

**DESIGN AND IMPLEMENTATION OF A RECORD  
MANAGEMENT SYSTEM FOR A MICROFINANCE INSTITUTION  
A CASE STUDY OF MEHTA GROUP MICROFINANCE**

**BY**

**NDOVYA MBASA**

**A RESEARCH REPORT SUBMITTED TO THE SCHOOL OF  
COMPUTER STUDIES IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE AWARD OF A  
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## DECLARATION

I, Ndovya Mbasa declare that the content of this project is my own original work and research and has never been presented to any other institute of learning for any academic award. It is my original work and to the best of my knowledge, it does not contain any material published or written by another person except where due reference is made. The literature and citations from other people's work have been duly referenced and acknowledged in the text.

Signed.....

NDOVYA MBASA

BBC/42097/133/DU

Date.....<sup>10<sup>th</sup></sup> August 2016.....

## APPROVAL

This research proposal has been written under my supervision and is ready for submission to the university.

Signed.....

MR. MASAABA RICHARD

SUPERVISOR

Date.....

## DEDICATION

I, Ndovya Mbasa Bertrand dedicate this book to my beloved parents Late Kambale Martin and Mukandala Kamala Philomene, to my lovely aunty Mukandala Mbambu Chantal. To my friends and all my colleagues at Kampala International University for their support in one way or another who were a contributing for my academic triumph. May almighty God reward them the best, and also satisfies their ambitions.

Above all, I would like to thank the almighty God, the most Gracious, the most merciful and Sustainer of the Universe for his wonders and favors always on to me up on reaching this big and further step in life.

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## LIST OF ABBREVIATIONS AND ACRONYMS

|           |                                                |
|-----------|------------------------------------------------|
| DBMS      | Database Management System                     |
| ERD       | Entity Relationship Diagram                    |
| RAM       | Random Access Memory                           |
| DDL       | Data Definition Languages                      |
| LAN       | Local Area Network                             |
| PK        | Primary Key                                    |
| MHZ       | Mega Hertz                                     |
| CD/DVD RW | Compact Disc/Digital Versatile Disc Rewritable |
| GB        | Giga Byte                                      |
| MB        | Mega Byte                                      |
| CAT 5     | Category 5                                     |

## ABSTRACT

The Significant impact of computer technology has led to increasing recognition that data is source that has volume and therefore needs to be organized, securely stored and managed. Thus the success of any organization that provides any service greatly depends on availability, consistence, reliability and correctness of the information. Therefore it is a duty of the organization to ensure that their data and records are well organized and managed efficiently. This project is aimed at developing an Automated records management system for Mehta Group Microfinance as opposed to manual system which involves manual filling system and has proved to be time consuming and hectic when updating records. The study has taken in an effort to portray how records can be managed through automation and its importance to the records manager, members as well as Mehta Group Microfinance clients.

This paragraph simply explains how the researcher achieved all the desired goals. In the first chapter, the researcher gave an overview of the system, its objectives, scope and justification of the study. Further research was carried out on different Literatures to get information on how to deal with similar problems of the Microfinance. Different literature was gathered from Electronic books and other online sources as shown in chapter two. The researcher used different methods and techniques to gather data from within and outside the organization which included interviews, observation, questionnaire and document review. After data gathering and analysis, design was made using bottom-up approach for entity relationship diagram (ERD) which is the approach for the design of simple databases with relatively small number of attributes. During the design, specific requirements were used which included both software and hardware to fasten the designing process and implementation. System testing was done using unit testing, system testing, acceptance testing and then presented to the users to verify whether it satisfies their need and was proved right.

## CHAPTER ONE

### INTRODUCTION

#### 1.0 Introduction

This chapter reviews on the background of the project, statement of the problem and why there was a need to design and implement a record management system for Mehta Group Microfinance.

#### 1.1 Background

Records management is the practice of identifying, archiving, preserving and disposition of records. the ISO 15489:2001 standards defines it as “the field of management responsible for the efficient and systematic control of the creation, receipt, maintenance and disposition of records including the process of capturing and maintaining evidence of and information about business activities and transactions in the form of records” ([http://en.wikipedia.org/wik/records - management](http://en.wikipedia.org/wik/records-management)).

Mehta group micro finance Lugazi is a registered micro finance company which is situated at Lugazi with one director as a shareholder. Its main objective is to lend money to different people within the vicinity of Lugazi.

Mehta group micro finance Lugazi was formed to help fight against poverty through the provision of short term savings to meet immediate needs and opportunities. Rural financing makes convenient access to savings and credit services with low interest rates and making it accessible to the employees of Sugar Corporation of Uganda limited at lowest interest rates possible.

Since the government of Uganda is encouraging the support of poverty alleviation projects by channeling resources through saving and credit schemes, for example entandikwa, send the cow this is a sign of attracting support for Mehta group micro finance Lugazi programs.

## **1.2 Problem Statement**

Mehta group micro finance has over the time been experiencing a problem of retrieving clients' information due to scattered information around different departments of the company in bulk files of bulk documents that led to a total mess. This made it hard for one to obtain a specific data or information for one to make or take an informed decision for the better of both the company and the stakeholders. Just like in many meetings conducted by Mehta board members distinguishing what customer did what, when, by who she/he was served was a total math equation of Xs and Ys that appear as stars to administrators and managers in charge since one has to go through files and files of papers looking for a particular document. For example if one was to obtain a loan, she/he could easily take all the time she/he wanted before thinking of paying it back, this result into the company losses since time is one of the determinant factors affection issuing loan.

If the problem was not solved Mehta group microfinance was likely to lose all its customers because decision making would be difficult, much costs would be involved in scheduling of meeting thus leading failure of the microfinance and yet the company is expanding and growing everyday and there will be need for an automated and efficient loan records management system to manage retrieval of large files.

## **1.3 Purpose of the Study**

The purpose of this study was to analyze, design and implement a client's record management system which improved on Mehta group micro finance Lugazi data collection and retrieval to enhance planning and decision making by the management.

## **1.4 Objective of the Study**

- To analyze storing of data with the database,
- To identify the level of productivity of staff and system at large using the technology,
- To design a prototype that is efficient in terms of making proper decisions,
- To implement and test the new system so that is efficient in terms of retrieval of records.

## **1.5 Research Questions**

This research sought to answer the following questions:

- i. What relationship does technology have with the traditional way to storing the records of Mehta Group Company,
- ii. What is the relationship between technology and productivity of staff and system at large in Mehta Group Company,
- iii. To what extent does technology affect proper decision making in Mehta Group Company,
- iv. To what extent does technology efficiently substitute the old system in Mehta Group Company.

## **1.6 Scope of the Study**

### **System Scope**

The study was focused on retrieving clients' record in the required time and came up with a database solution for Mehta group micro finance Lugazi in order to manage its staff with the record of the clients and also being able to calculate the balances and making updates.

### **Time Scope**

The system was developed in a period of three (3) months starting from 2<sup>nd</sup> April 2016 to 13<sup>th</sup> July 2016 but the system shall work for years to come.

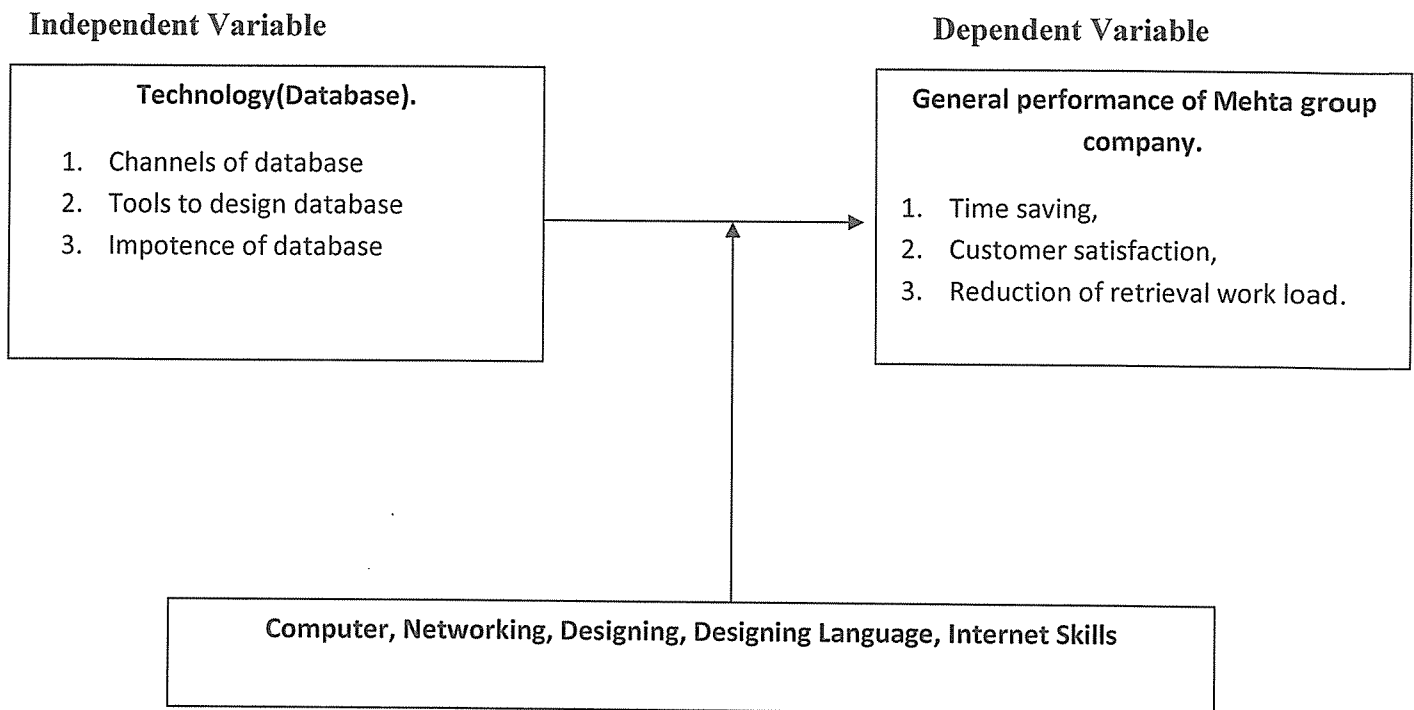
### **Geographical Scope**

The study was carried out in Mehta group microfinance which is located in Lugazi about 500 meters from Kampala -Jinja highway. Therefore the system that was developed was meant for Mehta Group Microfinance.

## **1.7 Conceptual framework**

The conceptual framework is simply a construct of the interrelationships that exist among the variable to be studied. This clearly illustrates the causative variable, the effects including other intervening factors in the relationship. It clearly outlines the structure of the research and guides the researcher in the whole research process.

**Figure 1 Conceptual Framework**



### 1.8 Significance of the Study

The study was to bring forward a system which was able to enhance faster retrieval of information.

The study was to help Mehta Group Microfinance to have an organized and proper business enterprise and their services would benefit the citizens positively.

The study was to help the researcher to acquire relevant skills such as ensuring that he came up with a validated system. This helps the students to do a lot of practice on databases while using this research as a reference.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.0 Introduction

This chapter reviews relevant literature on a computerized loan record management system, adaptation of a computerized system and types of records, advantages and disadvantages of using the database.

#### 2.1 Definition

In early days of computerization it was normal to maintain specific files for individual applications.

Data was processed centrally in batches and there was little or no on-line interrogation of files. This approach meant that there was duplication of data, concentration on the needs of the computer system rather than the user and difficulties of accessing files by on-line users. To overcome these problems databases were developed, T.Lucey, (2000).

#### 2.2 Record

This is a group of related fields. Thus a record represents a collection of attributes that describe an entity.

According to, S.P Arora, (2000), defined records management that it concerns itself with distribution, maintenance, retention, preservation, and retrieval. Thus this actions of distribution, preservation and retrieval helped the researcher to come up with a system that will be able to carry out the above actions hence solving the problem of timely retrieval of records.

#### 2.3 Types of Records Management

There are;

1. Manual records' management system,
2. Computerized records' management system.

##### *1) Manual Records Management System*

This type of system brought about the use of files to store records. The information will be kept on papers and books and then stored as computer files. The records are got for reports and comparisons any time they are needed.

Due to the inefficiency of this type of recording, the organizations have resorted to computerized way of storing, retaining and preserving records.

According to, James.A.O'Brein, (2007), data may be logically organized characters, fields, records, files and databases.

## ***2) Computerized Record Management System***

According to, S. B.Navathe, (2006), the collection of data that makes up a computerized database must be physically stored on some computer storage medium. The computer storage media form a storage hierarchy that includes two main categories;

Most databases are stored permanently on magnetic disks, secondary storage for all the following reasons;

The cost of storage per unit of data is an order of magnitude less for disk than primary storage.

Databases are too large to fit entirely in memory.

The circumstances that cause permanent loss stored data arise less frequently for secondary storage than primary storage.

## **2.4 Adaptation of a Computerized Records' Management System**

Most organizations often use registry books, files to keep their records which leads to accumulation of files but as the organization grows or have corporate records, a computerized record management system will be needed that stores large amounts of data that must persist over a long period of time.

The data is accessed and processed repeatedly during that period.

## **2.5 Record Types**

Data is usually in form of records. Each record consists of a collection of related data values or items where each value is formed of one or more bytes and, E. Kmasri / Navathe, (1999).

Record types or format is defined as a collection of field names and their corresponding data types used in programming. These include numeric (integer, long-integer or real number), Boolean (having zeros and ones or true or false values only) and some times especially coded data and time data types. The number of bytes required for each data type is fixed for a given computer system.

## **2.6 Files**

Elmasri / Navathe, (2000), refers to a file as a sequence of records, in many cases, all records in a file are of the same data type. A fixed length record is a file with exactly the same size (in bytes) and variables, length and size.

## **2.7 Operational Files**

Operations on files are usually grouped into retrieved operations and update operations where we may have to select one or more records for retrieval, deletion and modification based on selection condition. Examples of operators are; +, =, /.

## **2.8 Security of Data**

This can be done by protecting data against corruption and providing recovery and restart facilities after a hard ware or software failure.

## **2.9 Data Dictionary**

The data base management system makes use of description of data items provided by the data dictionary language (DDL).

The data dictionary is actually implemented as an additional database accessed by the database management system (DBMS).

### **2.9.1 Database**

This is an integrated collection of logically related records or files. A database consolidates records previously stored in separate files into a common pod of records that provides data for many applications.

### **2.9.2 Database Management System (DBMS)**

This is software that creates, maintains a database and enables individual business application to extract the data they need without having to create separate files or data definition in their computer programs, Laudon, (2002)

Lucey (2000), refers to DBMS as a collection of programs that enable users to create and maintain a database.

### **2.9.3 Examples of Database Systems**

Automated teller machines  
Computerized telephone catalogue  
Computerized record system  
Computerized payroll system

#### **2.9.4 Advantages of Database Management System**

##### **Centralized Security**

When data is stored in one place then there is a better control of multiple files containing redundant information on many tapes and disks are more difficult to protect.

##### **Data Shared**

Data can be used easily for multiple applications. The data does not need to be redefined by each user.

##### **Fast Response to User Requests**

A database management system allows quicker response to user requests because it permits users to cross original lines, files are not separated by applications hence increasing performance.

##### **Reduce Redundancy**

If data is stored in just one place, then the account of stored data can be reduced. Although redundancy cannot be eliminated, it can be minimized.

##### **Data Independence**

A database system means that programs are not dependant on the structure. You can add new data without having to re-write application programs.

#### **2.9.5 Using Database Management Software**

According to, K.Laudon (2002), DBMS packages allow end users to easily develop the databases they need however, DBMS allow organizations to place control of the organization wide database development in the hands of the database administrator and then clients with the use of DDL.

This improves the integrity and security of organizational database.

#### **2.10 Limitations of Database Management**

The limitations of database arise from its technological complexity and these include;

Longer processing time may result from high-volume transaction processing applications since an extra layer of software exists between application programs and the operating system.

If an organization relies on a centralized database, its vulnerability to errors and fraud is increased.

Developing a database and installing a DBMS can be difficult and expensive. More hardware capability is required since storage requirements for an organization data and the DBMS programs are greater.

## **2.11 Conclusions**

A computerized clients' record management system can change the storage, retrieval and recording process most especially with fast response to user requests that were entirely meant with the manual system. Security is provided to clients records and extra care should be taken when this system to avoid duplication of records.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.0 Introduction**

This chapter reviews the methodology, techniques and the tools that were used to accomplish the development of the automated system. It also provides the oversight of methods for collecting the information that were used to determine the users and their requirement of the system.

The investigation explains what the researcher investigated from the manual system while identifying its problems. The requirements for the new system were also identified.

A number of data collection methods were used by the researcher in information gathering especially observation, interviewing and document review.

#### **3.1 Research Design**

The study was based on primary data and data collection techniques involving use of interviews as main instruments to enhance and give quality to the findings. Interviews are a useful tool through which data can be acquired by reading the perceptions and feelings while collecting data although at times they yield minor biases, which is an implication that not all information was proven accurate. The study ensured that interviews were impressive to eliminate suspicious tendencies. Secondary data was also relied upon by reviewing literature of previous writers on the same study and included textbooks, CDs, Internet, Journals and previous research on database security in organizations.

#### **3.2 Targeted Population**

The research covered all the loan firms. The target size was 10 respondents from different departments who were then sampled randomly.

##### **3.2.1 Data Collection Techniques**

The following are the methods of data collection that were used.

#### **3.3 Questionnaires**

The questionnaire of closed and open-ended question was distributed to all concern persons. This method of data collection gave the respondents ample time to fill the questionnaires with the correct information freely. The information from this method was mainly used to facilitate coding and data analysis.

### **3.2 Interview**

This method was used to gather information from some of the members of Mehta Group Microfinance. Interview was conducted with the company chairman and the clerk. During the interview, the company chairman expressed the problems they encounter with the current system and proposed what the new system should do.

The clerk also talked about the problems he faces and what he expected from the new system thus the method helped the research achieve the objectives of analyzing the existing system and knowing the user requirements.

Using interview as a data collection method helped the developer to get first hand information from the respondents and opportunity to gather information from the people who are knowledgeable about the system under study.

The following are some of the issues the developer interacted with the company chairman during the interview.

The name of the company, the head of the company, When did the company begin to operating, products produced, market coverage of products, the specific market place, the selling of the services, problems encountered in giving loan, the problem of poor services performance ,customers ,customer awareness of company service ,interest in having a loan record management system, the company support to the developer in implementing the prototype for the company system, the company staff readiness to assist the developer to identify errors or identify requirements when a prototype presented for test. More detailed questions are in appendix

### **3.3 Observation**

The developer also used the observation method as it helped the developer to observe the current working system that Mehta Group Microfinance uses. Observation is the most effective and cheap method of data collection. Occasionally, visits were made to the company premises to observe how daily company activities are being carried out. Important data was captured particularly as regards information flow. This means that, the selling of services make customers turn up, and many other different aspect.

### **3.4 Document Review**

This was done through reviewing the company's current records pertaining results management and getting related literature to broaden the researchers' knowledge and experience in order to assign system requirements and design to solve the record maintenance related problems.

### **3.5 System Analysis**

The records of clients at Mehta group micro finance Lugazi are kept in files and since they cater for many clients, this leads to accumulation of files yet the place is very small to accommodate the many files.

There is only one clerk and he is responsible for all the work done such as looking for files, verifying them etc hence consuming a lot of time and losing of files. This makes it tedious and tiresome.

#### **3.5.1 Strength of the current system**

- It cannot be affected by power failures.
- All transactions performed can be retrieved relatively easy.
- It is very easy to implement.

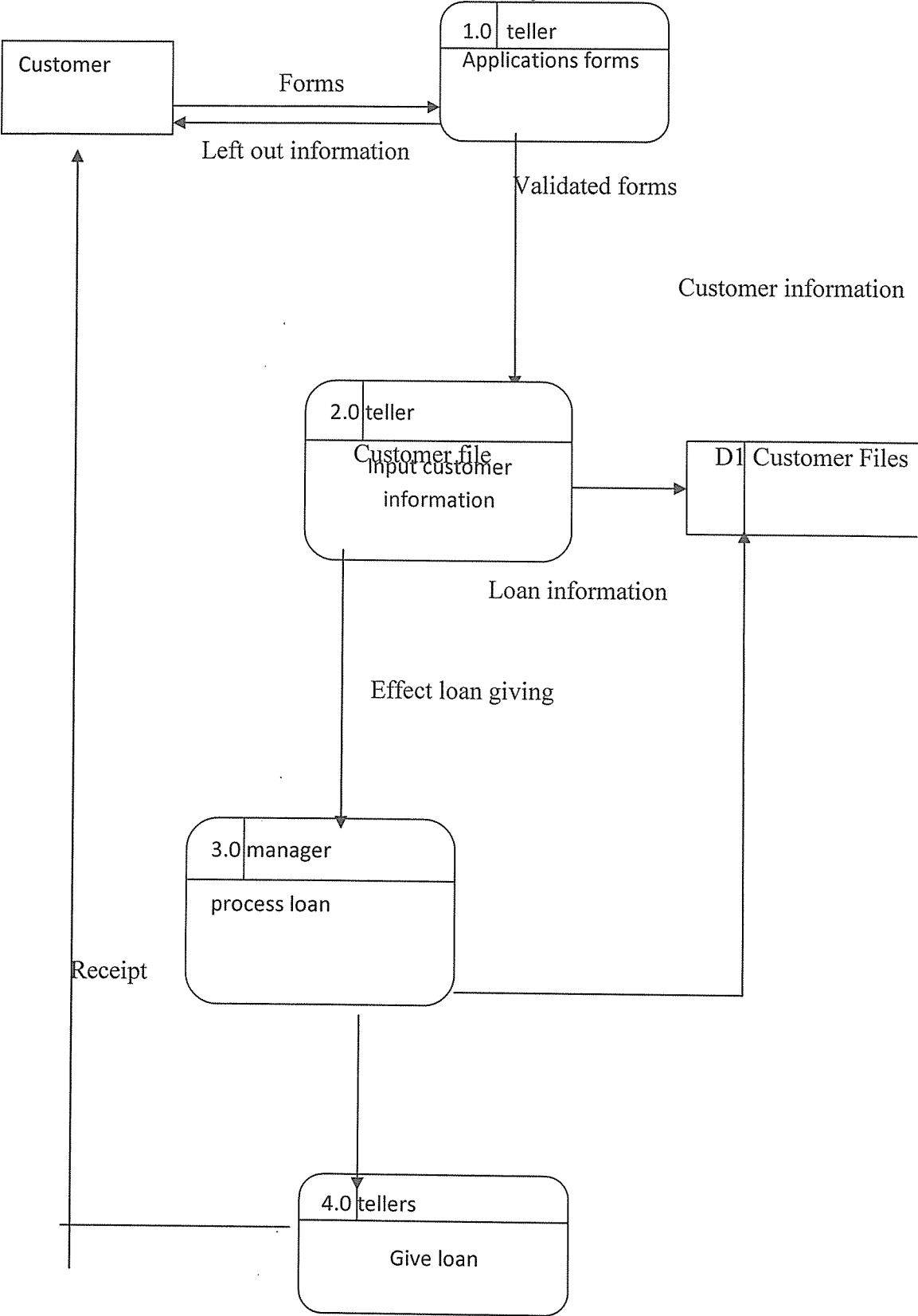
#### **3.5.2 Weakness of the current system**

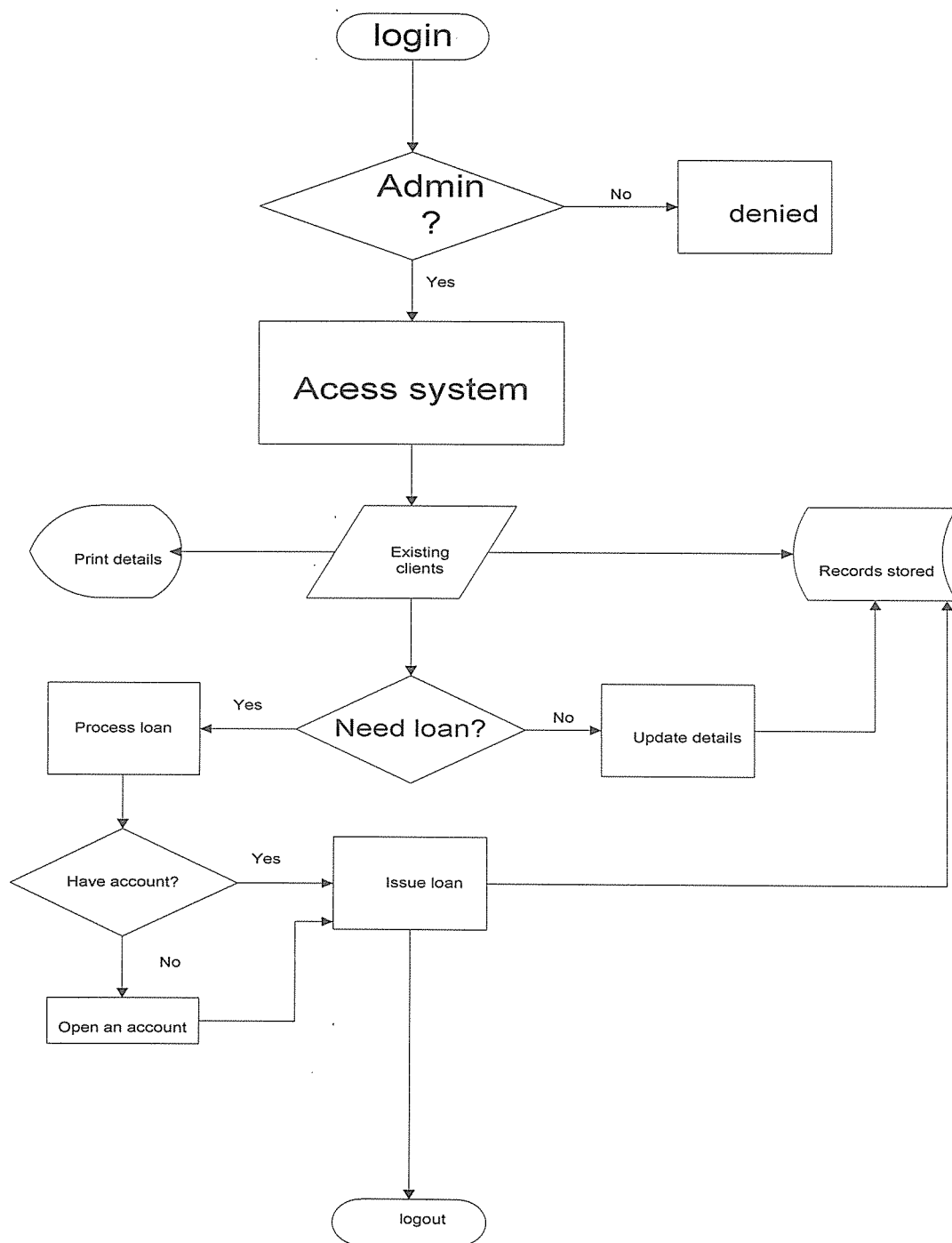
- A lot of paper work is needed hence higher maintenance cost.
- The manual system is relatively slow and cannot satisfy the growing number of population.
- Inconsistency of data as it is moved from one location to another.
- Possibility of data loss if the original files are misplaced since there are no backup copies

### **3.6 The Current System**

Mehta Group Micro Finance has a manual system of keeping and storing records. Updates and balance calculations are done manually. However, it was found out that the manual system does not require skilled people like the computerized database which requires knowledge and skills.

Figure 3.1 data flow diagram of the current system





**Figure 3.2** Data flow diagram of the new system

### **3.8 Requirements Specifications**

This is an analysis of the requirement for designing and developing a new system which includes; user, system, functional and non-functional requirements.

### **3.9 User Requirements**

User requirements summarize the services that the users need from a system.

The following is a summary of user requirements that were outlined to be met by the record management system.

Capture name of customer, loan amount, and staff to manage Hardware.

Process reports for record management, loan(s) issued in a day, a week, a month and even a year and print the outputs whenever needed.

Provide access to administrator and authenticated users.

Carry out data backup on a regular basis.

### **3.10 Functional Requirements**

Functional requirements refer to the features that must be included in the system to satisfy the business needs and be acceptable to the users.

Mehta group microfinance record management system met the following functional requirements:

The system;

Allows users to logon using usernames and passwords assigned to them by the administrator in order to use the database or accessing information from the database.

Produce a list of customers who have not completed payment of loans.

#### **3.10.1 Non Functional Requirements**

Non functional requirements describe the features, characteristics, and attributes of the system as well as any constraints that may limit the boundaries of that system. The following were identified as the non functional requirements for Mehta group microfinance in the department of information technology.

The system is reliable and always available.

The user interface is consistent throughout the application

### 3.10.2 System Requirements

System requirements are the software and hardware specifications that must be met for the system to effectively function. Justifying the nature of tasks performed, the researcher recommended the following software and hardware requirements for the system.

#### Hardware Specification

The hardware specification is necessary since the software is to be on local area Network (LAN) being a computerized server system one computer is needed to act as the server. The server is not much different from a client computer. It should host the software (server software), have the central database to which the employees log in to access the database. The server with more resources in terms of memory and hard disc space as compared to the client machines.

The following are the requirements needed on the server and the client machine in order for the software to run:

**Table 3.1 Software requirements**

|   | Type                                            | purpose                                                                             |
|---|-------------------------------------------------|-------------------------------------------------------------------------------------|
| 1 | Visual Basic                                    | For designing the System                                                            |
| 2 | Access                                          | For designing the database and acting as a bridge between database and Visual Basic |
| 3 | Windows XP, Windows Vista, Windows 7, Windows 8 | Operating system used to operate the system effectively and efficiently             |
| 4 | Anti virus                                      | Antivirus software for detecting and cleaning viruses                               |

**Table 3.2 Hardware Requirements for the System**

| Part                       | Specification                  | Reason                                          |
|----------------------------|--------------------------------|-------------------------------------------------|
| Computer                   | Pentium 4 processor of 1.8 GHZ | To handle multiple processing                   |
| Random access Memory(RAM)  | Minimum of 128MB               | To enable faster access to data                 |
| Hard disk drive(HDD)       | Minimum of 40 GB               | To handle voluminous data                       |
| CD ROM drive and writer    | Comb drive                     | To handle both function of reading and writing  |
| Floppy drive and USB ports |                                | Use of external storage devices                 |
| Monitor                    | 17 inch with a super VGA       | view contents of the system clearly             |
| UPS unit and stabilizer    | Pro 700 VA                     | For power backup and control power fluctuations |

### **3.10.3 System Design**

This section looked at the different activities needed to develop a new system, trying to solve the current problems being experienced, analyzing the system and user requirements, designing and implementing of the working prototype.

The most important reason for this system was to provide a set of tools and services, which would allow the user to access information, submit details, search and retrieve information.

### **3.10.4 Database Design**

The design of the database was based upon normalized relations. To this effect, the researcher created and normalized database tables up to third normal forms(3nf).A relation is in third normal form if it has no multi valued attributes, the values of all non primary key attributes are dependent on the entire primary key, and it has no transitive dependences.

### **3.10.5 Entities and Attributes in the System**

An entity is a collection of information related to a particular aspect. The system is composed of several entities and attributes which include the following;

| Field name         | Data type |
|--------------------|-----------|
| customernumber(pk) | Text      |
| customername       | Text      |
| telephonenumber    | Number    |
| security           | Text      |
| occupation         | Text      |
| nextofkin          | Text      |
| phoneofnextofkin   | Number    |
| district           | Text      |
| subcountry         | Text      |
| Village            | Text      |

**Table3.3 Showing entities used and attributes for Customers**

| Field name       | Data type |
|------------------|-----------|
| loanid(pk)       | Text      |
| paymentdate      | Date/time |
| amountpaid       | Currency  |
| balanceremaining | Currency  |

**Table3.4 Showing entities and attributes used for Payments**

| Field name       | Data type |
|------------------|-----------|
| Managename       | Text      |
| Managerid        | Text      |
| Loanid (pk)      | Text      |
| customernumber   | Text      |
| loanamount       | Currency  |
| security         | Text      |
| datecontractends | Date/time |

**Table 3.5 Showing entities and attributes used for Manager**

| Field name    | Data type |
|---------------|-----------|
| password (pk) | Text      |
| username      | Text      |

**Table 3.6 Showing entities and attributes used for User Accounts**

| Field name | Data type |
|------------|-----------|
| Tellername | Text      |
| amountpaid | Text      |
| loaned     | Text      |

**Table 3.7 Showing entities and attributes used for Duration**

Conceptual Schema For The Developed Record Management System For Mehta Group Microfinance

|                    |              |                 |          |           |            |                  |
|--------------------|--------------|-----------------|----------|-----------|------------|------------------|
| <u>tomernumber</u> | customername | telephonenumber | security | nextofkin | occupation | phoneofnextofkin |
|--------------------|--------------|-----------------|----------|-----------|------------|------------------|

**Table 3.8 customer schema**

|               |            |             |                  |
|---------------|------------|-------------|------------------|
| <u>Loanid</u> | Amountpaid | paymentdate | Balanceremaining |
|---------------|------------|-------------|------------------|

**Table 3.9 payment schema**

|                 |          |              |               |
|-----------------|----------|--------------|---------------|
| <u>Password</u> | username | Positionheld | Employeeename |
|-----------------|----------|--------------|---------------|

**Table 3.10 teller schema**

|               |                |                  |            |          |
|---------------|----------------|------------------|------------|----------|
| <u>Loaned</u> | customernumber | datecontractends | Loanamount | security |
|---------------|----------------|------------------|------------|----------|

**Table 3.10.1 manager schema**

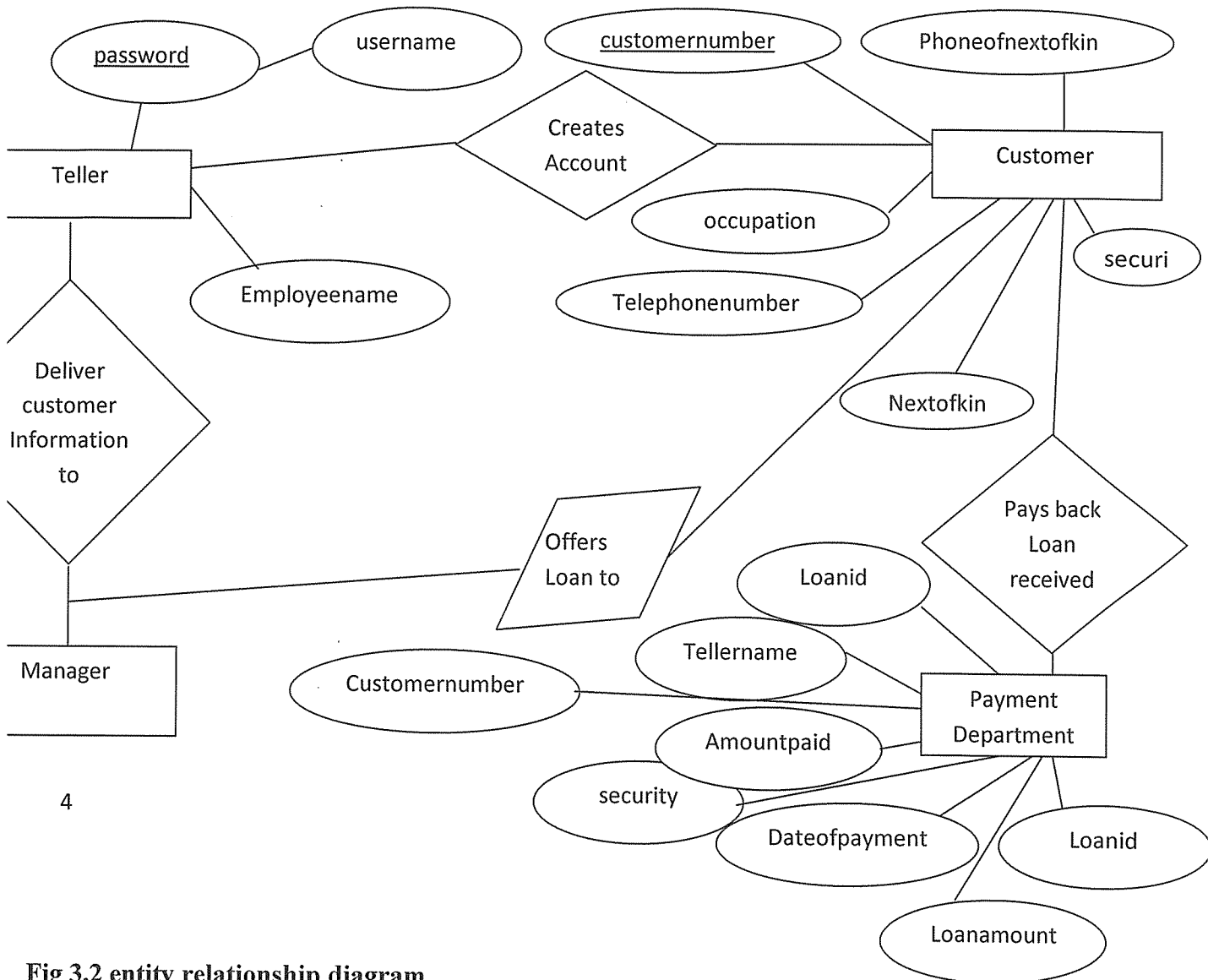
|                      |            |            |        |
|----------------------|------------|------------|--------|
| <u>Dateofpayment</u> | Tellername | Amountpaid | loaned |
|----------------------|------------|------------|--------|

*Table 3.10.2 department schema*

**3.10.6 Entity Relationship Diagram**

An entity Relationship Diagram (ERD) is a logical model that shows how tables with in a single database are linked to each other. The entities named above were related to each other as depicted on the next page.

An Entity Relationship Diagram for the Developed Record Management System



**Fig 3.2 entity relationship diagram**

The following are the cardinalities of the developed entity relationship diagram for the record management system of Mehta Group Microfinance.

Cardinality “1” shows that the customer has got a login loan account hence mandatory [1 to one] cardinality .

Cardinality “2” shows that a loan account is created by the teller for the customer hence mandatory [1 to many] cardinality.

Cardinality “3” shows that teller delivers customer information to the manager hence mandatory [1 to one] cardinality.

Cardinality “4” shows that the manager processes customer information hence mandatory [1 to one] cardinality.

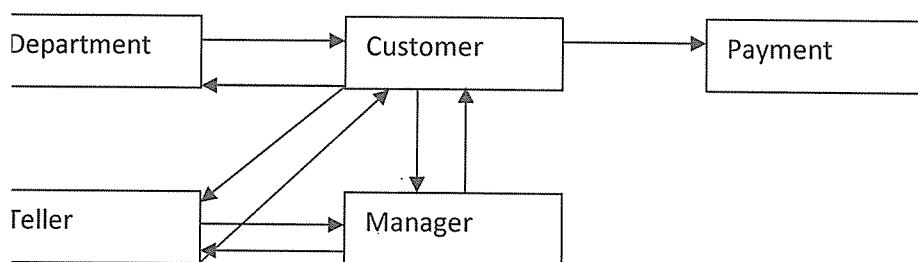
Cardinality “5” shows that manager may offer loans to customers or not hence optional [1 to many] cardinality

Cardinality “6” shows that customers may receive loan from the manager or not hence optional [ 1 to many] cardinality

Cardinality “7” shows that customers pay back loan only to one department hence [many to 1] cardinality.

Cardinality “8” shows that only one department is responsible for the payments hence [1 to many] cardinality.

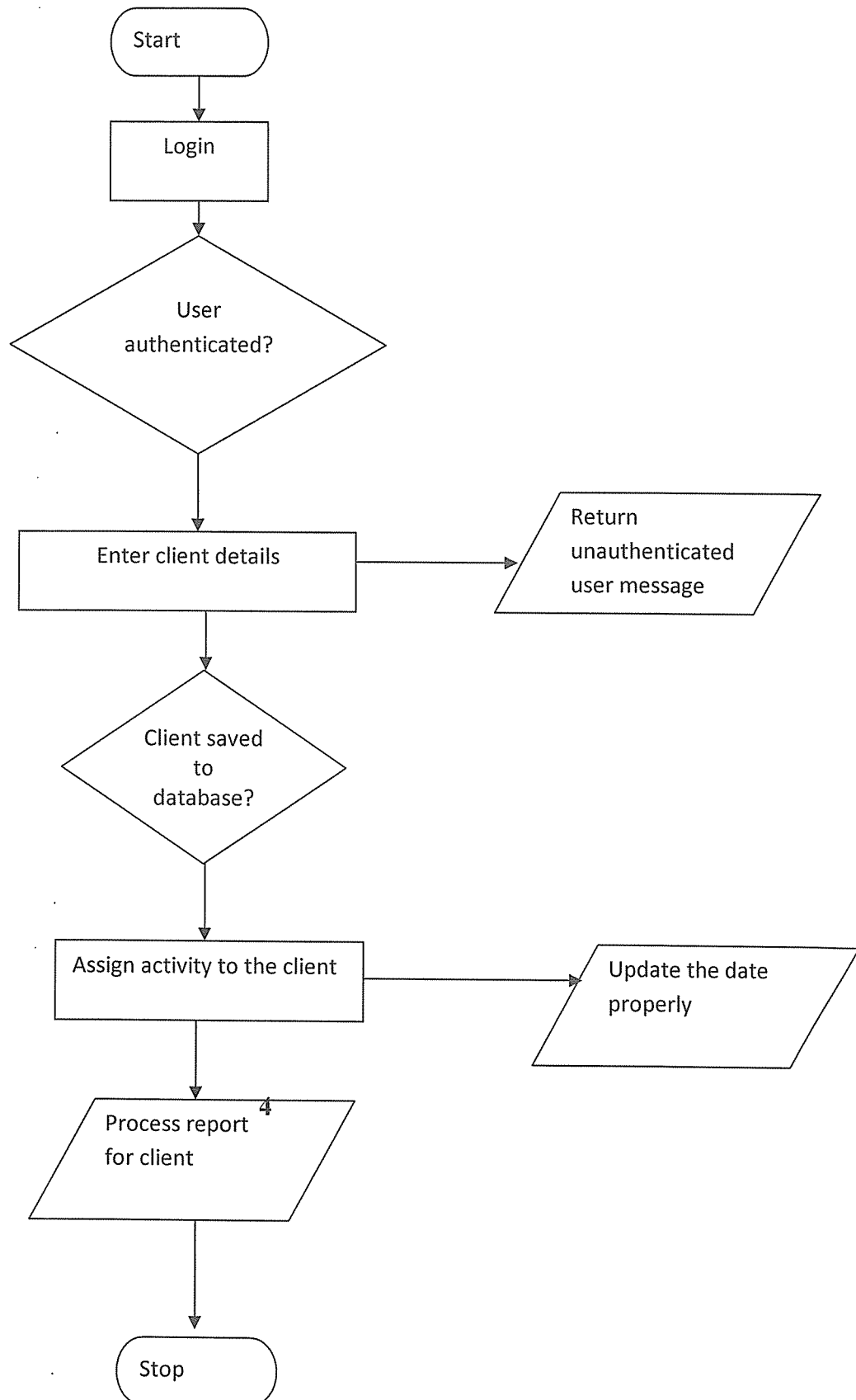
Navigation Schema for a Record Management System For Mehta Group Microfinance



**Fig 3.3 navigation schema for Mehta group microfinance**

The above navigation schema depicts that a customer who wants to acquire a loan first have to register with the teller who forwards his or her record to the manager for authorization whether the loan should be given to the customer. Customers who came to pay loan debts they do it with the teller in charge of receiving loans.

## Flow charts



## CHAPTER FOUR

### SYSTEMS DESIGN AND DEVELOPMENT

#### 4.0 Overview

The chapter represents the logical and physical design of the system. It provides information flow charts illustrating how data is in-putted, processed and out-putted. It also shows the display of the screenshots of all interfaces of the design lay out, and explanation of their contents and functionality.

The design and development of the system was done basing on provided specifications of the clients. Creation of the user interface to enter the client's information was developed in visual basic for application. And a back-end data source to store all the customer records developed using Excel.

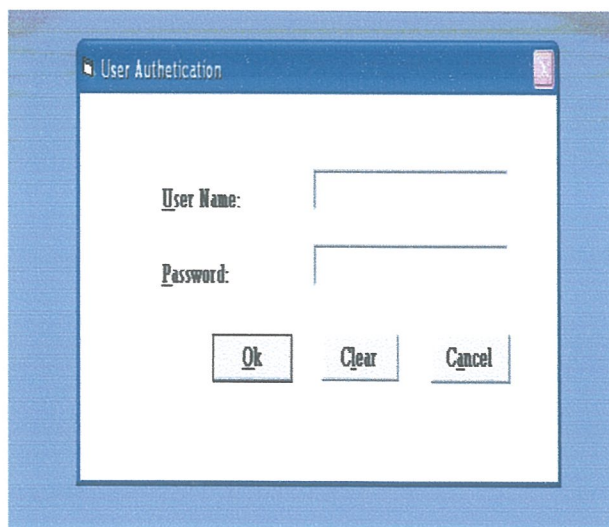
#### 4.1 User Interface Forms

User interface design is the specification of a dialogue between the system user and the computer (Whitten et al, 2001) the user interfaces were developed as windows-based forms, with a menu-driven that strategy that requires the user to choose an action from a menu of alternatives

##### 4.1.0 Login Screen

Given that logins are specified as secure, multi-user, and networked system, it was paramount that the researcher creates a screen whose purpose is to authenticate users of the system as illustrated on the next page.

*Fig 4.1 login screen*



The login screen requires the user to enter his/her username, password and position on the server host specified machine on the spaces shown on the interface below.

#### 4.1.1 Manager Form

When the manager login into the system he is able to carry out various activities that deal with Customers, Employees and Viewing reports as shown below;

## MEHTA GROUP MICROFINANCE

| Customers                                                                                                | Employees                                                                                                     | Reports                   |
|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|---------------------------|
| <div>GIVE LOAN </div> | <div>CREATE ACCOUNT </div> | <div>ISSUED LOANS</div>   |
| <div>SEARCH </div>    | <div>DELETE ACCOUNT </div> | <div>CUSTOMERS</div>      |
|                                                                                                          |                                                                                                               | <div>OVER DUE LOANS</div> |
|                                                                                                          |                                                                                                               | <div>PAYMENTS</div>       |
| <div>EXIT</div>                                                                                          |                                                                                                               |                           |

Fig 4.2 Manager form

4.1.2 Loan type

The above form allows the user to select on the type of loan he/she would like to issue and once it is selected, it brings another form interface below where the user enters the account number of the client and the amount applied for.

When the client doesn't have an account number the system also gives an interface for opening a new account and gets updated into the system where the loan shall be processed. Below is the interface form for creating an account.

MEHTA GROUP MICROFINANCE

Amount Applied

ACCOUNT NUMBER

ACCOUNT NAME

AMOUNT APPLIED

Records

Save

Cancel

The manager can also delete an existing account using the below interface of the system.

4.1.3 Opening an account

## MEHTA GROUP MICROFINANCE

reate Account

ACCOUNT NO

NAME

ADDRESS

PHONE NO

AGE

GENDER

OCCUPATION

ANNUAL INCOME

STATEMENT AMT

Add New

Reset

Delete

Cancel

Find

Clear

Exit

Records

4.1.4 Deleting an account

MEHTA GROUP MICROFINANCE

Confirm deletion

Please put the account number you want to delete!

Account number

Records

OK

Cancel

4.1.5 Customers report

Below is a sample of the existing customers in the organization

This report is viewed by the manager and it contains all customers whose loan contract dates have been processed or under process.

| Report on all the customers |                 |           |          |        |            |               |            |           |
|-----------------------------|-----------------|-----------|----------|--------|------------|---------------|------------|-----------|
| Account                     | Account Address | Phone No  | Age      | Gender | Occupation | Annual Income | Statement  |           |
| 999993                      | bdbbrb          | svvfgbchb | 76776870 | 40     | femae      | rgvfyv        | 7439380    | 99767680  |
| 111111                      | dbbhrbn         | ddhrj     | 5657570  | 70     | male       | rgreeoe       | 5788877    | 87867870  |
| 110101                      | fdcbdb          | bdhd      | 3434340  | 50     | femae      | maljgg        | 45455540   | 788678760 |
| 110113                      | eevete          | vtvvtvf   | 5665550  | 40     | male       | tvvtvtf       | 5554550    | 5555550   |
| 121212                      | tdtdtss         | donbndr   | 4455556  | 75     | femae      | sdgtgtd       | 5788876787 | 78778787  |

Fig 4.3 customers report

4.1.6Issued Loan Report

Below is a sample issued loan report. This report is viewed by the manager and it contains all customers who have been given loans and dates when the loans where issued to the customers.

Fig 4.4 issued loan report

| Report on issued loans |              |                |
|------------------------|--------------|----------------|
| Account Number         | Account Name | Amount Applied |
| 444444                 | ed           | 30000000       |
| 222222                 | kim          | 78888888       |
| 555555                 | yeah         | 5678388        |
| 888888                 | mmmm         | 44444440       |
| 777777                 | belly        | 444444440      |

## CHAPTER FIVE

### IMPLEMENTATION AND TESTING

#### ***5.0 Introduction***

This chapter presents the implementation and testing procedures of the record management system.

This section also includes description of the new system requirements.

#### ***5.1 System Implementation***

This section looked at the different activities needed to develop a new system, trying to solve the current challenges being experienced, analyzing the system and user requirements, designing and implementing of a working prototype.

The most important reason for this system is to provide a set of tools and services, which allow the user to access information, submit details, search and retrieve the desired information.

#### ***5.2 Software Tools***

In order to make the project a success, the researcher employed a host software tools in varying degrees and at different timings. Each of the tools was fundamental in implementation process as discussed below;

##### **i. Microsoft Access**

As described by J Timothy, Microsoft Access 2000 1<sup>st</sup> Edition (page 5-7) Microsoft access is a computer application that makes it possible to construct powerful system for organizing information called database.

An access database allows recording, maintaining and editing data by using simple commands and procedures. Access provide the opportunity to relate database to one another, you can share information among object in database or even among separate database. Throughout the system under development, Microsoft access was used to create database tables, their relationships, and data types were defined by this application.

##### **ii. Microsoft Visual Basic 6.0**

As described by Waite Group, Visual Basic source code Library (page 2-3), Visual basic is a Window development language that uses an interactive approach for development.

With Visual basic, if you make mistakes in writing your code, the error is caught by the compiler when you start to compile your application.

In addition to catching errors, visual basic also partially compiles the code as it is entered. When you ready to run and test your application, there is only brief delay to finish compiling. If the compiler finds an error, it is high lighten in your code. You can fix the error and continue compiling without having to start over.

Because of the interactive nature of visual basic, you will find yourself running your application frequently as you develop it. This way you can test effects of the code as you work rather than waiting to compile later.

### **iii. Entity Relationship Diagram**

An entity Relationship Diagram (ERD) is a logical model that shows how tables with in a single database are linked to each other. The entities named above were related to each other as depicted in chapter Three.

## ***5.3 Prototype For The Developed Records' Management System***

A prototype is a preliminary working version of an information system for demonstration and evaluation purpose. The process of prototyping was broken down into four steps namely;

- i. Identify the users basic requirements
- ii. Develop an initial prototype
- iii. Use the prototype
- iv. Revise and enhance the prototype.

## ***5.4 Goal***

- i. To ensure effective and efficient management of clients' records.
- ii. To ensure that there is a good follow up to the customer such as dates due, when to payback, balances etc

## ***5.5 Objectives***

- i. To increase effectiveness and efficiency sabotage and retrieval of clients.
- ii. To reduce on the duplication of records.
- iii. To increase storage space.

## ***5.6 System Testing***

System testing is the activity of developing the system and verifying whether it fulfils user requirements as stipulated in the requirements specifications. System testing helped the researcher to clear all errors in the system and therefore meet user requirements.

This activity was conducted in the department of information technology from Mehta group microfinance with sample customer information and the various tests that were carried out included;

i. Unit testing

Unit testing was carried out by the system researcher and the testing involved testing only those characteristics that are vital to the performance of the unit under test such as login interface. This was to provide access to the different system users such as manager, teller basing on the username, password and position of which the system was able to perform hence leading to integration of the small units into a complete system.

ii. System testing

The prototype system was full tested by using some of the sample information of the microfinance and it was found out that the system was functioning well and responding to real time delivery of information.

iii. Acceptance testing

The system users such as the manager, tellers having tested the prototype with some sample information of Mehta Group Microfinance agreed that the system was worthy being used but some modules were to be added in since this was a prototype.

## ***5.7 Results***

As a result of testing the system was able to store all the data into Microsoft access database. It was also able to generate printable reports and retrieve information.

## CHAPTER SIX

### DISCUSSION, CONCLUSION AND RECOMMENDATION

#### ***6.0 Introduction***

This chapter gives a brief discussion on the achievements or objectives of the entire system with emphasis on the achievements, conclusion remarks on the system and ends with recommendations of the researcher.

#### ***6.1 Discussion***

The system was designed to fulfill the basic aim and specific objectives that were proposed at the earlier stage of development. The researcher was mindful of the input, processing, storage and retrieving requirements necessary for an effective system.

The main users to interact with the system are the employees who input and process data. In any software creation, security is a very important issue to be put into consideration. The administrator should make use of authorized person to take charge of the system, before getting into the system thus the password should not be known by the other people who are not working in the enterprise.

Security is always a very important issue to be put into consideration. The employees should therefore make use of assigned password and username in order to use the system. Since the system requires usernames and passwords to login, staff and administrators should make sure that the passwords are not known by unauthorized persons.

#### ***6.2 Problems Encountered***

Various problems were meant by the system researcher in order to come up with the system;

Limited time to enable the development of the program with better features.

Inadequate literature materials on software development.

Limited capital for a wider and extensive data collection.

#### ***6.3 Conclusion***

The study revealed that record management systems are very important as regards on keeping track of clients or customer records. If the records of any company or organization are kept well

then the company is bound to see its success since the decisions that will be made will be based on the records.

For the developed system to be fully function and realize its quality functionality then the employees who are to use the system have to be trained.

The system takes a great note about security about the person using the system and the activities carried out by the employee depending on username, password and position held in the company.

#### ***6.4 Recommendations***

Basing on the research findings the researcher has therefore put the following recommendations;

First of all, the users that is, the staff of Mehta Group Microfinance need to be trained on how best they can use the system.

The developed system being a prototype Mehta group microfinance administrators ought to demand for a complete system in respect to time that will be spent in order to come up with a complete system.

This material in this report should be adopted for use by another researcher. The material in this report reflects the main areas that companies such as microfinance institutions and banks can use to enhance their performance. Though not all ways were stipulated above.

## REFERENCES

1. Terence Lucey. (2000) Management Information System. 9<sup>th</sup> edition.
2. Laudon and Laudon. (2002) Management of Databases. 7<sup>th</sup> edition.
3. Shamkant B.Navathe. (2006) Information Modeling and Knowledge Bases XVII. IOS press.
4. James.A.O'Brein and George.M.Marakas. (2007) Management Information System. 9<sup>th</sup> edition.
5. Ramez Elmasri and Sham Navathe. (2000) Fundermentals Of Database Systems. 3<sup>rd</sup> edition, Washington USA.
6. Kenneth Laudon. (2000) Access. illustrated edition, McGraw-Hill
7. Connolly Thomas and Begg Carolyn. (2005) Database system Approach.
8. [http://www.bryongaskin.net/education/mba%20track/current/mba621/LECTURES/ch04\\_1\\_.pdf](http://www.bryongaskin.net/education/mba%20track/current/mba621/LECTURES/ch04_1_.pdf)-(laudon & laudon) Management information system. 7<sup>th</sup> edition retrieved 20<sup>th</sup> /1/2010.

## APPENDICES

### APPENDIX A

#### Sample Interview Question

Sample interview questions for Mehta Group Microfinance.

##### Introduction

“My names are Ndovya Mbasa, I am a third year student at Kampala International University, pursuing a Bachelors degree in Business Computing. The purpose of my visit at this company is to study, investigate, analyze and examine the performance of the service offered to customers. Thereafter design an appropriate loan records system for your company that will handle the customers management problem. The desire of the company is to attain large market for their services as the company desires to expand in the near future.

We intend to use the information for our research project which is a partial fulfillment for our award degree in Business Computing.

##### Questions

- 1 What is the name of your company? \_\_\_\_\_
- 2 Who is the head of the company? \_\_\_\_\_
- 3 When did your company begin to operate? \_\_\_\_\_
- 4 What type of service do you offer? \_\_\_\_\_
- 5 What is the market coverage of your services? \_\_\_\_\_
- 6 What are the specific market places? \_\_\_\_\_
- 7 What problems do you encounter on the market? \_\_\_\_\_
- 8 How is the problem of poor services performance brought about? \_\_\_\_\_
- 9 Do you have specific customers or not? \_\_\_\_\_
- 10 Are customers aware your company services? \_\_\_\_\_
- 11 Are you interested in having a loan records system? ☐ Yes ☐ No
- 12 Is the company ready to support the developer in implementing the prototype for the company system? ☐ Yes ☐ No
- 13 Is the company staff ready to assist the developer to identify errors or identify requirements when a prototype is presented for test? ☐ Yes ☐ No

## APPENDIX B

### BUDGET

| ITEM                         | UNIT COST | QUANTITY | AMOUNT           |
|------------------------------|-----------|----------|------------------|
| Library and Internet         |           |          | 60.000/=         |
| Transport                    |           |          | 200.000/=        |
| Feeding                      |           |          | 70.000/=         |
| Typing and printing Proposal | 25.000/=  | 1 copy   | 25.000/=         |
| Binding and printing         | 20.000/=  | 3 copies | 60.000/=         |
| Typing and printing report   | 30.000/=  | 4 copies | 120.000/=        |
| Binding report               | 10.000/=  | 4 copies | 40.000/=         |
| Photocopying                 |           |          | 30.000/=         |
| Miscellaneous                |           |          | 42.000/=         |
| <b>TOTAL</b>                 |           |          | <b>647.000/=</b> |

## APPENDIX C

### TIME FRAME

| Activity          | Months(2016) |     |      |      |        |           |         |
|-------------------|--------------|-----|------|------|--------|-----------|---------|
|                   | April        | May | June | July | August | September | October |
| Proposal writing  |              |     |      |      |        |           |         |
| Data collection   |              |     |      |      |        |           |         |
| Data analysis     |              |     |      |      |        |           |         |
| Report writing    |              |     |      |      |        |           |         |
| Report editing    |              |     |      |      |        |           |         |
| Report submission |              |     |      |      |        |           |         |

## Codes

---

Option Explicit

Dim loansADOconn As ADODB.Connection

Dim AccDelSQL As New ADODB.Recordset

---

Private Sub cmdCreate\_Click()

frmCreateAccount.Show

End Sub

---

Private Sub cmdCustomers\_Click()

DataReport2.Show

End Sub

---

Private Sub cmdDelete\_Click()

If MsgBox("Are you sure you want to delete this account?", vbYesNo + vbQuestion, "Confirmation") = vbNo Then

Exit Sub

End If

frmAccountDelete.Show

End Sub

---

Private Sub cmdExit\_Click()

End

End Sub

---

Private Sub cmdGive\_Click()

frmSelect.Show

End Sub

---

Private Sub cmdIssued\_Click()

DataReport1.Show

End Sub

```
Private Sub optSelect_Click(Index As Integer)
```

```
End Sub
```

---

```
Private Sub cmdCancel_Click()
```

```
Unload Me
```

```
End Sub
```

---

```
Private Sub cmdGo_Click()
```

```
If optYes.Value = True Then
```

```
frmLoanSelect.Show
```

```
ElseIf optNo.Value = True Then
```

```
frmCreateAccount.Show
```

```
Else
```

```
msg = MsgBox("No selection was made, please click Ok to select again or Cancel to leave the application", vbExclamation
```

```
End If
```

```
End Sub
```

Option Explicit

Dim loansADOconn As ADODB.Connection

Dim AccDelSQL As New ADODB.Recordset

Private Sub cmdCreate\_Click()

frmCreateAccount.Show

End Sub

Private Sub cmdCustomers\_Click()

DataReport2.Show

End Sub

Private Sub cmdDelete\_Click()

If MsgBox("Are you sure you want to delete this Account?", vbYesNo + vbQuestion, "Confirmation") = vbNo Then

Exit Sub

End If

frmAccountDelete.Show

End Sub

Private Sub cmdExit\_Click()

End

End Sub

Private Sub cmdGive\_Click()

frmSelect.Show

End Sub

Private Sub cmdIssued\_Click()

DataReport1.Show

End Sub

```

ate Sub cmdAddNew_Click()
cCreate.Recordset.AddNew
ccount = ""
ame = ""
ddress = ""
hone = ""
ge = ""
ender = ""
ccupation = ""
nnual = ""
tatement = ""
ccount.SetFocus
Sub

```

---

```

ate Sub cmdCancel_Click()
= MsgBox("Are you sure you want to abort the process?", vbExclamation + vbOKOnly, "Aborting")
ide
elect.Show
Sub

```

---

```

ate Sub cmdClear_Click()
ccount = ""
ame = ""
ddress = ""
hone = ""
ge = ""
ender = ""
ccupation = ""
nnual = ""
tatement = ""
ccount.SetFocus
Sub

```

---

```

ate Sub cmdDelete_Click()
sgBox("Are you sure you want to delete this record?", vbYesNo + vbQuestion, "Confirmation") = vbNo Then
Sub
If
cCreate.Recordset.Delete
cCreate.Recordset.MoveNext
Sub

```

---

```

ate Sub cmdExit_Click()
ad Me
Sub

```

---

```

ate Sub cmdFind_LostFocus()
content
ent = Trim(txtAccount.Text) & content = "Name like'" & content & "'"

```