BACHELOR OF SCIENCE IN INFROMATION TECHNOLOGY

PROGRAMMING PROGECT: BIT 2206

SAVINGS AND CREDIT COOPERATIVE MANAGEMENT SYSTEM FOR LOCA SAVINGS AND CREDIT COOPERATIVE

BY

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16/05387

PROGECT IMPLEMENTATION PLAN IN PARTIAL FULFILMENT FOR THE REQUIREMENTS FOR THE AWARD OF A DEGREE IN INFORMATION TECHNOLOGY

PRESENTED TO: Dr. LUCY MBURU

Declaration

I declare that this project is my original work and has not been presented in any other college or university for the award of a Diploma or a Degree.

Student

Name…….. ……. Date……..

Signature…….

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1.0 Introduction

This document describes in detail the implementation of LOCA SACCO Management System. It will facilitate the installation and full handover of the system to the business, system changeover plan and its implementation.

1.1 Purpose

The purpose of this document is to detail how the system will be deployed in the organization for it to operate at optimal capacity. It contains an overview of the system, describe all major tasks and all other requirements that may be needed to carry out deployment of the system.

1.2 Scope

This document will provide a full definition of the operational environment into which the system is to be installed and provide a generic plan for installing and transition of the system into its working environment.

1.3 System Overview

LOCA SACCO desires to automate its operations by ensuring all their data is entered into the new system. All the information will be stored and secured in one central place and will be accessible at any time it is needed only by approved personnel.

1.3.1 System Description

This system will be a 2-tier database system where the database will reside in one central server and the rest of the business logic and user interface will reside in client computer/workstations which will all have access to the database running on the server.

The system will heavily rely on the SACCO's LAN (Local Area Network) to facilitate communication between the workstations and the server. The system will be able to validate new members, create new accounts, and capture loan applications, payments and contributions from the previous system as well as future transactions.

1.3.2 System Organization

The LOCA SACCO Management system consists of Visual Studio forms for data capture and MySQL database for storing the data.

1.3.3 System Security

This will be facilitated by the use of usernames and passwords to gain access to specific area of the system which will perform specified tasks.

1.3.4 System Users

The main users of the system will be:

1.3.4.1 Manager

Will be in charge of the SACCO's branch operations and responsibilities will be to monitor the other staff of the SACCO, review the loans given or rejected, add or remove a teller or attendant from the system on instruction by the management committee. The manager will also have all the data on all accounts in the system as well as their value and the members who currently have active accounts.

1.3.4.2 Attendants

Will be responsible for adding new members into the system by acquiring details necessary from the prospective member before giving it to the system for processing and validation; this will also include creation of new accounts and editing the details of currently existing members e.g. marital status, residence and occupation.

1.3.4.3 Teller

They will be in charge of the financial operations. They will receive payments for loans, accept loan requests and enter them into the system for processing as well as update all the customer accounts with their monthly contributions. There will be no room for editing details in this section.

1.3.4.4 Technical Support

They will be responsible for supporting other users, troubleshooting any problems that may arise from the system. They will need to have higher level IT-technical knowledge which will be useful in machine and network troubleshooting, report generation and maintaining the database (backup and recovery).

2.0 Implementation Overview

The implementation will be done in a way that will not affect the normal operations of the SACCO.

2.1 Chosen Strategy

There are several individual strategies that can be used to implement a system. They are:

1. Parallel conversion
2. Direct Conversion
3. Pilot Conversion
4. Phased Conversion

The strategy selected for this case is **Direct conversion**.

2.1.1 Direct Conversion

In this strategy, an organization immediately abandons their old system and start using the new one immediately. It has been chosen since the current system being used by the SACCO is unstable, i.e.; it is cumbersome, insecure and very much prone to errors, both intentional and accidental. However, all the data in the old system will be entered into the new system and so the SACCO's operations will become efficient and secure.

2.1.2 Features of Direct Conversion

- One automated system processes the data
- It is easier and more efficient to use compared to the old system.
- Implementation of the system is done immediately it is approved by the testing team.

2.1.3 Justification

When deciding which conversion strategy to go with, there are three key fectors one must consider, they will be discussed in reference to the direct conversion strategy. They are:

- **Risk:** Compared with others, direct conversion has lower risk in implementing because there is no currently existing system. Bugs in the system however may pose a risk which will be mitigated by testing the system.
- **Time:** No time will be wasted after successful testing of the system. It will be implemented immediately.
- **Cost:** Setting up for this kind of conversion is expensive because of the new resources demanded by the system but the cost is justified by the long-term benefits the system will provide because it has been tested and will be properly intergrated for its environment.

Advantages of Direct Changeover

- System errors will be identified early.
- No added resources are needed to run the system since the old system is discontinued.
- Immediate deployment of the system saves on time
- Resources will be saved since all the processing is being done on one system.

Disadvantages of Direct Changeover

- Poor implementation will prove to be disastrous to the organization
- Small errors will be difficult to capture.
- It is difficult to train staff to start using the new system immediately.

2.2 Tasks involved during implementation

2.2.1 Installation

It involves carrying out the full installation which is sub divided into various sections which are:

2.2.1.1 Hardware Installation

Involves the purchase of a server to host the database, networking devices for the network that will be used to connect the workstations to the server and workstations where the user interface will be installed.

2.2.1.2 Software Installation

It involves installation of MySQL database on the server and the client interface on the workstations.

2.2.2 Training

It involves ensuring that the users are fully conversant with using the system even though a user manual will be provided. This will involve arranging a full overview/tour of the system with a lot of user participation.

2.2.3 Data Migration

Data in the old system will have to be migrated into the new system to facilitate smooth transition from the old system to the new. This will ensure quick references to past records.

2.2.4 Execution

This action is carried out when everything is set and approved by the developer. It is done by the developer in conjunction with the technical personnel of the SACCO.

2.2.5 Review

To ensure that the whole implementation process was a success, a thorough review is conducted to ascertain that the process went as planned.

3.0 Implementation Chart

Activities	Duration	Objectives	Responsible
System Installation Planning	2 days	Assemble all necessary equipment for implementation	System Developer
Actual Implementation	1 Day	Installation of the system	System Developer and System Administrator
Final Checking	1 day	Ensure the system is working properly	System Developer, System Administrator, users, management
Staff Training	1 Day	Train all staff on how to use the system and System Admin on how to support the users.	System Developer

3.1 Implementation Support

Successful deployment of a system is highly dependent on hardware and software support.

3.1.1 Hardware

- G4 server 2.4GHz, 4GB RAM
- Workstation PCs, 2GB RAM
- Printer

3.1.2 Software

- MySQL 5.6
- Windows server 2012
- Windows 10 (for the workstations)

3.2 Implementation Requirements by Site

The system will be installed in the client's offices. The following will be needed:

3.2.1 Site Requirements

- **Hardware Requirements:** The organization must set up a Local Area Network (LAN) that will be used for the client/server based system. It could either be a wired or wireless network.
- **Software Requirements:** Windows 2012 server should be installed in the server and a dedicated technical staff recruited to manage it.
- **Facilities Requirements:** An exclusive room with restricted access, good airflow and power set specifically to house the server.

3.3 Post-Implementation Verification

It is done a month after training the staff to find out if the system is functioning as it is supposed to. The implementation team is also made aware of the challenges faced by the users which may need further attention. The users' views on their experience while using the system are collected in this stage.

4.0 Conclusion

As the system is being handed over to its users, a lot of care must be taken to ensure that it is done correctly and that the system is ready for deployment into its working environment.

5.0 References

1. https://searchcrm.techtarget.com/definition/implementation
2. https://creativehive.org.ukmishaalhussain/2016/03/15/conversion-strategies/