998:p345)

No	Item		Respondents	
			Number	Percent
1	Do you think that there are challenges and prospects of MIS practice in the branch	Yes	20	58.82
		NO	14	41.18
		Total	34	100

Table 4. 8: Response on the challenges and prospects Of MIS practice in the branch

Source: own computation (2024)

From the above table 4.8 No1, it is possible to see out of the respondent 20(58.82%) respondent that there are challenges and prospects in the branch whereas the remaining 14(41.18%) answers there are no any challenges and prospects in the branch. This implies that there are different challenges and prospects of MIS practice in the branch

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1 Conclusion

The major emphasis of the study has been for assessing the role of management information system organizational decision making in Ethio-telecom Wolkite

branch. Based on the analysis of data the following conclusions are drawn. The application of MIS at the corporation is to draw short-term, medium, and long-term planning, to make reliable and appropriate decision depend on the flow of information (may be structured and un-structured decisions), to craft strategies and the like. To do this the corporation advised to assess its material and human capacity and capability.

Regarding the application of MIS it is having inefficient flow of information. I.e. lack of properly organized information (reports and data), and lack of skilled operators. In the corporation, misunderstanding of information interpreted their own point of view, updated technology is not available and technical failures of the system are the main cause of the problem. There are also different factors affecting the implementation of management information system such as the information can't directly flow for whom it needs and there is no responsible body for the flow of information, frequently data duplication and inflexibility of the system and semantic difficulties of communication barriers are the main factors of affecting MIS application in the Ethio-telecom Wolkite Branch.

The employee's attitude towards MIS in the given corporation is not satisfactory, because most of the employees have lack of knowledge; accessibility of latest information in the organization is poor, and the employees less skilled about modern way information management.

The existence database capacity of the corporation is not satisfied due to: Lack of Fast communication among departments, less skilled and technically capable persons, weakness in Good management, inflexibility of the database center, and low Employing of new system of operations etc. The lower level management practice or participation in decision making process is not satisfied.

Finally, lacks of skilled manpower create difficulties for better application of the system. This problem can be solved based on the following bases. As respondents replied that filling the gap

of skilled professionals by hiring (recruited) for better application of the system. Besides, gathering information internal sources can be an implication or indicators of internal weakness. As result of this, the organization dig out those problems and made possible solution that hinder the over performance of the organization.

5.2 Recommendation

The importance of management information system has recognized in modern societies. Management information system is becoming, a dispensable factor for success of an organization. Where this study was conducted to take a series of measures to the significance of management information system on the decision making process in the corporation. The overall application of MIS in the corporation has been analyzed based on the sample respondents' response. The researcher would try to recommend the following general suggestions:

Since the corporation's employees are well educated and young enough ,the corporation should keep these young employees and train them to improve their ability and skill because it will beneficiary in the future operations that is will have good control and operating over data base center. Based on the collected data, it shows one of the problems was inefficient flow information within the corporation. So it is advisable that information should flow and disseminate of information should be adequate and properly organized. Decentralized management and proper delegation of authorities for each authority's divisional worker should be applied or assigned responsible person. On the other hand, for factors that affect the application of MIS in the prospect corporation, the researcher suggests that: Modern or update technology advisable to use. Then the technology may be improved the existing network using decision support system, executive information system etc. Hiring chief information officer, well trained employees assign for each department.

Flexibility system of each division or department for receiving and disseminate of information's are more valuable for the concerned parties.

The current employees' attitude towards MIS is unsatisfactory because of the employees having lack of knowledge; accessibility of latest information in the organization is poor, and the employees' less skilled about modern way of information management.

So, the corporation should bull its employee's performance that is by giving training and development on the management information system, and help them to get access of latest information etc.

The corporation should also create a strong network among departments to have a fast flow of information between them and avoid factors which are hinder flow of information that is poor inter relation among departments, time constraint, frequent interruption of network, poor relationship between management and employee, limited access of internet and so on. The corporation should also improve decision store system from manual system to computerized system because such system is easily exposed to deterioration and time consuming to assess the previous activities.

The investigated data shows for the less skilled manpower problems. Due to this, the researcher also advises to the HR department that : properly recruit or select more qualified employees as well as highly competently individuals using internal source of information to better understanding of internal weakness, and train employees and also assess their day to day activities, performance etc.

Finally, the company advisable to hire and assign employees to their profession and install modernized equipment's that is computers, to increase the performance of the data base center and other information systems. In addition to this, it should allow the participation of lower level managers in decision making, because in the future they may be experienced in such activity and will contribute their effort and knowledge to the corporation.

Reference

O'Brien (MIS) 10th edition, 2014

Post Anderson (MIS) 1st edition,2014

Academia (MIS)12th edition,2014

Citesesrx.itspsr.edu/view doc/download ,2014

Stair -----casement org/2014

LUCAS (MIS) 1st edition,2014

O'Brien (MIS)1st edition,2014

Curtis and cob ham(BIS)1st edition,2014

McLeod (MIS) 7th edition ,2014

Scott(principle of MIS)1st 2014

Indenmbo.com/facility column,2014

9. Do you think that MIS helps the corporation to make fast and reliable decision on time?

A. yes B. No

10. Which of the following systems the corporations use to store deferent decision?

A. Manual File System B. Data Base Management system C. Both
D. Others

11. Can we say the corporation has enough computers and equipment that are necessary to use MIS? A. yes B. No

12. What looks like the attitudes of employees towards the role of MIS in organizational decision making? A. Very Good B. Unsatisfactory C. Good D. Low

13. Would you say that the corporation has enough skilled man power to operate the data base center? A. yes B. No

14. Do you think that the participation of lower level Manager has an impact on the process of decision making? A. yes B. No

15. Do think that employees of the organization have good attitude towards the role of MIS in decision making? A. yes B. No

16. How does the corporation can know either the decision made effectively or not?
