

**JIMMA UNIVERSITY  
FACULTY OF BUSINESS  
DEPARTMENT OF MANAGEMENT**

**A RESEARCH PAPER SUBMITTED IN PARTIAL  
FULFILLMENT OF THE COURSE RESEARCH IN MANAGEMENT**

**THE IMPACT OF USE OF COMPUTER BASED  
INFORMATION SYSTEM ON MANAGERIAL DECISION  
MAKING AND ORGANIZATIONAL EFFICIENCY IN  
WEGAGEN BANK. (Addis Ababa)**

**Submitted to: Ato Yoseph Shiferaw (Advisor)**

**Submitted by: Liyat Getahun**

**MAY 26, 2002.**

*Jimma University  
Library Periodical*

## *Abstract*

Computer based information system has an impact on managerial decision making and organizational efficiency in the organization. It may have impact on organizational activity, better efficiency, decision making, superior control, reduce cost. Due to the fact that the competitive advantage computer based information system being practicing over different parts of the world.

Thus, this research on impact of computer based information system in wegagen bank, Addis Ababa by using primary and secondary data collection techniques. The aim of the study is to screen out the impact of computer based information system on managerial decision making and organizational efficiency prior and after installation. It also intended to provide or contribute evidences on this issue to the bank as well as who needs it for various purposes.

J. University  
Library Periodical

## *Acknowledgement*

First of all I would like to thank business faculty for giving us this chance to have best knowledge about research. I'm indebted to pass my appreciation to Ato Yoseph Shiferaw for his best support and advice through preparing the research proposal and this research report. And also my appreciation is goes to Nesra Oumer.

## **List of Charts**

Fig 1 - Objectives of installing IS

Fig 2 - Difficulties faced from Employees

Fig 3 - Difficulties faced from Clients

Fig 4 - Improvements in Employees side

Fig 5 - Improvements in Clients side



## Table of contents

	Page
Abstract	I
Acknowledgement	II
List of Charts	III
Table of contents	IV

### **CHAPTER -I- Introduction**

1.1 Background of the Study _____	1
1.2 Statement of the problem _____	5
1.3 Objective of the study _____	6
1.3.1 General objectives _____	6
1.3.2 Specific objective _____	6
1.4 Significance of the study _____	7

### **CHAPTER -II - Literature review**

2.1. Information and Information System _____	8
2.2. The Role of IS for decision making _____	10
2.2.1 Transactional processing system _____	10
2.2.2 Management information system _____	11
2.2.3 Executive information System _____	12
2.3. Efficiency _____	13
2.4. The role of IS for efficiency _____	14

### **CHAPTER- III- METHODOLOGY**

3.1 Methods of data collection	15
3.2 Data Collection	15
3.3 Data Analysis	16
3.4. Scope and limitation of the study	16

### **CHAPTER- IV- Result and Discussion**

4.1. Objectives of installing IS	18
4.2. Major Information System	19
4.2.1. The Banking system	19
4.2.2. The Inventory system	19
4.2.3. The Payroll and Personnel system	20
4.3. Arrangements	20

### **CHAPTER-V- Conclusion and Recommendation**

5.1. Conclusion	27
5.2. Recommendation	29
Bibliography	30
Annex I	31
Annex II	32
Annex III	33
Annex IV.	35

## CHAPTER I

### Introduction.

#### 1.1 Background of the study

Every body uses information one-way or the other. It is so pervasive that it touches all aspects of the humman life. Information is also an essential element in the life of an organization without information business simply cannot survive. It is so important that flow of information in an organization has often been linked with the flow of blood in the human body.

Not so long before information and information service in many organizations were regarded as luxurious and desirable in times of prosperity, but lately there has been a change in attitude towards information.

Nowadays, information is increasingly being regarded as the primary source to managers decision premises, managers who are continually faced with several alternatives to perform their tasks including making a decision, need information. Information provides decision makers with the means of ".....altering the degree of uncertainty in decision making situations....."( Kast, 1998), Kast has emphasized the importance of information in decision making by suggesting that the key to a good decision is "90% information and 10% inspiration". And information system (IS) play their role in penetrating the information that is required even though there is no question that they are very expensive propositions.

*Kume*

A definition provided by a management text states that an information system (IS) is a system that gathers, integrates, compares, analyzes, and disperses information internal & external to the organization in a timely, effective and efficient manner (Koontz and Weihrich, 1989).

O'Brien defines IS as "... a set of people, procedures, and resources that collects, transform and disseminate information in an organization, " It follows, therefore, that paper and pencil (manual), word of mouth (informal) and computer based information systems are all considered as information systems. However, considerations of manual & informal IS are beyond the scope of this paper.

Computer Based IS (CBIS) is " an IS that uses computer technology to perform some or all of its intended tasks." (Turban, 1999).

The element of IS, which also pertain to CBIS, include people, procedures and resources, (Turban). 'People ' refers to the personnel involved in developing and operating the IS (commonly known as IS specialists) and the users of the system or for whom information is generated (also known as end users). 'Procedures' refers to instructions usually in the form of manuals, for using the IS. 'Resources' refer to the following and other components of information technology involved in capturing and processing data into required output/information: **Hardware** (the classical machines computers and related equipment), **Software** (sets of instructions that manage the computer and allow it to undertake the necessary activities to process (analyze data) and **Telecommunication network** (communication channels that link computers and other equipment such as internets, intranets so that data, programs and peripheral devices like printers can be shared or communicated) are essential parts of an IS.



Turban suggests that managers should confine themselves to computer-based IS, since in reality manual, informal and other forms of information technology are used everywhere, and may even be preferable depending on particular circumstances. However, CBIS were designed primarily to meet information requirements that have not been met by other information system. Especially the indispensability of CBIS in the day-to-day information requirements of managers, particularly in each managerial decision making level need to be over emphasized, and also the system helps to do things faster and better (efficiently). And we can view this system as an ultimate tool to provide increased productivity, better efficiency, improved control and money saving mechanisms. Consequently, from organizations of all kind, there has been a heavy investment in CBIS. Wegagen Bank is one such organization, which has invested a great deal of money to install CBIS with very sophisticated software packages.

Wegagen Bank is one of the privately owned banks which have emerged in Ethiopia as a result of the creation of enabling environment facilitated by Ethiopia's new economic policy and institutional reform which began in the middle of 1991. The bank started its operations on June 11,1997. It was established by nine individuals and 7 corporate shareholders with a subscribed capital of birr 60,000,0000, out of which birr 46,000,000 has been fully paid. The board of directors (BOD) governs the bank.



The board of directors (BOD) consists of chairman, secretary and 6 other members. The management of Wegagen Bank is entrusted to the president/CEO, who is appointed by the BOD and is assisted by five vice presidents, the VP for International Banking, Domestic Banking Operations, Credit, Finance and Treasury, and Administration and Personnel. As of April 30, 2002, the full time staff members of Wegagen Bank numbered 620, out of which 275 are professionals and 345 support staff working both in the head office and the branches

Currently the bank is operating through a head office located in A.A and a network of 20 branches, out of which 7 are located in the capital and the remaining 13 are operating in the administrative regions of the country; namely, Bahir Dar, Dire Dawa, Awasa, Mekele, Shashemene, Kombolcha, Tulubolo, Jijiga, Yirgachefe, Agaro, Adigrat, Gondar, Humera and Dansha.

➤ The major activities rendered by the branches (the bank as a whole) are: accepting various types of deposits, providing loans for the establishment of large and small business and industrial establishment. Rendering fast and reliable local and international funds transfer services (international banking), providing credit facilities for the purchase of machineries and equipment, automobiles, household goods etc... and many others..

The bank aims to be one of the top performing banks in terms of market share and long term profitability. The bank believes it will achieve this goal through customer service commitments, cost control, credit quality, capital strength, community commitment etc... along with a very supportive information system. And the bank has presently implemented a “state of the art” computerized system that networks all of its branches and works in harmony with the business objectives.

## 1.2 Statement of the problem

Computer based information systems play a major role in supporting managerial decision making process and in achieving organizational efficiency. In Ethiopia, there is lack of awareness of the importance information and information system for facilitating decision making in an organization. Failure to use information system may have its own consequences (such as loss of competitive edge and customers towards competitors)

During the times when Wegagen Bank practiced the manual information system, collecting, analyzing and interpreting data, providing appropriate information for the purpose of decision- making, and communication of information was very difficult.

At the end of the day, the bank closed at 3:00 P.M to made cash inflows and out flows manually. Every six months, the bank closed for a certain period of time inorder to calculate interest, this activity is made by using calculators; calculating interest manually took several days and delay the organisation efficiency and decision making. It also took too much time to look at documents to crosscheck at the end of the day.

In Wegagen Bank the transfer service was made using telex and mail modes of transfer. The telex system uses telephone lines, and the people at both ends of the telephone line uses codes when communicating, it is a risk that other people may listen or overhead their conversation; This mode of transfer also takes a lot of time, and there's high probability that the telephone lines may fail to function properly and interrupt the message being transferred.

### **1.3 Objective of the study**

#### **1.3.1 General objective:-**

The overall objective of the study is to show the role of CBIS in managerial decision making and organizational efficiency in the selected service- giving organization, Wegagen Bank.

#### **1.3.2. Specific objectives:-**

1. To determine the objectives (reasons) for installing the information system.
2. To investigate what kind of information system was installed and the functions performed by each.
3. To determine if the necessary arrangements and/or preparation were made by the bank before installation of the computer-based information system.
4. To determine employee's readiness to use the system and their acceptance of the system.
5. To make a comparative study of the periods prior and after the installation of the information system.
6. To see how far the computerized information system has performed to increase clients satisfaction.

x

#### **1.4. Significance of the study:-**

The result of the study would be highlight for the bank, to install other advanced information system in order to be efficient and fast for decision making purpose to withstand (compute) with other banks and to attract customer by giving fast delivery service.

At the same time, it could serve as a role - model for other similar institutions by showing the extent of efficiency, customer and employee satisfaction.



## CHAPTER II

### Literature Review:-

#### 2.1. Information and information system.

Information is "Data that have been organized so that they have meaning and value to the recipient, then the recipient interprets the meaning and draws conclusions and implications" (Turban 1999). Data (such as customer records, wage rate) are processed and result in information (such as invoices, payrolls, management reports) which is a basic ingredient in the decision making process.

Managers carry out the tasks of planning, organizing staffing, leading and controlling by making decisions on the basis of information available to them. But the information used should possess certain qualities so that it incorporates value to the users.

A computer system can be as good as the people using it (O'Brien). Quality information input and various validation techniques can minimize errors. Some of the characteristics of useful information are that it is relevant, timely, accurate, concise, complete, and current. Consideration of these qualities of information are fundamental to the growing need for incorporating CBIS with an organization (Schultheis).

O'Brien defines an information system (IS) as, "....a set of people, procedures, and resources that collect, transform, and disseminate information in an organization" Like other systems, an IS includes inputs(data instructions) and outputs that are sent to end-users or to other systems. It also includes a feed back mechanisms that control operations.



IS can be paper-and-pencil (manual), word-of-mouth(informal) and computer based information systems-CBIS is “an IS that uses computer technology to perform some or all of it’s intended tasks” (turban,1999).

Many people mistake ISs for computers and vice versa. The difference between two is, computer provides an effective and efficient ways of processing data and they are a necessary part of an IS. An IS, however, Involves much more than computers. Its basic computers are hardware, software, database, network, procedures and people (Stair). The successful application of an IS requires an understanding of the business and its environment that is supported by the IS (Schultheis).

Several different ISs can exist in ane organization some of these are completely dependent but most are inter-connected by means of networks. If the entire company is networked, people can communicate with each other and access information throughout the organization (O’Brien).

ISs at the departmental level support the traditional functional area of the firm. The major functional ISs are Accounting, Finance, Manufacturing, Marketing and Human Resources Management ISs (Turban).

Managers on each of the levels have different levels of responsibilities and are therefore required to make different kinds of decisions, by utilizing ISs that are designed to meet information requirements at each managerial decision making (stair).

## 2.2. The role of IS for decision making.

There is no signal system that controls all aspects of computing in an organization. Organizations have many IS serving different organizational levels and function (Senn); He suggests that these different types of IS are aimed at processing data for one of the three reasons: to capture the details of transactions, to enable people to make a decisions and / or communicate information between people and location.

Managers on each of the levels are required to make different kinds of decisions. There are CBIS that are designed to meet information requirements at each managerial decision making level, which pertain to both manufacturing & service giving organization. Taking one example from each level:-

**2.2.1. TRANSACTIONAL PROCESSING SYSTEM ( TPS ) :-** or **the Operational level**, ISs that assist lower-level managers to make operational decisions. These systems "... capture and process data describing business transactions. Then, they update organizational files and data bases, and produce a variety of information products for internal and external use" (O'Brien,1993) with TPS ,accurate and reliable information is made available at speed, enabling operational managers to make timely decisions.

By virtue of the nature of operational decision making (as outlined previously), operational level CBIS are designed to provide support by generating quantitative information that is task - specific, frequently produced, predictable, very detailed, historical, highly structured, etc... To this end the data used emanate wholly from within the organization. (Senn).

A transaction is any-business-related exchange such as payments to employees, sales customers, and payments to suppliers. A transaction processing system (TPS) is an organized collection of people, procedures, databases, and devices used to record complicated business transaction (stain). Stair says that to understand transaction processing system is to understand basic business operations and functions.

Transaction processing system record and process data resulting from business transaction. Typical examples are ISs that process sales, purchases and inventory changes (O'Brien).

With TPS, accurate, reliable information is produced at a speed that manual information systems, for instance, cannot rival enabling operational managers to make timely decisions and allowing them to access and share information products by other parts departments of the organization through the use of telecommunication networks. (O'Brien, 1993).\*

Transaction processing system provide for quick input of data into a system, such as an order at a fast-food restaurant. (courtesy of PAR Technology crop).

**2.2.2. MANAGEMENT INFORMATION SYSTEM(MIS):- or the tactical level, ISs** that assist middle-level managers to make tactical decisions. These systems produce several kinds of reports: summary, expectation, periodic, on-demand, to enable managers at this level to spot trends and get on overview of business activities( O' Brien).

CBIS at this level provides periodic information about such topics as operational efficiency, effectiveness and productivity by extracting information from the corporate and database and processing it according to the needs of the users. (Senn).



Tactical CBIS also called Information Reporting System (IRS), Data for this system not only from internal sources (eg inputs & out puts of TPS) but also from external sources. (O'Brien).

**2.2.3. EXECUTIVE INFORMATION SYSTEM(EIS):-** or **the strategic level,** ISs that support top-level managers to make strategic decisions. These systems provide top management with immediate and easy access to information about key factors. They draw on data not only from system internal to the organization but also from those outside such as news service or market research database (O'Brien)

Strategic management is responsible to establish organization goals & objectives and to control the overall dissection and performance of the organization. Strategic CBIS In their design to support goal - oriented decision, generate both quantitative & qualitative summaries as required by top mgt that are future oriented and use unstructured data mainly from external source of the original (Such as news services or market research database) (Stair).

Strategic CBIS called Executive Information System (EIS), provide top management with immediate access to information about key factors, critical to accomplishing an organizations strategic objectives EIS are customs - made for individual executive user as strategic objectives differ from one organization to another.

EISs When enhanced attributes such as electronic communications: e-mail, word processing, computer conferencing; data analysis capabilities such as query languages, decision support systems and personal productivity, they are termed executive support system(ESS).(Stair).

EIS that produce analytic models and a variety of flexible reports and help managers to focus on the future are termed decision support system (DSS). ISs not only assist in providing information for decision-making situations but also greatly contribute to organizational efficiency (Turban).

As the oxford dictionary states to be efficient means "to be able to work well and with out wasting time of resources" ISs can also save time and avoid bulky paper documents when capturing data in the input phase. During the processing phase, computers perform activities such as rearranging, organizing, calculating, summarizing, and many more with a speed that is "in fraction of seconds" (O'Brien), and high levels of precision and accuracy and produce reliable information. They also facilitate the communication of information with in and out of the organization.

### **2.3. Efficiency**

Oxford dictionary defines, efficient to mean " to be able to work well and without wasting time or resources". It is simply doing things right (i.e in a faster and better way). Organizations need to efficiently undertake all their activities in order to gain advantage over their competitors. It has become a major competitive priority that organization has to achieve.

438  
438



x

## **2.4. The role of IS for efficiency**

A lot of activities in an organizations are supported by CBIS that lead to organization efficiency. These include economical processing of data, managing large amount of information (i.e. avoiding bulky paper documents), reduction of cost (as system replace labors and minimize the consumption of other resources and supplies), gaining better access to information through communication, and improvement of customers services and others (Senn).

Systems also have different capabilities such as performing high-speed, high volume numerical computation, proving fast, accurate and inexpensive communications within and between organizations, storing huge amounts of information in an easy - to - access yet small space etc...

## CHAPTER III

### METHODOLOGY

#### 3.1 Methods of data collection:-

As discussed in the introduction part as well as in the objectives of the study, the study was conducted in Wegagen Bank, Addis Ababa branches. A.A was selected because of the fact that it is the largest city and mostly it's where banks are most pronounced and concentrated.

Both primary and secondary data collection are used for the study. The primary sources used are interview questionnaire and secondary data include all kinds of published and unpublished materials about Wegagen Bank like books and company brochures.

#### 3.2 Data Collection:-

The collection of data was done during the three weeks semester break from February 4 -23,2002 after the first semester examination. The most important data collection tool that was used in his study was interview questionnaires.

Since the strategic study population is homogenous, sample size was taken for the study.

- Sample techniques
- . Judgement sampling ✓
- . Random sampling ✓

By using random sampling interview questionnaires were administered to clients in the bank during working /business hours to asses their opinion on the impact of CBIS. So the number of clients to be conducted is 50.

By using judgement sampling self administered interview was done to the concerned management personnel and employees of Wegagen Bank, concerning their decision making and organizational efficiency. The number of management bodies interviewed was 20 and the employs was 30.

Interview was administered to assist data collection with the President of Wegagen Bank, the Vice presidents, IS Division Heads, the person in charge of IS unit, non-management employees, and clients at service.

### **3.3 Data Analysis.**

The collected data has been edited and compiled and the results are presented using descriptive analysis method. Data interpretation was done by relating the data to more general theories about the impact of computer based information system.

### **3.4 Scope and limitation of the study**

Due to the current time and financial constraint the scope of this study is limited i.e the area that the study ~~will be~~<sup>was</sup> conducted is Addis Ababa, primary and secondary data is collected related to the objective of the study, the study will be<sup>was</sup> done from December to May.

The study encompasses Wegegen Bank in Addis Ababa, on the impact of use of CBIS for decision making and organizational efficiency on selected 100 respondents by using interview questionnaire with in three weeks.

During the data collection, some management bodies were not willing to be interviewed because they are busy and some management bodies and employees preferred to fill the questionnaire rather than be interviewed. Similarly, some clients were not willing to be interviewed.

14  
34

20  
20

## CHAPTER IV

### RESULT AND DISCUSSION

Wegagen Bank has 108 professional employees and 111 support workers in Addis Ababa branches. In Addis Ababa branches, the number of management bodies are 20. From the total number of professional employees, 30% has been taken as a sample to assess the impact of CBIS and 100% of management bodies have been taken as a sample. 30 questionnaires for employees and 20 for management bodies were distributed; out of the 30 questionnaires of the employees 27 were returned i.e 90% of the questionnaires distributed and the remaining 3 were not i.e 10%. As to the second questionnaire 20 were distributed to the management bodies and all were returned i.e. 100%. The researcher distributed 50 questionnaires for clients at the service place to get across their response or the bank service. From the whole questionnaires, 32 questionnaires were returned which accounts 64% of the total number and the rest questionnaires were not returned due to several factors.

Wegagen bank renders various services to its customers. According to my interview with managers, services like deposit, overdraft facility, budget loans, International banking service, locale fund transfer service and monthly statements.



#### 4.1. Objectives of Installing IS

According to the interview with the managers, the objective of installing CBIS are to achieve efficiency and to assist management. To achieve efficiency according to the view of bankers means to achieve possible speed (with out wasting much time) to get accurate and reliable results or computation (which can not be seen when activities are carried out manually) and satisfaction i.e. 35% of the respondents said to achieve efficiency, 15% of them said to achieve speed and 5% of them said to satisfy customer that means a total of 55% of the respondent said that the objective of CBIS is to achieve efficiency.

For decision making purpose managers are the one and the responsible to decide the right decision by considering different factors, in this case 5% of the respondent said that to assist management, 10% of them agreed on decision making purposes, 15% of them said to save money and 15% of them is for decision making purpose, that means a total of 45% of managers have objective to use CBIS for decision making purposes.

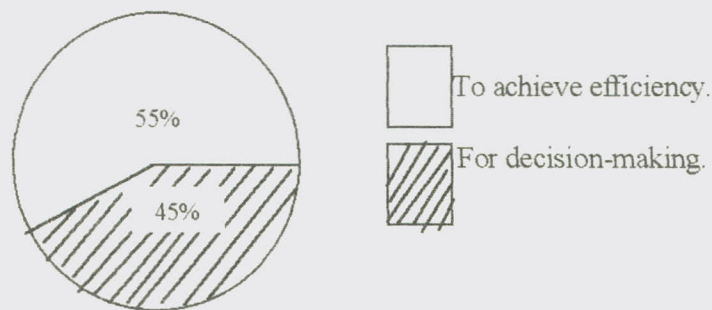


Fig.1. Objectives of installing IS



## **4.2. Major Information System**

Form interview with managers group the bank has installed three kinds of IS. Such as the banking system, Inventory system and payroll and personnel system. Of the above-mentioned systems, the bank utilizes all systems as to 95% of the respondents.

### **4.2.1 The banking system:-**

The banking system is the biggest and the most important system which supports most of the banking activities. This system is divided into smaller parts called modules which is based on the type of account or function they are serving. The modules include saving accounts, checking or current, overdraft account, loan account, remittance or Domestic transfer and international banking.

### **4.2.2. The Inventory System.**

This system keeps a record of all the contents or goods of the bank. which can be accessed in seconds. This system performs the cost and quality control purpose of the different items of the bank. It calculates this depreciation from time to time which is very helpful for decision making purposed and for the preparation of the account statements. To use this system, the bank gathers information from the branches and the head office on the number of inventory item.

### **4.2.3. The payroll and personnel system.**

This system processes the payroll data of employee of the bank and also the human resource data of the bank and provided an up - to - date information for decision making purposes.

The system performs all the additions such as bonus, overtime and deduction such as salary tax on the salaries of the employees.

All in all using the system as a whole has enabled the bank to save money. Because of automation (computerization) of the bank's activities, the number of employees has been reduced, using stationary material has been decreased by 80% and other costs have come down.

### **4.3. Arrangements**

According to the response of the managerial bodies and employees, necessary preparation were made before installing the system. 100% of the respondents of managerial bodies said that trainings were given for the staff to prepare them to manipulate the system easily, to feed the right information and to communicate with other computers. From the interview of employees, 85% of them received trainings from the bank and 100% of employees have computer knowledge. If wrong data is being fed into the system, the only out come as output is wrong information i.e. Garbage in Garbage out (GIGO). Having this in mind, the bank found it very essential to train its employees.

The training session included both off - the - job (at training center) and on the job (with operating the system) training programs. Manuals, showing both the operational procedures and the technical parts of the system were also prepared for the employees to guide them in the work activities.

Results from the interviews with operational level workers revealed that they are ready (both mentally or physically) to use the computer system. This was possible mainly because of the training given to them and the manuals prepared to guide them in their work activities. Besides this, they have been using the CBIS along with the manual system in a parallel way for over a year. Through the bank fully adopted the computer system only recently, it is using the system well in present days.

Before computerization of the banking activities the bank was following a different pattern. When we compare CBIS with the manual system, it has an impact on efficiency, speed, workload, decision making purpose, for getting up to date information. 100% of the respondents of management group said that efficiency and speed have increased because of CBIS installation. From the response of 96% of the employees, efficiency has increased, 92% responded that speed has increased, and 96% responded that workload has decreased. For decision-making purpose, computerized system aided decision makers at different level by providing information 100% of managers group responded the above idea. And also 100% of them said computerized system is fast for decision making purposes. 80% of management group responded that, both management and non-management bodies have benefited from the use of the system, 15% of them respond that only management bodies have benefited and 5% of them said only non management bodies have benefited; so, we can say that both management and non-management bodies are benefited from the use of the system.

In the general, when activities were done manually, it was time consuming, tiresome and boring and results were some times inaccurate because of computational blunders and it was likely to happen more effort, more cheating or fraud would occur since it was difficult to control each and every activity.

When manual system was used, it took a lot of time to look for documents, to crosscheck documents and to process all the check payments manually at the end of the day. It was also very tiresome and boring to process the documents manually, errors



appeared more frequently and there was a high probability that problems and errors pass without being noticed or identified. However, the computer gives a signal showing an insufficient balance and identifies that the account has been frozen.

92% of the employees responded that CBIS is a better way to accomplish their task when they compare it with the manual system, 18% of them said it is better because it is a faster way to accomplish their that task, 29% of them said that efficiency and accuracy is increased, 11% of them said that it is a best method of serving customers, 11% of them said that it that to accomplish their work, and 100% of Managers group said that computer system is better to achieve the over all organizational goal in efficiency.

During the time when the bank used manual system, clients and employees faced difficulties.

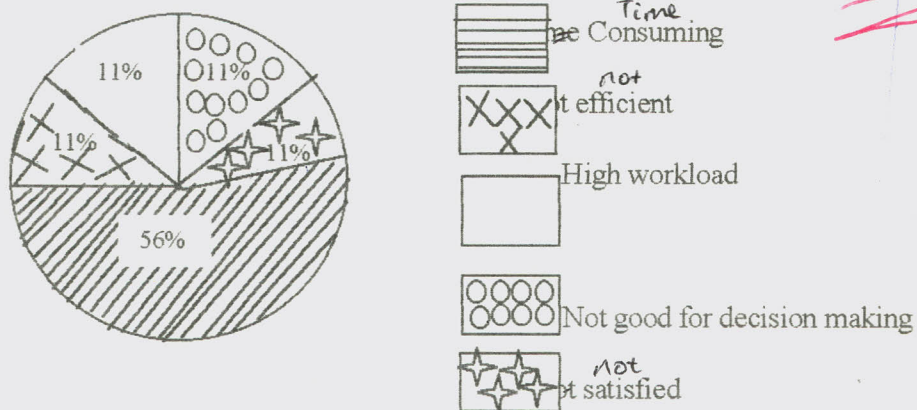


Fig. 2. Difficulties faced from employees

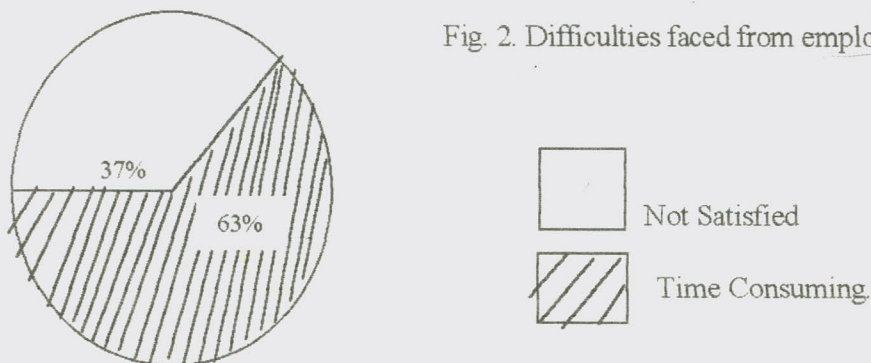


Fig. 2. Difficulties faced from clients.



Manual system was very time consuming to look for documents and it was also boring for clients and employees, so the bank was not efficient because of this and other factors. There was high workload and it was not convenient for decision making purpose because confirmations are not provided in time.

➡ After installation of CBIS there are improvements in the employees side.

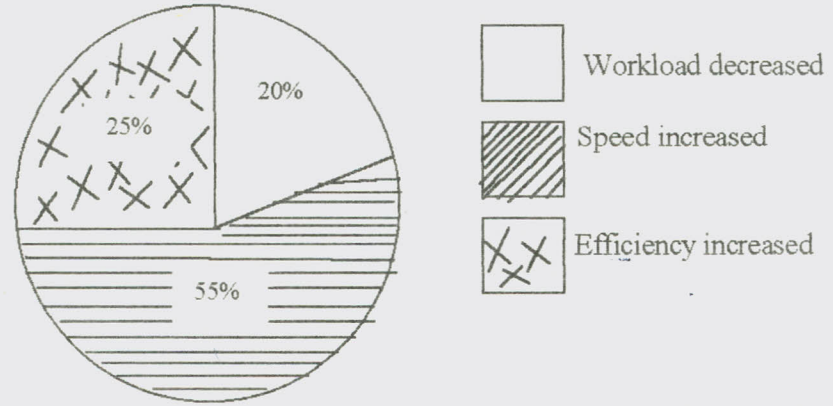


Fig.4. Improvements in the employees side

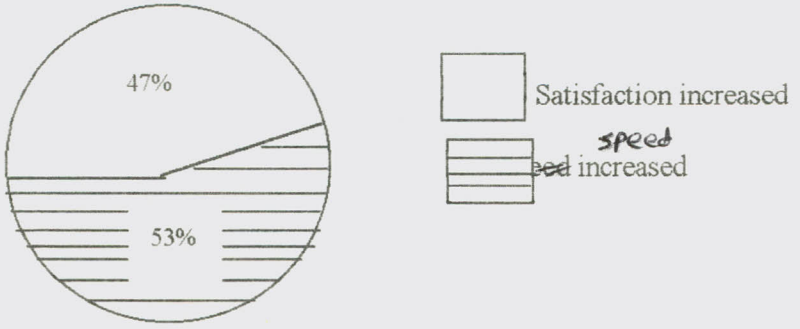


Fig. 5. Improvements in clients side

Employees are satisfied because workload is decreased and they can give better service for the clients in a fast way. Clients are satisfied because of different factors. 50% of them preferred to be a client of WB because of its speed. 22% of them preferred the bank because they can withdraw money at any branch 13% of them preferred the bank for the

reason the Bank is near to their house and their friends are a client of WB and they heard comments about the bank. 15% of them preferred to be a client because they like the hospitality of WB workers.

100% of managers group responded that computer system is helpful to give better customer services because of different factors. 45% of them said that it is fast to give services. 40% of them said that because of networking it gives better customers service that satisfy the customer and 15% of them said that employees can make withdrawals deposits money at any branch they prefer. In managers perception 100% of them prefer to give service by the help of computer than manually.

According to the interview conducted with the clients of the bank, the other most important use of the banking system along with the network established is the creation of link (connection) between computers within a branch and computers among different branches. Because of the presence of communication among the branches, clients can withdraw money from any branch in the country in which they did not make deposits.

For eg.: assuming a client has opened his/her initial saving account and has made all his/her deposits in the "Merkato" branch but he/she can withdraw money from the "Bole", or "Gergi" or any branch of WB.

Unlike other times, where clients have to wander from here to there and waste a lot of time in the bank, now clients walk- in the bank, do whatever they do (be it making a transfer, taking a loan, making deposits or withdrawals) and walk out with in 5 - 7 minutes. All they have to do is filling the deposit or withdrawal voucher and approach the teller (assuming they have made initial deposits). The teller opens the client's account using his/her account number, check the client using his/her name, photo and signature

and enter the amount to be deposited or to be withdrawer. The computer prints all the figures (make additions or deductions) depending on what they made, adds the interest earned (if any) and puts the balance on the passbook. Then the teller pays and receive money from the client.

Had the bank used the manual system, there would have been a number of additional steps to followed. The client fills the voucher and approaches the saving account officer who searches for the clients ledger card from among several thousands of other clients' ledger cards, moves additions or deductions on the ledger card and pass book and pass them on to the auditor. The auditor checks and this to reconcile the figures in all the documents in the voucher, pass book and ledger card. Then by a messenger the document passes to the teller. The teller pays or receives money from clients and returns their passbook.

Within the banking system, there is an accounting program designed in the context of banking activities, which assist the works of the accountant and auditors. Using the out put of different modules, it produces daily proof sheets showing the debits and credits of the daily transactions. Then it produces general and subsidiary ledgers and different accounting reports such as daily account, balance reports, trial balance reports, credit summary, etc, which will be used in different level managers to make decision on deferent maters. The system also generates different reports to the management to make timely and better decisions. Management can also access any information from the system with in seconds. It takes the system less than 10 minuets rather than a day when it was done manually to produce reports.

Longer working hours (until 5 pm) which were not previously possible because of early shut - downs (at 3 pm) in order to undertake computations manually, withdrawal service from any branch of WB in which the clients did not make their deposits because of the network created among branches, less waiting time in the branches before and while getting services which on average takes 5 - 7 minuets, and other important benefits reaped from the Banking system are some of the benefits that customers are highly valuing .



## **Chapter V**

### **Conclusion and recommendation**

#### **5.1. Conclusion**

The CBIS has proven to be successful in achieving (fulfilling) the objectives set for it. From the result of the interview with employees, management and clients of Wegagen Bank and from the overall observations, it can possible to conclude that the system has improved to a great extent the operational (organizational) efficiency and decision making capability. It has also served as a controlling and money saving mechanism.

From the interviews with management group we can see that the bank has installed there kinds of IS the banking system, inventory system, and payroll & personnel system and the bank utilizes all kinds of IS which are installed.

According to the interview with management groups and employees, necessary preparation were made before installing the system. Trainings were given to employees and manuals were prepared to guide them. They are ready to use the computer system.

Similarly, according to the interviews with employees and clients during the time when manual system was used there were difficulties they faced. Employees faced efficiency problem, decision making problem, high work load, use of much time and they were not satisfied and clients faced problems like wasting of much time and they were not satisfied by the service. After installation of CBIS, there have been improvements. Improvements from employees include increased efficiency; decreased workload and increased speed and improvement from clients ~~we~~ have increased satisfaction and increased speed.

In general, because of the different capabilities of CBIS, ~~a~~ number of business objectives are supported. Today, systems have become a major tool to improve decision-making, efficiency, control, productivity, reduced cost and enhance profit. Hence different consideration must be taken by installing CBIS to achieve the objective of an organization.

## 5.2. Recommendation

Companies in Ethiopia have to install these systems if they are to be successful in today's world wide market. There are several advantages to Information System, a few include improved customer service, better decision making capability, improved efficiency & higher competitive advantage. This research would like to recommend that all companies that have the financial capability should install IS given the feasibility. As we are in a world, where competition is getting stiffer and companies from all over the world are entering into markets in many countries. To make an organization successful, it is crucial for them to install IS.

A company needs adequate human resources to install and maintain IS. Besides these, management & employees should have acceptance of the IS that is going to be installed, otherwise they might challenge and resist it. And also managers should prepare themselves to CBIS, since in reality manual, informal & other forms of technology are used and may even be preferable depending on particular circumstances. However, CBIS being designed primarily to achieve efficiency and to assist management. It is very important to be competent in today's business environment when "INFORMATION IS POWER"!.

## Reference

1. Turban, " Information Technology for mgt." , 1999.
2. Kast, Fremond E. And James E. Rosenzweig " Organization and management:A Systems and contingency Approach, " McGraw- Hill, inc., 1970.
3. Schultheis Robert and mary summer, " Management information system; the manger's view," Richard D, Irwin, Inc., 1995.
4. O'Btirn, James A., "Management information system: A managerial End user perspective," Richard D. Irwin, Inc., 1993.
5. Stair, Ralph M, George W. Reynolds, " Principle of information system: A managerial approach 3<sup>rd</sup> edition, 1998.
6. Koontz, Harold and Heinz Wehrich, "MANAGEMENT," McGraw-Hill Book Co., 1989.
7. Senn, James A., "Information Technology in Business: Principles, Practices, and Opportunities," Prentice-Hall, Inc., 1993.



ANNEX 1  
JIMMA UNIVERSITY  
FACULTY OF BUSINESS  
DEPARTMENT OF MANAGEMENT

Interview questionnaire for employee of Wegagen Bank.

1. Do you mention your position in the organization? \_\_\_\_\_

2. Do you have any computer Knowledge?

Yes     No

3. Did you get any computer training from Wegagen Bank?

Yes     No

4. What is the impact of computerized banking system to employees of Wegagen Bank  
intems of :

Efficiency \_\_\_\_\_

Speed \_\_\_\_\_

Work load \_\_\_\_\_

5. During the time when manual system was used what type of difficulties did you face?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. During the time when computerized system is used what kind of improvement do you  
see?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. Do you think that computerized system is better to accomplish your task?

Yes     No

If yes, Explain \_\_\_\_\_

If No, Explain \_\_\_\_\_

8. What do you recommend to improve the activity of banking system of Wegagen  
Bank?

ANNEX 2  
JIMMA UNIVERSITY  
FACULTY OF BUSINESS  
DEPARTMENT OF MGT

Interview questionnaire for clients. Of Wegagen Bank.

1. Have you made any account in any branch of Wegagen Bank.

Yes  No

2. For how long have you been a client of Wegagen Bank? \_\_\_\_\_  
3. For what type of service do you come to Wegagen Bank?

1. Deposit  2. Loan  3. Money transfer

4. All  5. Others

4. Why do you Prefer Wegagen Bank from others?  
\_\_\_\_\_

5. During the time when manual system was used, what difficulties did you face?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. During the time when computer system is used, what kind of improvement do you see?  
\_\_\_\_\_  
\_\_\_\_\_

7. Are you satisfied with new computerized system of Wegagen Bank?

Yes  No

If yes, what is your reason, \_\_\_\_\_  
\_\_\_\_\_

8. Due to the fact that Wegagen Bank is a recent Bank than others, what do you suggest to compete with others?  
\_\_\_\_\_  
\_\_\_\_\_

### ANNEX III

Interview questionnaire for Management bodies of WB.

1. What is your position in your organization? \_\_\_\_\_
2. What service does the Bank renders? \_\_\_\_\_
3. In your perception, the Bank's service is better when it gives service:

1. Manually  2. By help of computer

4. If your answer is computer system, what service does the computer system give?  
\_\_\_\_\_

5. What is the objective of installing computer based information system in your organization?  
\_\_\_\_\_  
\_\_\_\_\_

6. What kind of IS is installed in your organization ?  
\_\_\_\_\_

7. Does the Bank utilize all types of IS's installed?

Yes  No

If yes, what? \_\_\_\_\_

8. What impact does the computer system have for the activity, when you compare with the manual system in terms of :

Speed \_\_\_\_\_

Efficiency \_\_\_\_\_

9. Were necessary preparation made before installing the system ?

Yes  No

If yes, what \_\_\_\_\_

10. From decision point of view which one is fast ?

1. Computerized  2. Manual System  3. Both

11. Which employees are benefited from the computer system ?

1. Mgt bodies  2. Non - mgt bodies  oth

11. Do you hope to achieve cost saving by the implementation of the system ? how significant ? \_\_\_\_\_

12. Do the computer system aid decision makers at different level ?

Yes  No

If yes, what \_\_\_\_\_

13. How do the computerized system and manual system help to achieve the over all organization goal ?

manual system \_\_\_\_\_

Computer system \_\_\_\_\_

14. Which one help to achieve over all organizational goal ?

1. Manual System  2. Computer System

15. Do you think the Computer System help you to give better customer service ?

Yes  No

If Yes, How ? \_\_\_\_\_

16. Do all your branch derive the benefit of IS?

Yes  No

If yes, Specify \_\_\_\_\_

If No, Compare the performance with branches that do have IS, in terms of:

Decision making \_\_\_\_\_

Efficiency \_\_\_\_\_

Speed \_\_\_\_\_

Client satisfaction \_\_\_\_\_

Client Service \_\_\_\_\_

Client feed back \_\_\_\_\_

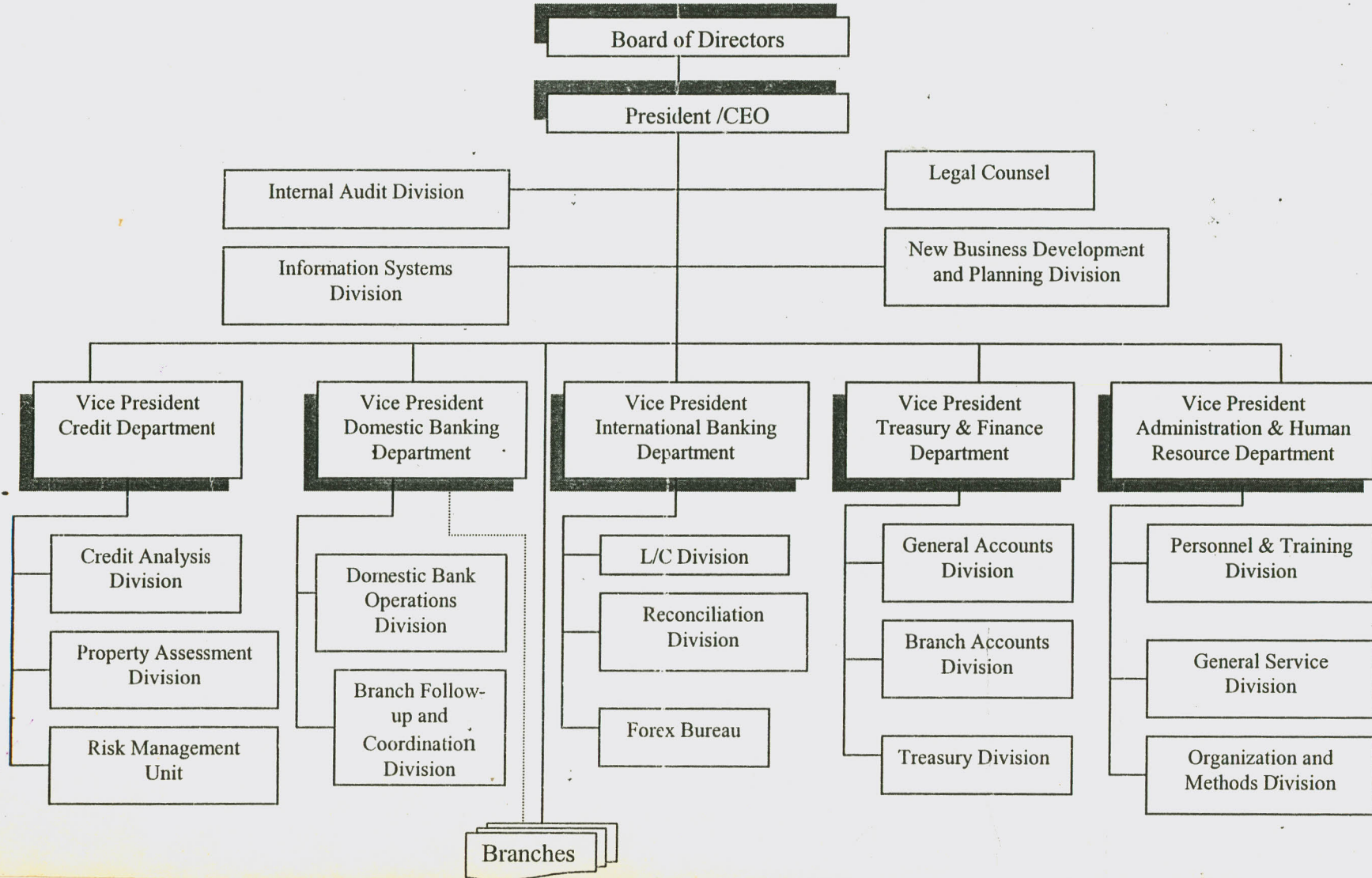
Leaser mistakes \_\_\_\_\_

Higher controls \_\_\_\_\_

18. What do you recommend to improve the activity of Banking system of Wegagen Bank ? \_\_\_\_\_



## Wegagen Bank, S.C Organization Structure





This work is licensed under a  
Creative Commons  
Attribution – NonCommercial - NoDerivs 3.0 License.

To view a copy of the license please see:  
<http://creativecommons.org/licenses/by-nc-nd/3.0/>

This is a download from the BLDS Digital Library on OpenDocs  
<http://opendocs.ids.ac.uk/opendocs/>