**WOMEN GROUP LOAN MANAGEMENT INFORMATION SYSTEM**

**CASE STUDY OF LONDIANI WOMEN GROUP SACCO**

**BY**

**BEATRICE CHEPKEMOI**

**G127/0889/2019**

**A PROJECT PROPOSAL SUBMITTED TO THE FACULTY OF**

**SCIENCE AND TECHNOLOGY IN PARTIAL FULFILLMENT OF THE**

**REQUIREMENTS FOR THE A WARD OF THE BACHELORS' DEGREE IN**

**INFORMATIONTECHNOLOGY OF**

**SOUTH EASTERN KENYA UNIVERSITY**

**NOVEMBER, 2022**

**DECLARATION**

I Beatrice Chepkemoi, declare that this is my original work and has never been submitted for any award or any other purpose in any University, or academic institution of higher learning for the award of degree.

Signed ......................... Date .........

Student

**DEDICATION**

I dedicate this proposal to the almighty God for his guidance through all my research and my family members for their financial support

**ACKNOWLEDGEMENT**

I would like to appreciate all the help and support given by my parents, brothers and sisters throughout the entire course

l wish to appreciate my supervisor Mrs. Caroline Onkangi for her supervision and guidance that has enabled me to come up with this proposal.

Special thanks goes to friends who helped me during research, they played big role and I gained a lot from them

Finally, I would like to thank my lecturers and classmates whom I have shared with all kinds of challenges, happiness as far as school life is concerned and our patience has made us succeed in our course of study.

**TABLE OF CONTENTS**

**LIST OF FIGURES**

**LIST OF TABLES**

**LIST OF ABBREVIATIONS**

**SACCO-**

**ABSTRACT**

The Women Group Loan Management Information System will be a computerized database of financial information organized and programed in such way that it will produced regular reports on operations for every level of management in a Group; it is also possible to obtain special reports from the system easily. The general objective of study will be to design a women group loan management information system that could improve loan record handling and bring about timely Loan processing. The specific objectives of study will be to investigate and gather data about the existing manual system being used at Londiani women group SACCO, analyze the requirements for the new system, develop a loan management information system for Londiani women group SACCO, test and implement the new system. After gathering the requirements, entity relation diagrams and dataflow diagrams will be used to design the women group loan management information system. Microsoft Visual basic 2005.net will be used to create user interfaces and Microsoft Access for creating the database. The loan management information system will develop authenticates System users and enables them to capture and store loan records and client banking records, the system allows the users to view loan report and Client payment records, also the system calculates payment denominations for loans The loan management information system reduces a burden of over compiling of papers and the need for more shelves which reduce congestion in Londiani women group SACCO.

CHAPTER ONE

INTRODUCTION

**Background information**

Londiani women group SACCO started as a small financial institution with few employees and clients around 2018. The SACCO had the objectives of uplifting the women in the villages by giving them short loans and in return it gets little profits from them and now it is one of the leading financial institution SACCO in the region. The Sacco often uses traditional methods like paper, pens, and manual filling to capture and manage data and information about clients' details and this leads to time consuming, when the administrators are trying to arrange every record in a proper way. Since this SACCO receives many and different clients both around and outside Londiani to get loans for personal and project developments and thus the information captured is a lot, and this leads to incorrect, improper and in accuracy data recording then the administrators get tired during data entry. There is much time Consumed when recording and keeping details about customers leading to time delay and tirelessness of both administrators and clients. If nothing is done, Londiani women group SACCO will lose customers, fail to deliver timely services and delay in decision making. However, LMIS will prove to be more reliable, effective and efficient since it will allow ease capturing, storage, easy retrieval, easy to back up, and security of the data.

**Statement of the problem**

Traditional methods of Loan management (use of pens, manual files) to capture and manage records are used at most finance services in Kenya including Londiani women group SACCO LTD pose difficulties in capturing, storage, retrieval and back up of clients' loan records. Since clients' loan records are kept in paper files and then stacked in open shelves, retrieving a particular record is tiresome and time consuming and there is no security measures to the clients' records. As a result, the SACCO is not able to timely retrieve client records; carry out proper data analysis, which leads to increased clients waiting time, loss of client data, inaccurate and delayed reporting, leading to delayed and unguided decisions in loan management. Therefore, it's upon this background that the researcher set out to develop a women group loan management system to solve the problem of time wastage, and delays in loan managing and processing at Londiani women group SACCO

**Objectives of the study**

**General Objective**

To develop a Women group loan management information system that will improve loan record handling and bring about timely Loan processing.

**Specific objectives of the study**

1. To investigate and gather data about the existing manual system being used at Londiani women group SACCO
2. To analyze the requirements for the new system
3. To design a women group loan management information system for Londiani women group SACCO
4. To test and implement the new system.

**Research Questions**

1. What are the methods used to gather data for existing manual system?
2. What are the requirements of the new system?
3. What are the design methodologies for developing women group loan management information system?
4. What extend will the women group loan management information system affect the performance of Londiani women group Sacco?

**Justification of the study**

Since clients' loan records are kept in paper files and then stacked in open shelves, retrieving a particular record is tiresome and time consuming and there is no security measures to the clients' records. As a result, the SACCO is not able to timely retrieve client records; carry out proper data analysis, which leads to increased clients waiting time, loss of client data, inaccurate and delayed reporting, leading to delayed and unguided decisions in loan management. Therefore, it's upon this background that the researcher set out to develop a women group loan management system to solve the problem of time wastage, and delays in loan managing and processing at Londiani women group SACCO

**Scope of the study**

The study will focus on the way how loan is processed at Londiani women group Sacco. The study has more interest on founding out who has taken loan, defaulted, and finished paying the loan taken. Researcher will carry out his research at Londiani women group SACCO located in Londiani-Kericho county. The researcher will center his study to loans department and the research will be carried out within 3 months from January to march. The study looks at how records about loan management and processing are managed at Londiani women group Sacco since the SACCO opened.

**CHAPTER TWO**

**LITERETURE REVIEW**

**Introduction**

Literature review includes what other researchers have discussed and highlighted about Loan management information systems. The researcher highlighted various management systems in different fields but related to loan management information systems such as library book management systems to expand on his idea of study.

**Existing systems**

The database collects information about Customers who borrow money from a company. Every month the customer must pay at least the capital or the interest rate. According to Barry Williams (2003), where he continues by saying that management system accommodates various types of savings plans, designed to allow one-time entry of the customers' information which can be tied to as many accounts as necessary. According to Pollock (2002), a loan records management program is advantageous as it enables the organization to retrieve required information easily, which facilitates transparency. accountability and democracy; Enables the organization to perform its functions successfully and efficiently; created and maintained Authoritative and reliable records in an accessible, intelligent and usable manner to support the business and accountability requirements of the organization; ensures elimination of unnecessary duplication of records by maintaining only those records it really needs for functional purposes; exercise controls to ensure that only authorized persons have access to the information, thus preventing information and/or the records themselves from 4 being stolen or damaged. This ensures the protection of privacy and confidentiality, and prevents the inappropriate disclosure of information that could harm the organization or infringe the privacy rights of individuals.

According to PSI (2012), Organizations create, retain, and preserve records so that they can be used for better service delivery. If a system user cannot locate a required document at the required time, it might be as well as a non-existing record. As such, an effective records management program should have in place systems (manual or computerized) that can locate and retrieve records in a reliable and timely fashion to meet the needs of the users.

**Requirements for new system**

The requirements for designing Women Group Loan management information system are categorized into functional and non-functional requirements

1. Functional Requirements

The functional requirements are the activities and services the system must provide.

• The system enables users to capture loan records

• The system Authenticates System users

• The system allows users to capture client banking records

• The system allows the users to view loan report

• The system saves and updates records

• The system allows users to view Client payment records

• The system calculates payment denominations for loans

b). Nonfunctional Requirements

Nonfunctional requirements are a description of other features, characteristics and constraints that define a satisfactory system.

• Maintenance: The system allows for future developments to be conducted and additions to the systems functionality as seamlessly as possible. And it also allows the administrator to have access to the database

• Cost Reduction: The system would reduce on most of the costs like stationary costs and enforce tight security of the data.

• Easy and Faster Update of the Database: Updating of the database will be faster and more effective.

• Usability: The system allows users to view and edit information on the same page.

• Enhance Decision-making: The SACCO's information flow will be done automatically thus decision making will be fast.

**Conceptual framework**

**Related work**

**Gaps in the literature**

One of the weaknesses of existing system is the time it takes to access data. It can take minutes if not hours to locate a few files in a large paper filling system. It is very difficult to enforce security checks and access rights in current system, since application program are added in ad hoc manner. It is not easy to retrieve information using the existing system.

**Approach**

The system designed is women group loan management information system which would help in storing a lot of data/information and carry out automatic report generation. The new system will be more advantageous than the old system in the following ways;

* the new system generates reports within less time and with fewer errors as compared to the existing system.
* The new system will use computerized methods in capturing and processing of loan records which will be cheaper as compared to the old system which uses papers and pens that take a lot of time and space during processing and capturing and consumes a lot of space.
* Clients' records and loan records concerning clients Will be captured electronically in the new system stored in the database for the efficiency of the system.

**RESEARCH DESIGN AND METHODOLOGY**

**Introduction**

This section looks at how the system is designed together with the methods and tools to be used during system development. The methodology is based on the design and the interfaces of the system and how the system is used to meet its requirements. It is also based on the methods used by the researcher to gather information and data from various people especially those responsible for women group loan management system request. The methods of representing data are also considered by the researcher and design techniques to develop the system.

**Target population**

This project will target the employees and clients of Londiani women group SACCO. information that will be obtained by the researcher will be documented. Manager, loan officers and cashiers will also be studied together with customers who will be present at the moment.

**Sample size determination**

A sample size of fifteen (15) people will be carried out which will include; the manager, three (3) Cashiers, two (2) loans officer and nine (9) Clients. They will be interviewed and observed by the researcher on how the management process will be carried out.

**Data Collection Methods**

Variety of methods will be used to gather facts about the existing system and these methods included interview, questionnaire and observation. The researcher will use the data and information collected to design and development the new system.

1. Interviews

Nine (9) Clients and two (2) Cashiers Londiani women group SACCO will be interviewed privately where the researcher will ask questions as the interviewee will respond. This will help the researcher to obtain facts about the current system. Each one will express their concern about the current system and recommend on what should be done to improve on the efficiency in a new system.

1. Observation

This method will enable the researcher to get clear information about the existing system since he will be able to see personally what is taking place during transaction at the Sacco. The researcher will base his observation on how loan information is managed and the process used in transaction. The researcher also will observe how data will be recorded and the methods used in storing data.

1. Questionnaire

This includes draft of questions about existing women group loan management system. The researcher will be able to draft a questionnaire which will be filled in by employees of the Sacco.

**Data analysis methods**

The researcher will use Microsoft excel for data analysis. The data collected will be analyzed using the Microsoft excel 2007 and tabulated. This will be represented using graphs and pie charts during the presentation of data.

**Development methodology**

The new system will use waterfall model for development process. It emphasizes the logical progression of steps be taken throughout the software development life cycle (SDLC). The phases consist of analysis, basic design, implementation, testing and maintenance. The reason for choosing this model is because its suitable for the time given to complete this project

System design

implementation

testing

integration

MAINTENANCE

Figure 3 Waterfall model

Requirement analysis and specification this is a phase which focuses on the task that determine the needs or conditions to meet the new project and it should be documented, measurable and related to and detail sufficient for the system design.

Design in this phase all the information that was gathered through the first phase are crucial and it must be included for the designing process.

Implementation this is the phase where researcher will use Sublime text to develop system with the help of programing languages such as html, PHP, CSS and JavaScript.

Testing it helps one to understand how real users interact with the system and makes it accessible to the users

Integration is a phase where my system will be in a position to send and receive information and connect with other key system and be beneficial to others.

Maintenance it’s the last phase of monitoring your system and its performance

**Technology for development**

This system will be developed using the Visual basic 2005.net in the interface i.e. the front end and Microsoft Access as database management software, has been used at the back end. These are user-friendly programs and easy to train. Database (Microsoft Access) allows accessibility of data and retrieval of data easily. It allows elimination of duplicated data and also security of the database is concrete.

**References**

1. Philip J. Praff and Joseph Adamski (1987), database systems management and design, Boyd and Fraser Publishers Company.

2. Fred R. McFadden and Jeffrey A. Hoffer (1994), modern database management 4th edition, the Benjamin/ Cummings Publisher.

3. Sarah E. Hutchinson and Stacey C. Sawyer (2000), computers, communications and information, a user's introduction 7'h edition, the McGraw-Hill Publisher.

4. Jeffrey L. Whitten Lonnie D. Bethey Kevin C. Dittman (2000), systems analysis and design methods 5th edition, Irwin/McGraw-Hill Publishers.

5. Charles's. Paker and Deborah Morley (2003), understanding computers today and tomorrow 2003enhanced edition

. 6. Kai Hwang (1993), advanced computers architecture parallelism, scalability, programmability, McGraw-Hill Publisher

**APPENDICES**

**APPENDIX A: PROJECT BUDGET**

|  |  |
| --- | --- |
| **Description** | **Amount** |
| Laptop | 40,000 |
| Internet | 2000 |
| Transport | 4000 |
| Printing | 500 |
| Binding | 200 |
| miscellaneous | 3000 |
| **Total amount** | **Ksh.49,800** |

**APPENDIX C**

**Hardware requirements**

Requirements Hardware Processor Memory (RAM)

|  |  |
| --- | --- |
| **hardware** | **Minimum requirements** |
| processor | Intel® or Pentium (III, IV), Cyrix, AMD Athlon, 1.8 GHz or higher. |
| Memory(RAM) | Minimum 1.00 GB recommended or higher. |
| Hard disk | Minimum 73.8 MB recommended or higher |
| resolution | 1024x768 or higher |

**APPENDIX D**

**Software requirements**

|  |  |
| --- | --- |
| **software** | **Minimum requirements** |
| Operating System | Windows XP, 7 & 8 |
| Visio Basic 2005 .net | Visio studio.net or high version |
| Database management system | Microsoft access 2000 or higher version |
| Antivirus | ,Avast & Smadav 2015,Rev 10.1 |