FINANCIAL INFORMATION MANAGEMENT SYSTEM

CASE STUDY OF SOROTI DIOCESE

BY

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DECLARATION

I ETOJU FRANCIS do hereby declare that this dissertation is a result effort and has not been submitted to any institution of higher learning before for an academic award and should not be reproduced without my consent

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SUPERVISOR'S APPROVAL

This study project, financial information management system has been done under my supervision as the university supervisor and submitted with my approval

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DEDICATION

I thank the Almighty God who has successfully enabled me to complete the entire course with the dissertation. In special, I dedicate this project to my entire family members especially my parents Mr. Asirit John Micheal and Mrs. Asio Margret for their entire efforts, my grate brothers Mr. Etidu Richard and Mr. Olego David for their kind and loving hearts, my supervisor Mr. Musana Eddie and finally to my fellow colleagues who have tried their level best to bring me up to this far morally and this has been the source of courage and inspiration throughout this school life. This work is a manifestation of your prayers and hard work, may the almighty God provide you all with more of life as a special gift

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LIST OF ACRONYMS

CSS Cascading Style Sheet

DFDs Data Flow Diagrams

E RD Entity Relationship Diagram

FIMS Financial information Management System

GAAPGenerally Accepted Accounting Principles

HTML Hyper-Text Mark Language

ICT Information and Communication Technology

IS Information System

IT Information Technology

MYSQL MY-Structured Query Language

NADFM National Association of Diocesan Fiscal Managers

PHP Hyper-Text Processor

RAD Rapid Application Development

SCD Soroti Catholic Diocese

SDLC System Development Life Cycle

USCCBUnited States Conference of Catholic Bishops

WCMworking capital management

ABSTRACT

This is a computerized FIMS project study that was carried out at SCD in Soroti city. The main objective of the study was to develop financial information management system to capture all the church moneys collected, improve financial performance, reduced costs which enhance the financial management practices.

To come up with the system, data was collected through interviewing the bishop of SCD, health workers and patients as well as observation and focus group discussion. The data collected was analyzed and then used to design and implement the system using RAD model approach.

The system was developed using the Unifying Modeling Languages with frontend and back-end interfaces with a database system. The developing software tools included PHP, HTML, JavaScript, Visual Studio, Xampp together with MYSQL. The database stores records of Parishes and other related information. The system also enables bishop and other system users to update, edit, delete, view and add new parish and make contributions.

CHAPTER ONE: INTRODUCTION

1.1Background of the study

Financial Information Management System (FIMS) is a crucial tool in modern business and organizational management. It involves the collection, processing, storage, and analysis of financial data to facilitate informed decision-making, financial planning, and performance evaluation in non-profit organizations (Zietlow et al., 2018).

The evolution of financial management systems can be traced back to the manual accounting methods used in early businesses. With the advancement of technology, particularly the development of computerized systems, financial management underwent a significant transformation(Anderson et al., 2017).

The Catholic Church has a long history of financial management dating back to the Middle Ages when the Church was one of the wealthiest institutions in Europe. Since then, the Church has continued to refine its financial management practices, and dioceses around the world have developed their own systems for managing finances. In addition current research shows that there is a correlation between mismanagement of finance and lack of financial controls that can lead to fraud (War & Barlis, 2023)

Previous research highlights the importance of efficient financial management systems in enhancing transparency, accuracy, and timeliness of financial information. Various studies discuss the benefits of adopting technology-based solutions to streamline financial processes and mitigate risks(Gelinas et al., 2018).

The system being used is unable to a track and manage the financial activities, facilitate timely decision making by providing up-to-date and timely report financial reporting

This research aims to develop a deeper understanding of the challenges faced in implementing FIMS and the potential benefits it offers.

1.2 Statement of the Problem:

The diocese faces significant challenges in managing its finances, necessitating the establishment of an advanced and automated financial management system. This system should enable effortless fund collection from multiple parishes, provide comprehensive features that meet both environmental and human needs, ensure precise donation tracking, and enable real-time reporting and analysis. The goal is to enhance transparency, accuracy, and decision-making processes within the diocese.

Currently, the diocese relies on manual fund collection methods, resulting in time-consuming procedures, hindering effective donation tracking and report generation. The existing system lacks automation, integration, and user support, leading to inefficiencies in handling financial data.

These manual processes, lack of automation, and limited reporting capabilities contribute to inefficiencies and financial management challenges. The absence of real-time reporting affects timely decision-making, and difficulties in tracking donations impact transparency and accountability.

These challenges may lead to inaccuracies, potential fund mismanagement, and decreased financial stability. Trust issues among stakeholders, including parishioners and donors, may arise, affecting the diocese's ability to make informed financial decisions and meet financial obligations.

Therefore, it is crucial for the diocese to develop and implement an automated financial management system. This system should incorporate modern Information Systems (IS), seamless integration, a well-structured framework, and robust user support. By adopting such a system, the diocese can streamline financial processes, enhance accuracy and transparency, enable real-time reporting and analysis, and improve donation management. The proposed solution aims to strengthen financial decision-making, promote accountability, and ensure the diocese's financial stability and effective operations.

1.3 Main objective of the study

The main objective of the study was to develop financial information management system to capture all the church moneys collected, improve financial performance, reduced costs which enhance the financial management practices.

1.3.1 Specific objectives

1. To review the literature and determine the requirements for developing the financial information management system.
2. To design the financial information Management System.
3. To implement the design of financial information Management System.
4. To test the functionality of financial information Management System

1.4 Significance of the study

This study was significant for several reasons. First, it was to provide insights into the current state of diocesan financial management systems and identify areas for improvement. Second, it was to contribute to the existing literature on financial management in religious organizations. Finally, it was to provide practical recommendations for diocese on how to improve their financial management practices.

On successful completion and further implementation of the financial information management system, the study was to the following significances which include the following;

The study was to enable the researcher with more knowledge and skills about financial management systems which was used as reference by other researchers who would like to carry out research on the same field of management systems.

finance council and parish priests tackle the problem of financial problems. The development of diocesan's financial information management system was to improve the recording and processing of financial diocese records and would also allow prompt and efficient access to reliable financial data. This would support enhanced transparency and accountability of financial resources and information in the diocese.

Secondly, developing a diocesan financial management system would strengthen financial controls, facilitating a full and updated picture of deposits and expenditures. Once a deposit is made, the system should be able to trace all the stages of the transaction processing from budget releases, deposits, purchase, payment request, reconciliation of bank statements, and accounting of expenditure(Pfang, 2015).

1.5 Scope.

Financial information management system shall operate in real-time, allowing church to track and manage her financial activities. facilitates timely decision-making by providing up-to-date financial information and enables organizations to respond quickly to changes in the fi

The financial management information system study which aims at improving on the performance of different functionalities such as;

Financial Reporting: This involves generating financial statements, such as income statements, balance sheets, and cash flow statements, to provide an overview of the organization's financial performance.

Cash Flow Management: It focuses on monitoring and managing cash inflows inform of donations and others, ensuring and optimizing cash utilization.

Financial management system shall operate in real-time, allowing church to track and manage her financial activities. facilitates timely decision-making by providing up-to-date financial information and enables organizations to respond quickly to changes in the financial landscape.

Geographical scope

The study was conducted at Soroti catholic diocese located in Soroti City, Eastern Uganda

Time scope

The study was for a period of four months

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

In this chapter, the researcher reviews the existing body of knowledge related to financial management systems in religious organizations, focusing on dioceses. The chapter aims to provide a comprehensive understanding of the unique challenges faced by religious organizations in managing their finances. Furthermore, it explores the role of Information Systems (IS) in modernizing financial management within these organizations. The chapter is organized as follows: Financial Management Systems in Religious Organizations,Information Systems,Requirements for FIMS,Designing the FIMS,Implementing the FIMS,Testing and Validation and Benefits and Outcomes.

2.2 Financial Management Systems in Religious Organizations

Religious organizations, such as dioceses, face distinct financial challenges that stem from their unique organizational structures and missions. These challenges encompass fund collection, transparency, accountability, and efficient financial reporting(Raji et al., 2020). For instance, religious institutions often rely on donations from a diverse group of stakeholders, making fund collection complex. Additionally, the need for transparency and accountability to maintain trust with parishioners and donors can be demanding(Redmond, 2020).

The significance of financial management systems in organizations include the following:

Budgeting and Planning: Financial management systems enable organizations to create and manage budgets, forecast revenues and expenses, and set financial goals. This helps in aligning financial resources with strategic objectives and ensuring efficient allocation of funds.

Accounting and Financial Reporting: These systems provide tools for recording and tracking financial transactions, maintaining accurate and up-to-date financial records, and generating financial reports such as balance sheets, income statements, and cash flow statements. This ensures compliance with regulatory requirements and provides stakeholders with transparent and reliable financial information(Quinn & Hiebl, 2018).

Financial Analysis: Financial management systems facilitate financial analysis by providing tools for evaluating financial performance, conducting variance analysis, and measuring key

performance indicators. This helps organizations identify trends, assess profitability, and make informed decisions based on financial data(Njobvu et al., 2020).

Risk Management: Financial management systems assist in identifying and managing financial risks through features like internal controls, audit trails, and risk assessment modules. Organizations can implement safeguards to mitigate risks, monitor financial activities, and ensure compliance with financial policies and regulations.

Efficiency and Productivity: By automating financial processes, reducing manual errors, and streamlining workflows, financial management systems improve operational efficiency and productivity. This enables finance teams to focus on strategic tasks, optimize resource utilization, and enhance overall organizational performance.

Decision Making: Accurate and timely financial information provided by financial management systems empowers decision-makers to evaluate investment opportunities, assess the financial viability of projects, and make informed business decisions. This leads to improved resource allocation, reduced financial risks, and enhanced competitiveness.

Information Systems (IS) play a pivotal role in enhancing financial management within religious organizations. They enable the automation of financial processes, ensuring efficiency and accuracy in fund collection, tracking, and reporting. IS also facilitate data-driven decision-making by providing real-time financial insights. The integration of IS into the financial systems of religious organizations can streamline operations, improve transparency, and enhance accountability (Wright, 2012).

Diocesan Financial Management Systems:

Diocesan financial management systems are financial systems and processes specifically designed for the management of finances within diocese of religious organization. These systems are used to track and manage financial transactions, budgeting, reporting and other financial activities within the diocese(Brannan, 2013).

The diocesan financial management systems face many challenges in operation which include the following;

Donor Dependence: Many religious organizations rely heavily on donations and contributions from their members and supporters. Managing these donations effectively and transparently is a crucial challenge, as donors expect their funds to be used wisely and for the intended purposes.

Transparency and Accountability: Religious organizations are often held to high standards of transparency and accountability, as they are entrusted with funds contributed by their congregations. Ensuring that financial transactions are well-documented, traceable, and subject to scrutiny is essential to maintain trust.

Complex Funding Sources: Dioceses and religious organizations often receive funds from various sources, including individual donations, grants, investments, and revenue from events or activities. Managing and tracking these diverse funding sources can be complex and require specialized systems.

Non-Profit Status: As non-profit entities, religious organizations must adhere to strict financial regulations and reporting standards(Zietlow et al., 2018). They are often subject to audits and must demonstrate that their funds are used exclusively for religious, charitable, and educational purposes. Case. (2020).From a collection of case studies on financial reporting principles and accounting concepts(McLeod, 2020)

Limited Resources: Many religious organizations operate with limited financial resources. Efficient financial management is essential to make the most of available funds and allocate them to support the organization's mission and activities.

Therefore, financial management in religious organizations like dioceses requires systems that address the unique challenges they face, emphasizing transparency, accountability, compliance, and efficient fund management to support their mission and activities effectively.

The development of the diocesan financial management systems has the specific requirements which are discussed below;

Specific Requirements:

Donation Tracking: Religious organizations require systems that can accurately record and track donations, whether they are one-time contributions, regular tithes, or special offerings. This tracking should include donor information and the purpose of the donation.

Fund Allocation: Dioceses often manage multiple parishes, each with its own financial needs and priorities. A financial management system should allow for the allocation of funds to specific parishes or projects based on predetermined criteria.

Budgeting and Forecasting: Planning and budgeting are critical for managing financial resources effectively. The system should support the creation of budgets and financial forecasts, enabling the organization to plan for future expenses and revenue.

Audit Trails: To ensure transparency and accountability, financial systems in religious organizations must maintain comprehensive audit trails. This means recording every financial transaction and making it accessible for auditing purposes.

Reporting and Analysis: Robust reporting capabilities are essential for religious organizations to generate financial statements, performance reports, and compliance reports required by authorities and stakeholders.

Security and Access Control: Protecting sensitive financial information is paramount. The system should have robust security measures in place to prevent unauthorized access and ensure data integrity.

Management information systems

Despite the importance of financial management in religious organizations, there is a lack of research on the diocesan for financial information management system. Some areas for further research include the effectiveness of different financial information management systems, the impact of financial management on the sustainability of religious organizations, and the role of technology in improving diocesan financial management. Additionally, there is a need for more research on the ethical considerations related to financial management in religious organizations, particularly in relation to the use of donor funds and the management of assets.

The literature in this section was based on the literature of the other researchers. Unfortunately, other researchers focused only on examining and describing financial management systems and financial characteristics related to small and medium enterprises and don't focus on examining the financial management practices in the diocese

(Njeru, 2016)defines financial management as a discipline that adopts the same principles, regardless of an enterprises type size. Financial management would focus on building a sustainable cash flow by forecasting receipts and payments to establish the line to funding with banks and thus managing the day-to-day operations of business to minimize the amount of cash required to achieve sustainable business growth(Eton et al., 2019).

Financial management is necessary to avoid mismatches between the timing of payments and the availability of finances.

In Uganda, existing financial management practices include working capital management, capital structure, financial reporting mechanisms capital budgeting, social exchange theory and others.(Eton et al., 2019)states that the efficient financial reporting systems are significant in determining the growth and survival of small-scale enterprises.

Working capital management (WCM) is significant in making rightful decisions related to financial management which has a critical impact on the financial management which has a critical impact on the financial performance of the business enterprise(Akomeah et al., 2018). The capital structure represents the right capital mix of either debt or equity which enables the financing of business operation(Akomeah et al., 2018).

Management Information Systems are systems that take information captured and recorded by other systems such as Transaction Processing System about the transactions that affect the organization and produce reports that management needs for proper planning and controlling the business. Protection and management of records from destruction is an important task as they provide us evidence of legal status, ownership, accounts received and the particulars of obligations required by the government agencies or private organizations(Peltz-Steele, 2018). Management of both important and useful records is crucial for the operation and smooth functioning of the organization and those including financial statements(Nurdiono et al., 2016). The number of hospitals and clinics using the Management Information System to protect the

records of their patients is increasing. A computerized technology is being adopted in capturing and recording of patients and employees' details in order to realize the benefits and challenges of a complex manual system. Also develop full understanding of patient complications in-depth through the internet and sharing of experiences within and outside the organization.

Management Information System provides information in the form of pre specified reports and displays to support business decision making(Agung, 2015). High quality of the system leads to high quality of the information. Agung, confirms that the quality of information output by financial Management Information System is strongly associated to the technical and service aspects of the system, that is, to system quality. A system that utilizes user-friendly and modern technologies such as GUI-Graphical user interfaces, can present information to users in an easy-to-understand format, enabling them to use Information Systems effectively(Agung, 2015).

In general, Management Information Systems provide accurate, timely, relevant and complete information necessary to facilitate decision making in an organization. It helps in planning, control and operational functions to be carried out effectively and efficiently. While in the clinic, there is quick access to relevant data and documents, provides valuable time-saving benefit to the workforce, improvement in organizational and departmental techniques, use of less labor, effective and efficient coordination between departments, and quick and reliable referencing.

2.3 Role of Information Systems

Information Systems (IS) play a pivotal role in enhancing financial management within religious organizations. They enable the automation of financial processes, ensuring efficiency and accuracy in fund collection, tracking, and reporting. IS also facilitate data-driven decision-making by providing real-time financial insights. The integration of IS into the financial systems of religious organizations can streamline operations, improve transparency, and enhance accountability (Kuruppu et al., 2022).

These systems facilitate the flow of information, support decision-making processes, and enhance overall organizational efficiency. In the context of the Soroti Catholic Diocese, information systems include physical collection of money, recorded on the book and the money is kept by the treasurer until the day for taking to the parish reaches and it's taken by the leader.

The information systems are physical collection of moneys and paper work for capturing the amount of money collected

An Information System (IS), from the word System which is defined as “a collection of parts or components which interact with each other to function as a whole”, is a collection of interrelated components that collect, process, store, and provide information as output needed to complete a business task and looks at financial block chain and reporting using technology (Bakarich et al., 2020). The use of automated Information Systems has resulted into improved faster and efficient means of information collection, processing, store, distribution and retrieval. Information System is also a reliable tool that can be used in billing the financial information required in decision making for proper planning and budgeting of the resources in an organization. There are different types of Information Systems for example Management Information Systems, Transaction Processing Systems, Expert Information Systems, Decision Support Systems, Communication Support Systems among others.

Automation in Financial Management:

Automation in financial management refers to the use of technology and software to streamline and automate various financial processes and tasks, reducing manual efforts, improving efficiency, and minimizing errors.it involves leveraging tools and systems to handle tasks such as data entry transaction processing, reporting, analysis and decision making hence benefiting from the efficiency gain from financial regulatorycompliance (Chatterjee, 2020)

Automation in financial processes offers several significant benefits, primarily in terms of improving efficiency and accuracy. This includes the following;

Reduced Human Error: One of the most significant benefits of automation is the reduction of human error. Automated systems follow predefined rules and algorithms consistently, minimizing the chances of mistakes in data entry, calculations, and transaction processing. This leads to more accurate financial records.

Faster Processing: Automation accelerates the speed at which financial transactions and processes are completed. Tasks that may have taken hours or days manually can be

accomplished in minutes or seconds with automation. This increased speed is especially valuable for tasks that require quick decision-making and reporting.

Improved Data Accuracy: Automation ensures that data is captured and processed consistently and accurately. This leads to improved data quality and reliability, which is essential for financial reporting, analysis, and decision-making.

Real-time Reporting: Automation allows for real-time monitoring and reporting of financial data. This means that financial stakeholders have access to up-to-date information, enabling faster and more informed decision-making.

Cost Savings: While there is an initial investment in implementing automation, it often leads to significant cost savings in the long run. Automation reduces the need for manual labor, which can be a substantial ongoing expense. It also minimizes the costs associated with errors and rework.

Audit Trails: Automation systems maintain detailed audit trails of all financial transactions and activities. This makes it easier to trace the history of financial data, track changes, and provide evidence of compliance for audits or regulatory inquiries.

Enhanced Security: Automated systems often include robust security features to protect sensitive financial data. Access controls, encryption, and authentication mechanisms help safeguard financial information from unauthorized access or breaches.

Transparency and Accountability:

Transparency and accountability are fundamental principles in financial management, particularly in the context of organizations and the responsible handling of financial resources (Potter,2016)

Automated systems play a crucial role in enhancing transparency and accountability in financial management across various organizations.

Audit Trails and Traceability: Automated systems maintain detailed audit trails of all financial transactions and activities. These logs capture who performed what actions, when they were executed, and any changes made to financial data. This transparency allows for a complete and

verifiable record of financial activities, making it easier to trace the history of transactions and identify any irregularities. Auditors can rely on these audit trails to verify the accuracy and integrity of financial records.

Access Control: Automated systems include robust access control mechanisms that limit who can access and modify financial data. By assigning roles and permissions, organizations can ensure that only authorized personnel can make changes or access sensitive financial information. This control prevents unauthorized alterations and ensures accountability for actions taken within the system.

Consistency and Accuracy: Automated systems consistently apply predefined rules and algorithms to financial data. This reduces the risk of errors and inconsistencies in financial records, ensuring that data is accurate and reliable. Stakeholders can have confidence in the integrity of financial information, promoting trust and accountability.

Reduction of Manual Interventions: Manual financial processes can introduce opportunities for errors, manipulation, or unauthorized access. Automated systems minimize the need for manual interventions, reducing the chances of human error or misconduct. This reduction in manual handling of financial data enhances transparency and accountability.

Documentation and Reporting: Automated systems generate detailed financial documentation and reports. These reports provide a clear overview of financial performance, transactions, and budgetary information. Accessible reports facilitate transparency by offering stakeholders comprehensive insights into the financial state of the organization.

Data Security: Automated financial systems incorporate robust data security measures to protect financial information from unauthorized access or breaches. The security of financial data ensures that it remains confidential and secure, promoting trust and accountability.

Efficient Record Keeping: Automated systems streamline record-keeping processes, ensuring that financial data is organized, easily accessible, and securely stored. This efficient record keeping simplifies audits and inquiries, making it easier to demonstrate transparency and compliance.

Financial Controls and Tracking

Financial controls and tracking refer to the process and mechanisms put in place to monitor and regulate financial activities within an organization. These controls are designed to ensure the accuracy, reliability and integrity of financial data (Peterson, 2013)

Robust financial controls and tracking mechanisms are of paramount importance in diocesan financial management for several reasons as discussed below.

Financial Stewardship: Dioceses, like any other organization, have a responsibility to effectively manage and steward their financial resources. Robust financial controls ensure that funds are used in accordance with the diocese's mission and are not misappropriated or wasted.

Accountability: Accountability is essential in religious organizations, as they are entrusted with donations and contributions from parishioners and donors. Financial controls help track the flow of funds, making it clear how money is used. This transparency builds trust among stakeholders and demonstrates responsible stewardship.

Preventing Fraud and Mismanagement: Financial controls act as a deterrent to fraud and mismanagement of funds. They include checks and balances, segregation of duties, and authorization processes that make it difficult for individuals to engage in fraudulent activities without detection.

Effective Budgeting: Financial controls and tracking mechanisms provide the data needed for effective budgeting. They enable dioceses to allocate resources wisely, plan for future needs, and ensure that financial decisions align with strategic goals.

Transparency for Parishioners and Donors: Parishioners and donors expect transparency in how their contributions are used. Tracking mechanisms and financial controls enable dioceses to provide clear and accurate financial reports to their constituents, demonstrating how funds are being utilized for the benefit of the community.

Efficiency: Effective financial controls streamline financial processes. They reduce the likelihood of errors, duplication of efforts, and inefficiencies in financial operations.

Data-Driven Decision-Making: Tracking mechanisms provide dioceses with data and insights into their financial performance. This data can inform strategic decisions, such as resource allocation, fundraising efforts, and program planning.

Safeguarding Donor Trust: Donors are more likely to contribute to a diocese that demonstrates strong financial controls and transparency. When donors trust that their contributions will be used wisely and for the intended purposes, they are more inclined to support the diocese's mission.

2.4 Requirements for financial information management system (FIMS)

To determine the requirements for developing a Financial Information Management System (FIMS), it is imperative to examine existing literature. This process involves reviewing essential elements and features of FIMS. The literature provides insights into the specific requirements and needs of religious organizations for effective financial management. Case studies of successful FIMS implementations in similar religious contexts offer valuable design approaches based on the determined requirements (Cordery, 2015).

Data Management: The system should have robust data management capabilities, including data capture, storage, integration, and security. It should support different data types (e.g., financial transactions, customer information) and provide mechanisms for data validation, cleansing, and backup.

Accounting and Financial Reporting: The FIMS should support standard accounting practices and be capable of generating accurate financial reports, including balance sheets, income statements, cash flow statements, etc. It should adhere to relevant accounting frameworks (e.g., Generally Accepted Accounting Principles or International Financial Reporting Standards) and offer functionalities such as general ledger management, journal entries, and financial statement generation.

Budgeting and Planning: The system should enable budgeting and forecasting processes, allowing users to create and manage budgets, allocate resources, track actual performance against planned targets, and generate variance reports. It should support collaborative budgeting, scenario analysis, and what-if simulations.

User Interface and Accessibility: The system should have an intuitive user interface that is easy to navigate and use. It should offer role-based access controls to ensure data security and provide different levels of access to different user groups. It may also include features for customization and personalization of user interfaces.

Security and Auditability: The system should have robust security features to protect financial data from unauthorized access, data breaches, or tampering. It should offer user authentication, data encryption, and audit trail capabilities to track system activities and maintain data integrity.

Scalability and Performance: The FIMS should be designed to handle increasing volumes of data and user activity as the organization grows. It should be capable of handling complex calculations, processing large datasets, and delivering responsive performance.

Specific Requirements:

Donation Tracking: Religious organizations require systems that can accurately record and track donations, whether they are one-time contributions, regular tithes, or special offerings. This tracking should include donor information and the purpose of the donation.

Fund Allocation: Dioceses often manage multiple parishes, each with its own financial needs and priorities. A financial management system should allow for the allocation of funds to specific parishes or projects based on predetermined criteria.

Budgeting and Forecasting: Planning and budgeting are critical for managing financial resources effectively. The system should support the creation of budgets and financial forecasts, enabling the organization to plan for future expenses and revenue.

Audit Trails: To ensure transparency and accountability, financial systems in religious organizations must maintain comprehensive audit trails. This means recording every financial transaction and making it accessible for auditing purposes.

Reporting and Analysis: Robust reporting capabilities are essential for religious organizations to generate financial statements, performance reports, and compliance reports required by authorities and stakeholders.

Security and Access Control: Protecting sensitive financial information is paramount. The system should have robust security measures in place to prevent unauthorized access and ensure data integrity.

According to a study by the United States Conference of Catholic Bishops (USCCB), the implementation of sound financial management practices is critical for the effective operation of dioceses (West & Zech, 2007). The study emphasized the need for dioceses to develop financial policies and procedures that are consistent with generally accepted accounting principles (GAAP) and to establish internal controls that are designed to safeguard the assets of the diocese.

Another study by the National Association of Diocesan Fiscal Managers (NADFM) found that the use of technology has become increasingly important for diocesan financial management aligns itself with not for profit accounting standards (Rixon & Faseruk, 2014). The study emphasized the need for dioceses to embrace technology such as accounting software, online payment systems, and electronic banking to streamline financial processes and improve efficiency.

In addition, the NADFM study highlighted the importance of training and development for diocesan financial managers. The study recommended that dioceses provide regular training and development opportunities for financial managers to enhance their skills and keep abreast of changes in financial reporting requirements.

The Archdiocese of New York implemented a comprehensive FIMS to manage the finances of its various parishes, schools, and ministries. Their system included features such as donation management, fund management, and budgeting. They focused on integration with existing systems, such as their accounting software and online donation platforms, to streamline data capture and improve accuracy. The FIMS also provided centralized reporting capabilities to ensure transparency and compliance with financial regulations.

Catholic Relief Services (CRS), an international humanitarian organization affiliated with the Catholic Church, implemented a FIMS to manage their financial operations across various countries and programs. Their system focused on grant and project management, as they receive funding from multiple sources for various initiatives. The FIMS included features for budgeting, expense tracking, and reporting to ensure compliance with donor requirements. Integration with

their existing systems and collaboration tools enabled effective communication and coordination among global teams.

The Church of England implemented a FIMS to manage the finances of its dioceses, parishes, and other entities. Their system emphasized multi-site support and consolidation of financial data. The FIMS allowed for centralized financial reporting and analysis, enabling the Church to gain insights into the financial health of individual entities and the organization as a whole. The system also incorporated features for tax compliance, endowment management, and financial transparency to meet regulatory requirements and provide accountability to stakeholders.

2.5 Designing the financial information management system (FIMS)

The design of a FIMS involves incorporating the identified requirements and adhering to best practices from the literature. This section explores the principles and guidelines for designing a user-friendly and effective FIMS that aligns with the specific needs of the diocese. Additionally, it considers the integration of the FIMS with various financial functions within the organization, ensuring that the design follows the recommendations provided in the literature and guided by the empirical tool of internal financial controls used by churches (Hankerson, 2016).

This section presents the analysis of other literatures about the perspective of creation of safe management of finances. When financial managements are computerized, there shall be proper accountability and fast decision making. The technology dramatically reduces the manual collection use of paper work and physical transfer of money hence allowing the proper monitoring of money by the responsible persons. Analysts say that the use of a Computerized financial information Management Systems significantly reduces Security risks due to the use of manual methods, Mismanagement and use of the moneys.

According to the report from (Montague, 2013), he reported that advocates say electronic financial information management system could save 140 billion dollars a year in catholic church expenses on things like file clerks and space for file cabinets, transport fare and theft of finances hence reducing financial errors. When financial information management are computerized, there are no rooms for misuse and diversion of church money for other activities The technology dramatically reduces the time for collection of finances between different churches. Analysts say that the use of a Computerized financial Information Management

Systems significantly reduces misuse of money and improper collection, and cuts back on potentially financial errors resulting from incomplete or erroneous information from the representatives of different churches.

2.6 Implementing the financial information management system (FIMS)

Successful implementation of the FIMS relies on strategies informed by the literature. This section details the steps involved in the actual deployment of the system, addressing infrastructure, resource allocation, and change management considerations based on best practices and insights from the literature (Turner et al., 2022).

This is the stage at which the physical realization of the financial information management system was implemented(Lakidi et al., 2023). This shall be done using several implementation tools and technologies such as MySQL, HTML, CSS, PHP, JavaScript, and Bootstrap.

The impact of IT on the organizations has influenced on development of the Management Systems. The review of different research literatures explains arrange of IT applications suitable for organizational operations and desired objectives. In other words, IT facilitates higher functionality of the organizational system, integration and return of better output to the users (Lakidi et al., 2023). The direct impact of IT on the performance of the research on the study suggests multiple failures that need to be put right in order to realize the maximum performance of the system. In trouble shooting of the weaknesses exposed by the IT, vast ideas have been integrated from different researchers and increasing at a very high rate.

2.7 Testing and Validation

The process of testing and validation is informed by similar implementations in religious organizations as described in the literature. It outlines the methods and procedures for testing the functionality of the FIMS to ensure it aligns with the predefined requirements. Validation procedures are conducted to confirm that the FIMS aligns with the objectives and needs of the diocese, following the examples found in the literature (Tran & Nguyen, 2021).

Validation techniques involves testing the prototype with invalid data and procedures to check its way of handling exceptions as proposed by(Lakidi et al., 2023). This involved planning that will cover the user, functional and design requirements, system building involving operational,

installation, and performance tests, and then reporting on final results after an examination. Perez (2018).

This required the use scope of data collection, identify any constraints, and use analytical techniques which will involve taking note of the final results in comparison to the expected results to check the compliance of the system elements with their purposes or functions. (Tran & Nguyen, 2021).

2.8 Benefits and Outcomes

The anticipated benefits of implementing the FIMS in the diocese, such as enhanced transparency, efficiency, and data-driven decision-making, are summarized based on findings from the literature. These benefits are identified as a result of implementing similar systems in other religious organizations, reflecting the potential positive outcomes(Robinson, 2020).

In this chapter, the literature is explored to lay the foundation for understanding and implementing a Financial Information Management System tailored to the unique requirements and challenges of religious organizations, particularly dioceses. The insights gathered from the literature will inform the subsequent chapters, focusing on design, implementation, and testing of the FIMS within the diocese.

CHAPTER THREE: METHODOLOGY.

3.1 Introduction

This chapter describes the methods used to achieve the objectives of the study. This describes how data was collected using literature review, interviews, observation, focus groups and how collected data was analyzed to aid the system development.

The method for data collection of this project was qualitative which is often the best and most efficient approach of collecting information from small population and horse administrator, qualitative method was for conducting researches that rely on open ended exploration of people's actions, words, thoughts and intentions. Qualitative methods include the following; observation, focus groups and interview. RAD (Rapid Application Development) model was used in the system development life cycle (SDLC). RAD is an adaptive software development approach where software prototype is rapidly update based on user feedback and interactively delivered until it meets all the needs of the client.

3.2 Area of study.

This study was conducted at Soroti Catholic Diocese in Soroti city, Eastern Uganda was chosen due to the existing problems and challenges explained by the system.

3.3 Population and Sampling.

Population refers to the entire group of people, events or subject of interests that the researcher wishes to investigate whereas sampling refers to the process of selecting a sufficient number of samples from the population. The purpose of the study determined the number of participants that were involved in the study. In this research twenty participants were involved. The Bishop/ Assistant was involved and other participants focus groups which are the Priests and Catechists.

The total sample size of 20 participants was involved in the study. The method was purposive, to select key people having knowledge under investigation for example Bishop/Executive director, Priests and Catechists.

3.4 Project Planning

The planning phase of the System Development Life Cycle (SDLC) was used outlining project goals, defining roles and responsibilities, and creating a comprehensive project plan. It also includes defining the scope, budget, and timeline for the system development project. In this study, the planning phase ensured that the research objectives, data collection methods, and system development goals were clearly defined.

3.5 Analysis

Data collection

The purpose of data gathering is to collect sufficient, relevant, and appropriate data so that a set of stable requirements can be produced(Sharp & Litschi, 2014). Data gathering was required to expand, clarify, and confirm the initial requirements. This explains the different methods that were used by the researcher to gather the information. Numbers of steps, procedures and tools that was employed as shown below

3.5.1 Interview techniques.

This was the most used and most useful fact-finding technique used by the researchers to collect information from the participants face to face. There can be several objectives of using interviewing such as finding out facts, generating user interest and feelings of involvement, identifying the requirements and gathering ideas and options. The face-to-face interviews with the guide was conducted on 20 participants/respondents. These respondents were sufficient because Creswell john according to (Mason, 2010) suggest that 5 to 25 interviewees are satisfactory. This helped in obtaining rich information in regard to the topic understudy. Interviews was used since they are appropriate in providing in-depth data required to meet specific objectives allows clarity in questioning and quite flexible compared to questionnaires.

Focus group discussion

Focus group was one type of group interviews where the interviewed individuals are put in groups by the researcher. This is according to (Mishra, 2016) who also discussed that one of the biggest challenges of focus groups is that it requires resources together the participants. Also, the participants may not give the right information as required by the research under the area of investigation.

Focus groups are not to be conducted as several as one to one interview simultaneously, instated focus groups are about creating a situation of open discussion concerning this area under investigation where all participants feel comforted in expressing their opinions and responding to other opinions around them. Before execution of focus group discussion open ended questions are set by the researcher to provide him with the opportunity of creating a discussion environment among the members of focus group (Freitas, 1999).

Focus Groups:

Focus Groups	Bishop/Director	Priests	Catechists	Total
Male	01	10	07	18
Female	_	_	02	02
Number of participants	01	10	09	20
Day	Day 1	Day 2	Day 3	06

Table 1: Sample Size Representation

However, it has drawbacks such as time consuming and costly, and therefore maybe impractical, success is dependent on communication skills of interviewees

3.5.2 Observation

This technique was used to gather accurate information about how the system actually operates particularly about processes. This technique shall enable the researcher to systematically observe and record the behavior and characteristics of operations and processes in the Diocese. The method gives more detailed and context related information, permits the collection of information, permits tests of reliability of the responses to the view operations of the system as they occur. The observer can see exactly what is being done, it allows the validity of facts and data to be checked, it is inexpensive and the observer can obtain data describing the physical environment of the task. The observation technique becomes impractical in that people may knowingly or unknowingly perform differently when being observed

3.5.3 Document Review

This tool was used to understand what has been written on the subject matter of capacity building of financial management system in small and medium enterprises. Review of the document was used in the Diocese with the intent to study how things are done and discover areas where improvements are necessary. It enables the researcher to investigate gaps, problem and benefits of the existing system. This method was used because it is inexpensive due to the availability of data, it allows examination of the trends over the past, does not interrupt the church programs and there are few biases about information from above available data technique, the researcher used document reviews to understand what has been written on the subject matter of capacity building of financial management system.

3.5.4 Data Presentation.

This describes how the functions of the financial Information management System for diocese shall be realized. This was done through the use of system design tools such as DFDs, Context Diagrams, ERDs that could be used in the development of the system and its databases.

After the data collection exercise, data analysis of the collected data was done to eliminate inconsistencies, sieve out useful data, and update the system requirements(Lakidi et al., 2023).According to(Sileyew, 2019) elaborated the process of analyzing the collected data as a translation of the gathered data by different methods through research and refers gathered data to the literature review to construct the proper results for the resources and fulfill the purpose.

The qualitative data collected by interview, observation, document review and focus groups was analyzed according to the qualitative analysis is the use of non-quantifiable method to evaluate investment and make decisions. In qualitative analysis, the data collected is structured in a proper sequence, basing on the method of collection(Sileyew, 2019)and (Parker, 2012) argued that qualitative approaches are employed to achieve deeper insights into issues related to designing, administering and interpreting language assessment.

The common data was approached to demonstrate the data in a suitable way for interpretation. The coding process continued and the data based on determined themes that will clarify the valuable findings of operated discussions was described.

3.6 Requirements Identification

Based on the data analysis, the project identified the system requirements, encompassing both quantitative and qualitative needs. The objective is to meet the challenges and expectations of the Soroti Diocese's financial management. The RAD methodology's focus on end-user involvement facilitates the rapid gathering and refinement of requirements.

A number of tools was used to analyze the data collected from the diocese such as Interview, Observation among others from which useful information shall be extracted, identifying and listing of the Functional and Non-Functional Requirements.

3.6.1 Functional Requirements

The Functional Requirements describe the functionalities or services that the system is going to render to its end users and it includes the following;

Financial management system shall operate in real-time, allowing church to track and manage her financial activities. facilitates timely decision-making by providing up-to-date financial information and enables organizations to respond quickly to changes in the field.

The system was able to capture all the relevant information about the parish and any other information.

The system was effectively allowing storage of financial records to ease retrieval.

The system was able to provide accurate financial reporting

The system was able to perform mathematical calculations for any transaction automatically.

3.6.2 Nonfunctional Requirements

The Non-Functional Requirements are not directly concerned with the specific functions rendered by the system, but increases on the accuracy, reliability, performance of the system and they include the following;

User-friendly; the system shall give support to the users in terms of using with ease.

Backup recovery; there shall be a backup of records in case of any disaster.

The system shall ensure high security to prevent untheorized users from accessing or corrupting the database.

Fundamental computer skills were required among the users to ensure proper use of the system.

Ensure proper maintenance and constant update of the system for smooth running of the system.

3.7 Design

3.7.1 System Design

“System Designs are important because they provide road maps for how to rigorously conduct studies to best meet certain objectives” and technology has been adopted in the keeping of church records (Matasio, 2017).

The individual student will craft a comprehensive system design, encompassing the system architecture, functionalities, and user interface. A combination of RAD and Agile methodologies will be employed, with Agile principles promoting adaptability during implementation. The RAD methodology's emphasis on prototyping aligns with the Agile approach.

3.7.2 User Interface Design

The student designed a user-friendly interface that caters to the specific requirements and expectations of financial personnel within the Soroti Diocese. Rapid prototyping techniques will be used to gather user feedback and refine the design.

3.7.3 Development

In the development phase, the individual student was responsible for coding and programming to build the FIMS based on the design specifications. The RAD methodology's focus on quick iterations and frequent user feedback drives rapid development and adaptation.

Visual studio code was used for development languages such as Hyper Text Markup Language (HTML) for creating dynamic and interactive web pages, PHP for connecting the system interfaces to the databases, JavaScript of validating the system web pages and CSS files for modifying the appearance of the font and web pages. Xamp server has MYSQL components that enable us to create the system database and tables that provide platform from which the system information is stored. MYSQL supports different data types including primary types such as an integer, decimal, Binary (for unstructured blobs of data), text (for textual data) and so on.

3.8 Implementation

The financial information management system (FIMS) was a web-based system whereby the suitable software was installed in the web server and user computer, to enable the whole system to operate fully, Notepad, HTML, PHP, JavaScript, Xamp or Wamp server were used to implement system.

3.9 Testing

Testing procedures, including unit testing, integration testing, and user acceptance testing, was be conducted to validate system functionality. The student will manage this phase to ensure that the system works as intended. Agile testing practices, including continuous testing throughout development, was employed to identify and address issues promptly.

All components of the system were tested to ensure proper functionality. They shall be integrated to form a fully functional system.

System testing involves testing software or hardware connected on a computer, integrated system to evaluate the system’s compliance with its specified requirements. This testing requires no knowledge of the inner design of the code or logic. System testing was performed on the entire system in context of the functional requirements and system requirements. System testing shall be carried out to ensure that the client cannot submit empty fields especially those that are mandatory. This was done by leaving some fields empty to see whether the system can send an alert information

3.10 Support

3.10.1 Deployment

The student will oversee the deployment of the FIMS within the Soroti Diocese's financial management infrastructure. This phase involves the installation and verification of the system, with RAD's emphasis on rapid deployment practices.

3.10.2 Training

Training sessions was organized by the student to educate financial personnel about the new system. This was to ensure a smooth transition and effective utilization of the FIMS. Agile principles encourage ongoing training and adaptation.

3.10.3 Ongoing Support

The student was responsible for providing ongoing technical support, addressing any issues or concerns that may arise following system deployment. Prompt assistance was provided to users, in line with the RAD methodology's iterative approach.

3.11 Ethical Considerations

The student was to uphold ethical considerations throughout the project. Participants in surveys and interviews were guaranteed confidentiality and voluntary participation. The student was strictly adhering to ethical guidelines for data collection and analysis.

3.12 Limitations

Due to the one-semester time frame and resource constraints, the project's scope and complexity are limited. This may affect the depth of data analysis and the extent of system features.

CHAPTER FOUR: SYSTEM DESIGN AND IMPLEMENTATION

4.1 Introduction

This chapter describes the study of the current system, strength of the current system, weaknesses of the Current System, System Requirements (Functional and Non-Functional Requirements), System Design (Context Diagram, Data Flow Diagram, ERD, Use Case Diagram).

4.2 Current System Study

The Current Information System of FIMS is a Manual File-Based System managed by the Director who is the bishop as the top administrator and other administrators from different parishes departments and officer who is the in-charge of finances. Christians also play a role of managing the manual file in which the information is passed, processed and distributed. The system has been in existence for about twenty years now. The Diocese is a single compartmentalized structure, but all the parishes' records are kept in their respective separate files from each parish with limited automation in the system.

Currently, the diocese relies on manual fund collection methods, resulting in time-consuming procedures, hindering effective donation tracking and report generation. The existing system lacks automation, integration, and user support, leading to inefficiencies in handling financial data.

These manual processes, lack of automation, and limited reporting capabilities contribute to inefficiencies and financial management challenges. The absence of real-time reporting affects timely decision-making, and difficulties in tracking donations impact transparency and accountability.

As the Christian arrives at the Parish for contribution, he/she enters at the reception where the parish assistant records their details in the Christian's record book and his/ her contribution is captured.

4.3 Strength of the Current System

The Current Information System at Soroti catholic diocese gives Christian's chance to interact with the in-charge finance in the parish physically thus explaining their contributions in details.

Close Supervision of the in-charge finance by the parish priest towards handling of finances.

It gives Christians an opportunity to visit to any other parish and make their contributions towards any category they wish to.

It does not require specific skills and knowledge in the field of ICT to handle the contributions.

4.4Weaknesses of the Current System

Difficulty in easily retrieving a record of interest at a later time.

The existing system lacks automation, integration, and user support, leading to inefficiencies in handling financial data.

the diocese relies on manual fund collection methods, resulting in time-consuming procedures, hindering effective donation tracking and report generation.

Book-based records tend to fade with time hence information lose.

The process of recording manually consumes a lot of time thus making the system slow.

The director cannot access the system from a distance without physically coming to the facility.

The system is prone to errors due to the fact that it is manual throughout. The priest has to manually capture data from Christians and all humans are prone to making mistakes.

Some parishes lose their financial records which makes it hard for the in-charge to trace for their contributions.

4.5 System Requirements

A number of tools were used to analyze the data collected from the Soroti Catholic Diocese such as Interview, Observation among others from which useful information was extracted, identifying and listing of the Functional and Non-Functional Requirements in an orderly and organized.

System user	Summery	Requirements for Each User
Bishop/Administrator	The bishop is the head of the diocese who controls and manages all the activities at the diocese	Login, create new Parish Church records, search for parish, manage tithe, manage thanksgiving and editing, delete parish church respond quickly to the parish church.
Parish Priest/User	This is a diocese member role is to make deposits basing on different contributions from different people to different categories.	Login, enter thanksgiving, enter tithes, add offering, add tithes

Table 2: System Users and their Requirements

4.5.1 Functional Requirements

The Functional Requirements describe the functionalities or services that the system is going to render to its end users and it includes the following;

The system should be able to capture all the relevant information about the diocese

The system should effectively allow storage of diocese financial records to ease retrieval.

The system users especially the bishop should be able to access the system and other relevant services like editing information.

The system should be able to perform mathematical calculations for any transaction automatically.

4.5.2 Nonfunctional Requirements

The Non-Functional Requirements are not directly concerned with the specific functions rendered by the system, but increases on the accuracy, reliability, performance of the system and they include the following;

User-friendly; the system should give support to the users in terms of using with ease.

Backup recovery; there should be a backup of records in case of any disaster.

The system should ensure high security to prevent unauthorized users from accessing or corrupting the database and to ensure that patients' profiles are only accessed by authorized users.

Readily stand by power source such as generators, solar in addition to electricity.

Fundamental computer skills are required among the users to ensure proper use of the system.

Ensure proper maintenance and constant update of the system for smooth running of the system.

4.6 System Design

System Design is the process of defining the interfaces, and modules for the system to realize functionality of the requirements. This was through the use of system design tools such as Context Diagram, DFD, ERD and Use Case modeling diagram to help to know how different processes interact with each other and their relationships.

4.6.1 System Context Diagram

This is the highest level of Data Flow Diagram that defines the scope of the system and provides an "outward" looking view from the system, shows system boundaries and interaction with external entities. The Context Diagram also shows other Subsystems or group of people that

interact with the system and the main flows of data. It has data flows and processes as shown below;

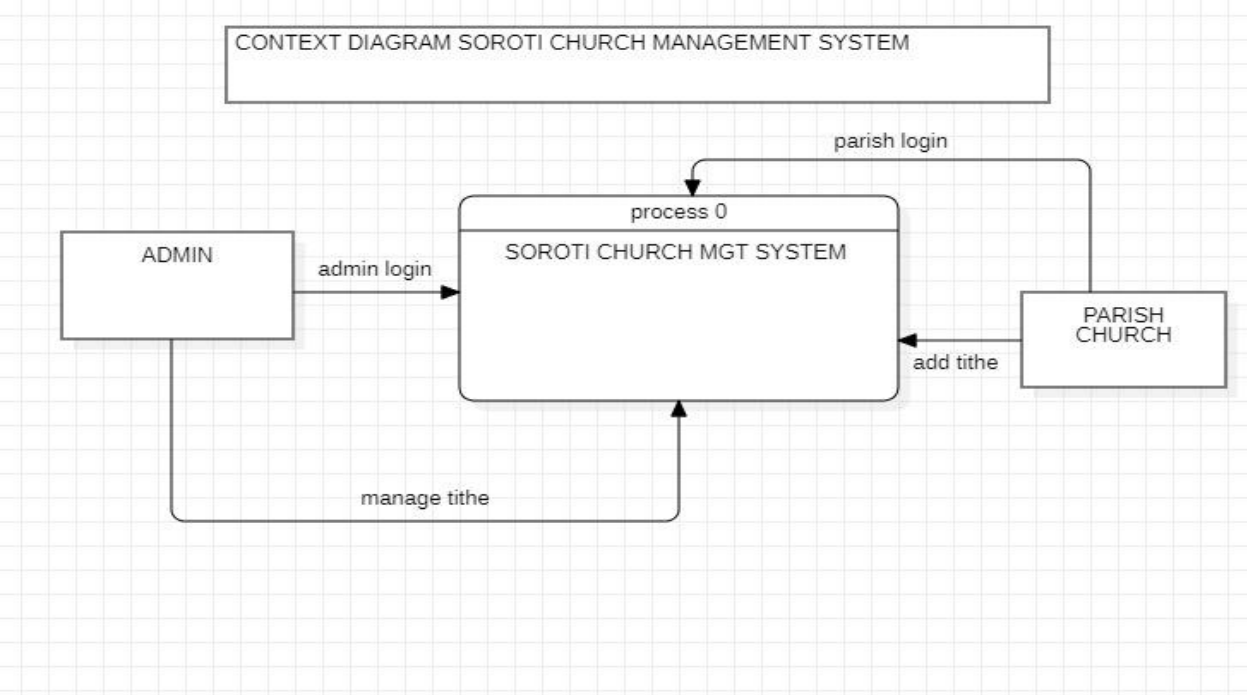

Figure 1: System Context Diagram

4.6.2 Data Flow Diagram (DFD)

Data Flow Diagram shows how data moves or changes through a specified sequence as shown below in the graphical top-down fashion that describes the system components, processes and interfaces. It helps to examine the Inputs, Outputs and Processes of the Financial Information Management System.

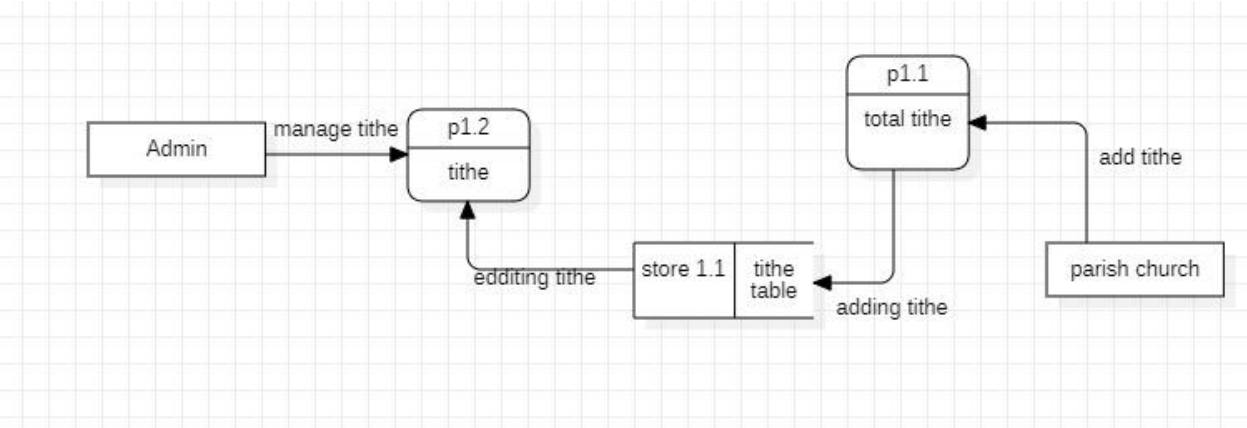

Figure 2; Data Flow Diagram.

4.6.4 System Entity Relationships Diagram (ERD)

The Entity Relationships Diagram is a graphical representation of the relationship between the entities and attributes within a proposed database of the system. The entities about the data includes; Christians.

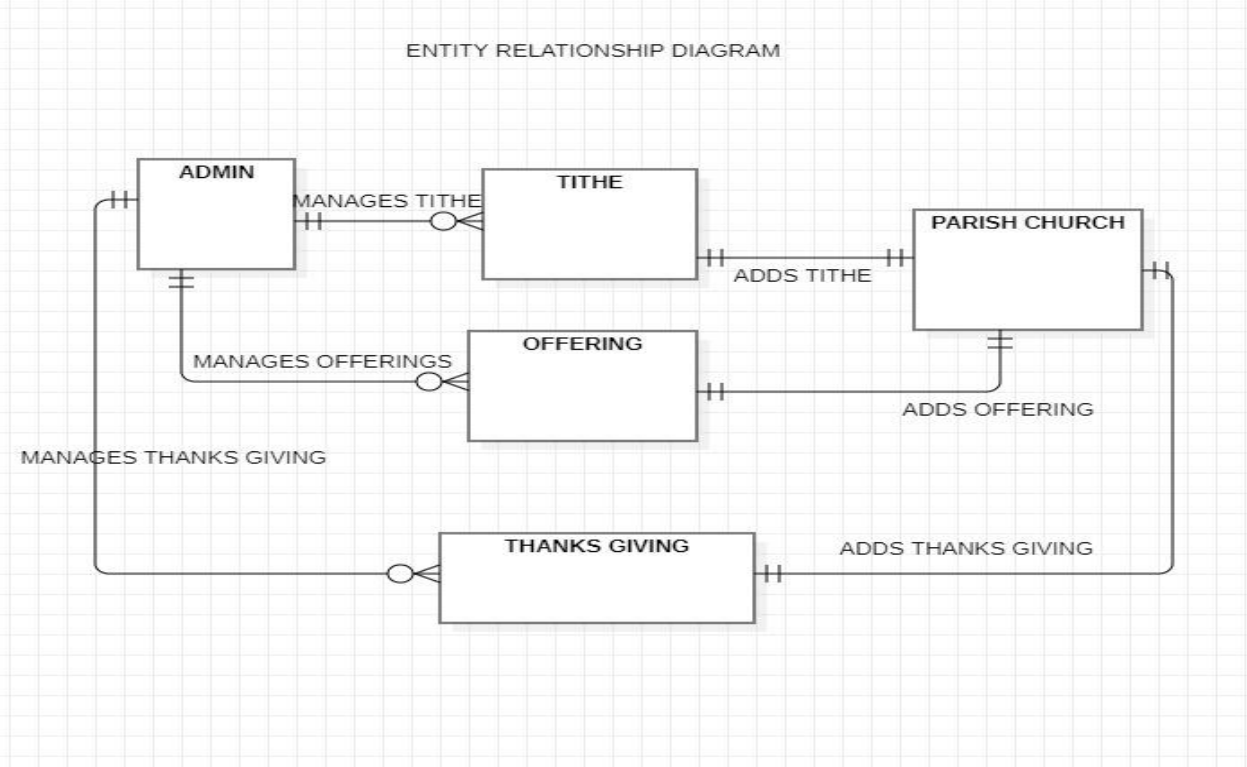

Figure 3: System Entity Relationship diagram

4.6.5 Use Case Diagram

The Use case diagram represents the activities of the users with special functionalities of the system. Use Case Diagram model is what the system is expected to do and to view externally the use of the system from the user's perspective rather than internally.

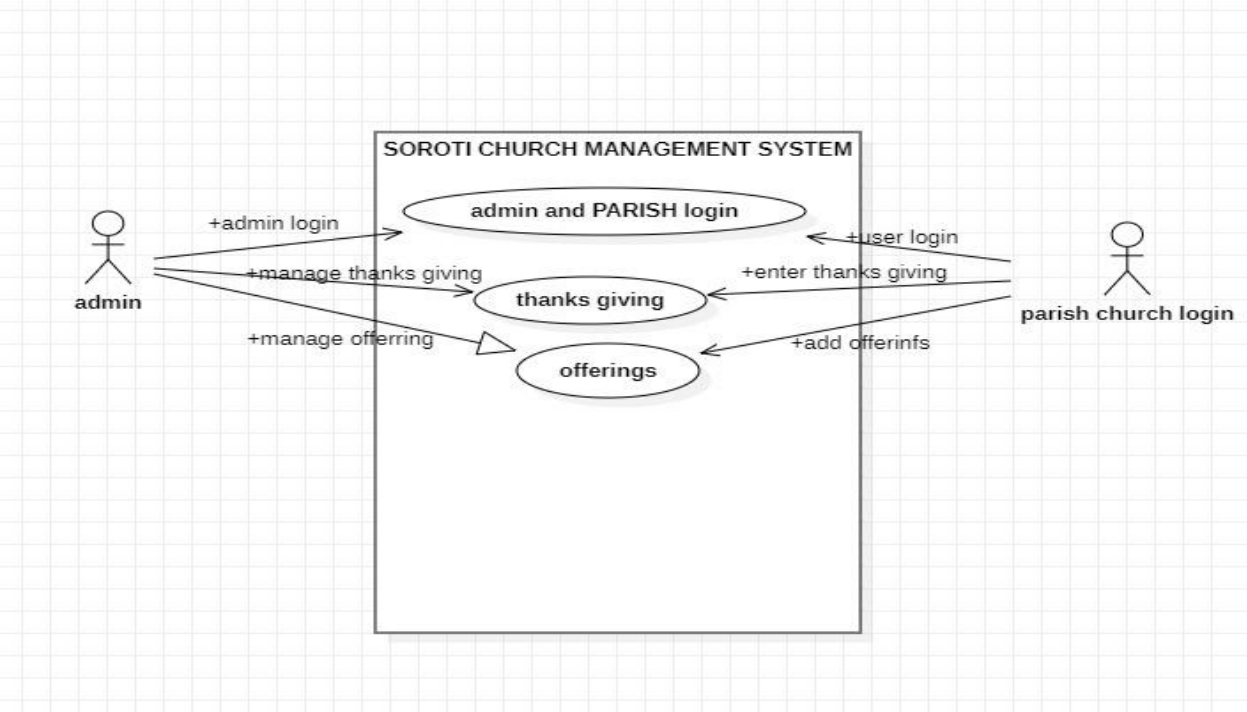

Figure 4: Use Case Diagram

CHAPTER FIVE: PRESENTATION OF RESULTS

5.1 Introduction

This chapter presents the implementation and testing of the system and it shows login interface which gives an authentication of users in order to provide security to unauthorized users, allows registration of new user, and testing of the system.

Implementation involves testing an idea from concept to reality. According to the system design described early on, the FIMS website, consisting of two major parts that is the back-end and the front end was successfully implemented. At the developing stage, where enough research and experiments were done amongst the programs and databases the major software that were used includes PHP, MYSQL, Xampp and Bootstrap JavaScript that were so important in the development of the entire system with its databases.

5.2 Login Interface Design for an Administrator.

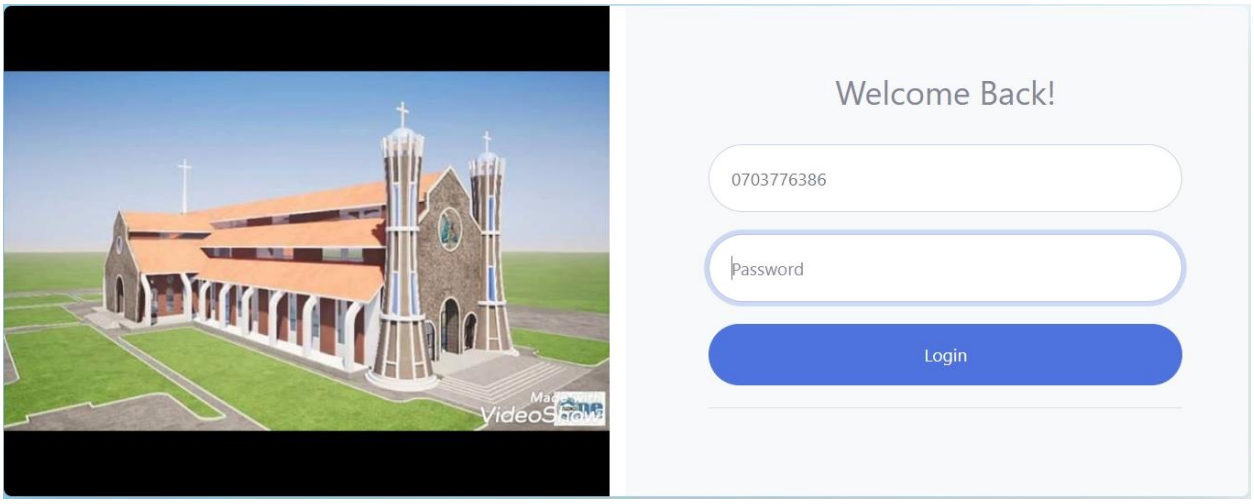

Figure 5: Login Interface

Login interface for an administrator as shown in the figure 5 above gives a clear distinction with other users. Given the fact that the admin has the overall access to the system, he creates an account to new users where login credentials are entered for examples the username and password.

5.3 Admin user management.

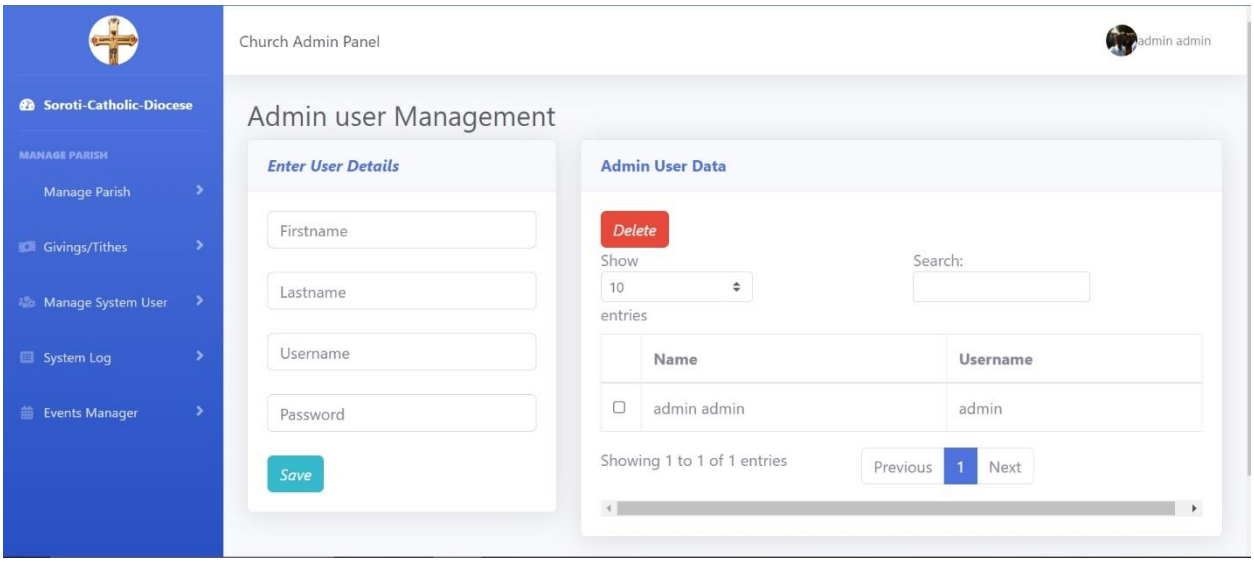

Figure 6: Admin user management interface

Admin user management interface as shown in the figure 6 above gives a clear way of managing churches. Given the fact that the admin has the overall access to the system, he creates an account to new users where login credentials are entered for examples the username and password.

5.4 New Parish Registration

The interface shown in the figure 6 below enables the Bishop to capture the details of the parish into the system.

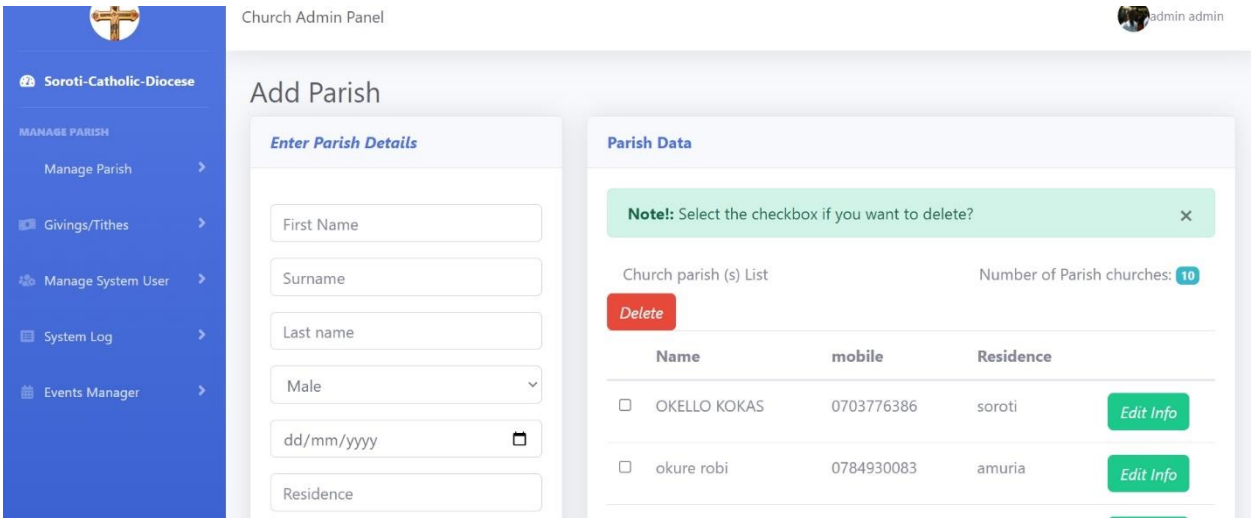

Figure7: New Parish Registration

The interface above allows the system user to access the parish details and provide the right service to the parish as per the records captured by the system. This makes it more efficient and faster to retrieve the information of the parish in the later time than manual current system.

5.5 System Summary for Users Interface

The Executive Director/Administrator reserves the rights of the number of people who will have direct access to the system and assigns them with specific roles. He creates the accounts for the new users where each shall have the login credentials. After creating an account, the user will login with valid login credentials and shall be directed to a specific screen page. Below is an interface showing system users with their roles.

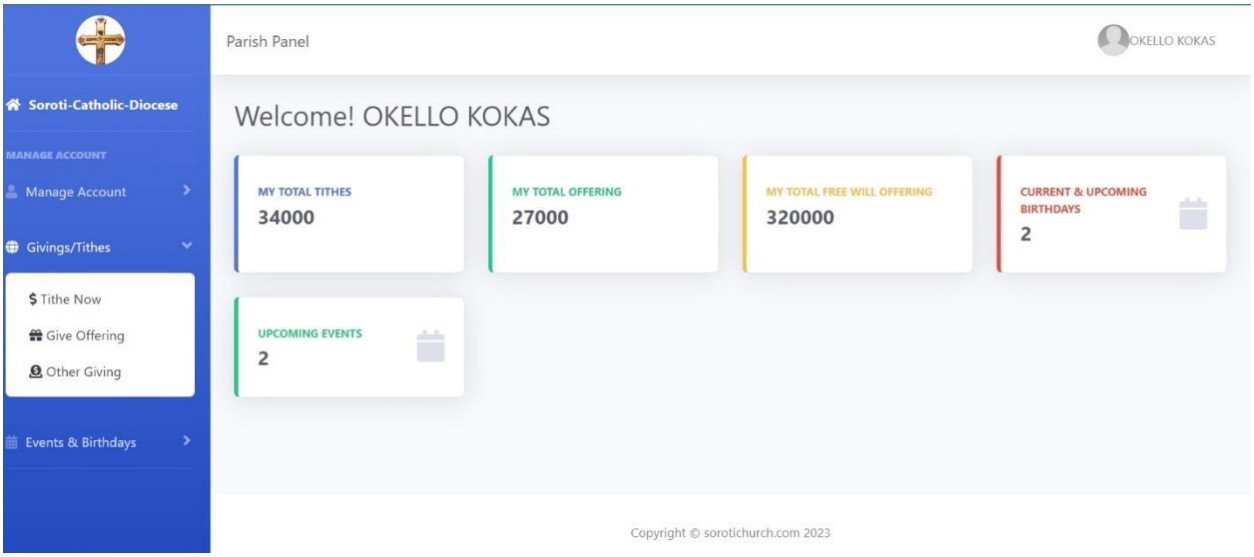

Figure 8: System User Interface

5.6 Givings Management interface

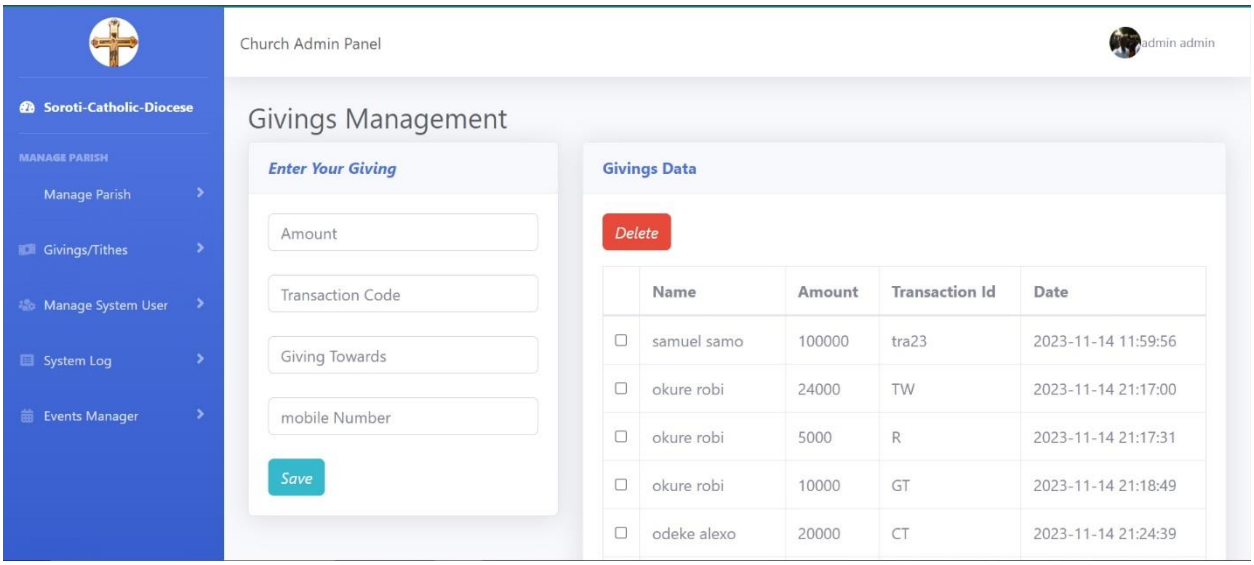

Figure 9: Other Givings Interface

5.7 Tithe Management interface

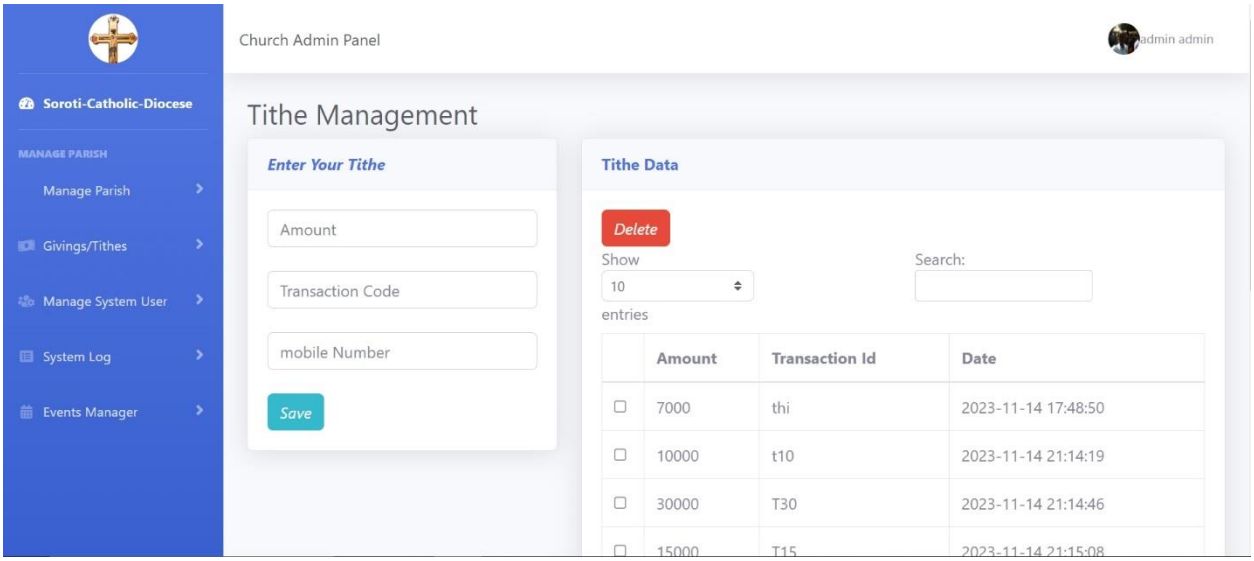

Figure 10: Tithe management interface

5.8 Offering management interface.

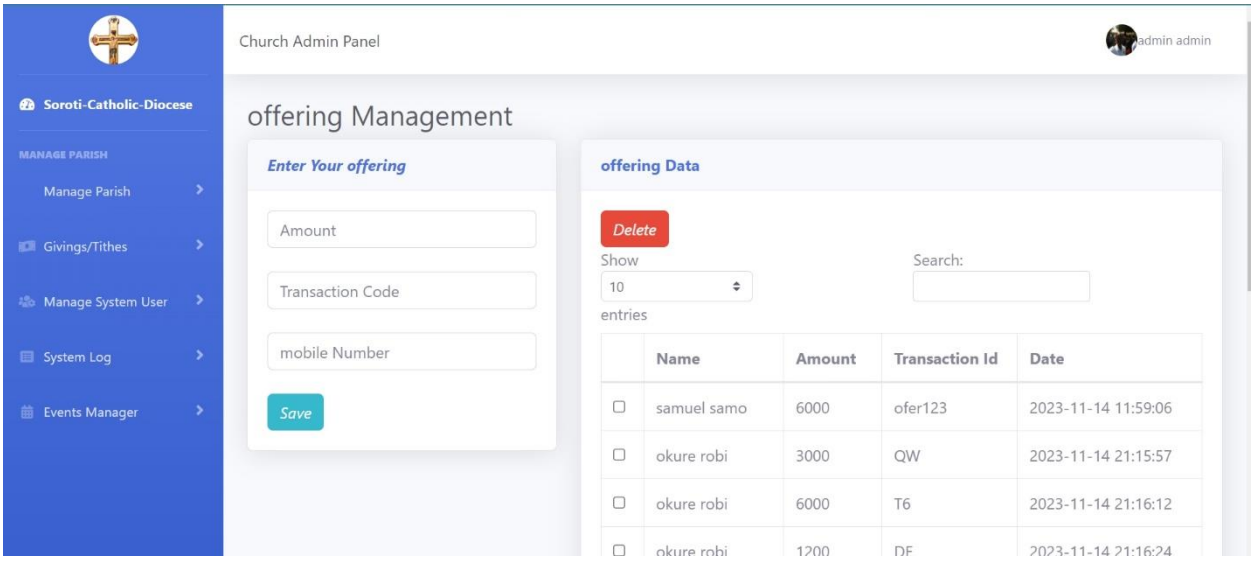

Figure 11: Offering management interface

5.9 Event management interface.

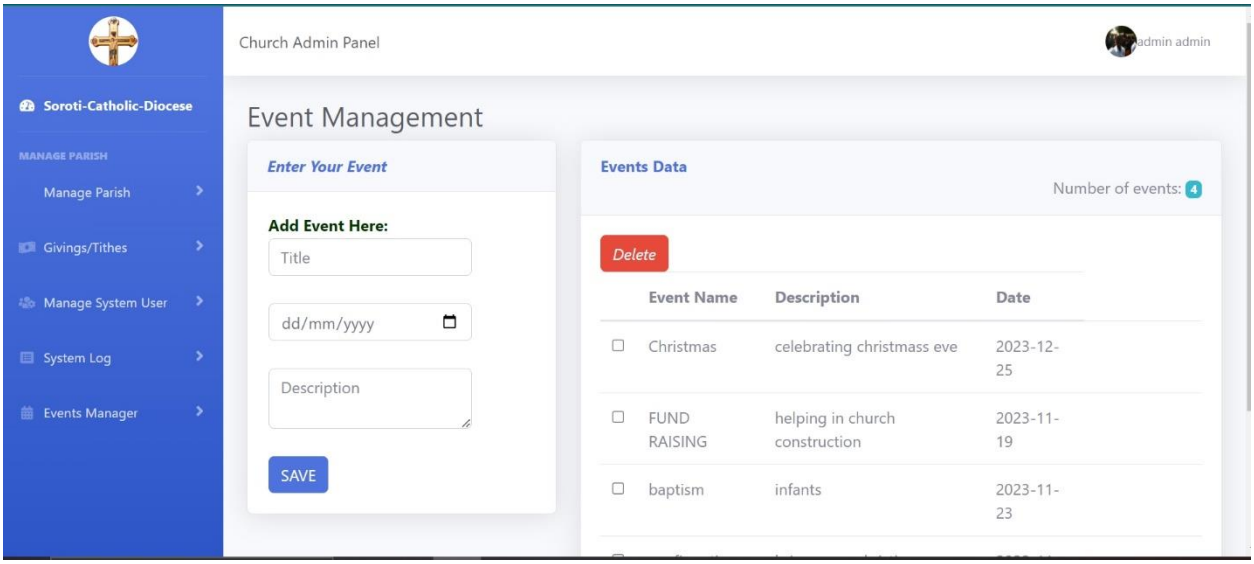

Figure 12: Event management interface

5.10 Parish Church Details Interface.

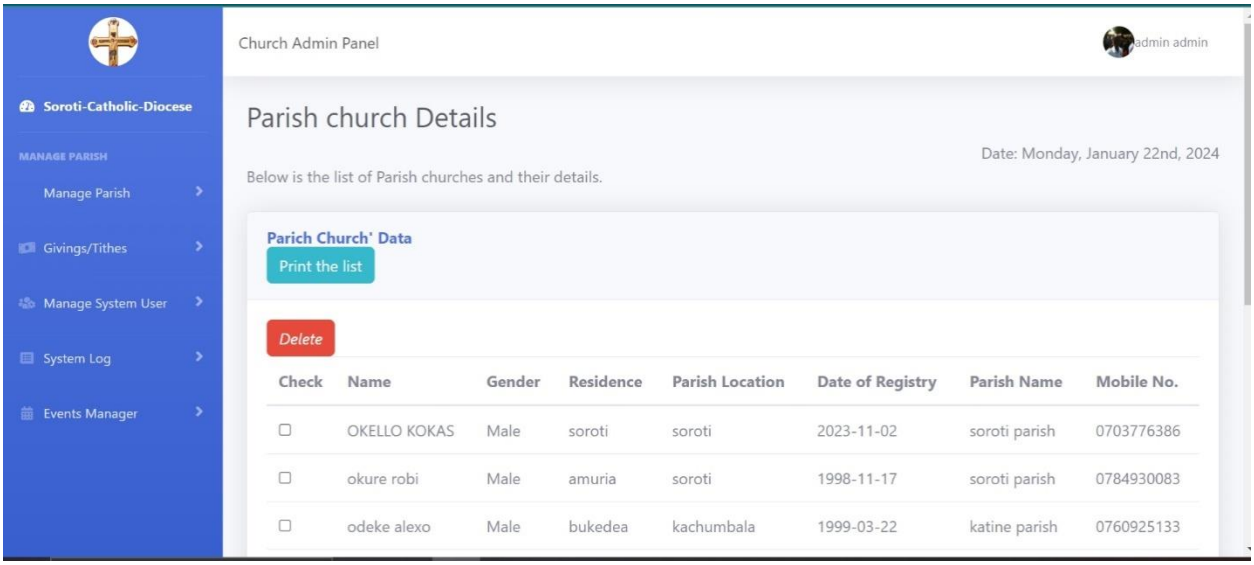

Figure 13: Parish church details

5.11 System Testing

System testing is a technique used to evaluate the system; it is focused on how the users interact with the front end of the system. In order to discover the weaknesses and strength of the system, the following testing strategies where used;

5.11.1 Unit Testing

This is a method where individual units of source code are tested to determine if they are ready for use. A unit is a smallest testable part of an application. A system was tested unit by unit with the presence of the bishop in order to enable the developer to identify each part of the program to show that individual parts function correctly.

5.11.2 Integration Testing

The various components of the system were meaningfully manipulated. This tested the general functionality of the system as a whole after unit-by-unit testing.

5.11.3 Security Testing

The incorrect User names and Password which did not exist in database were used to access the system but all attempts were unsuccessful meaning our authentication procedure was perfected.

CHAPTER SIX: DISCUSSION, CONCLUSIONS, RECOMMENDATIONS AND FUTURE WORK

6.1 Introduction

This chapter summarizes the project, identifying what was achieved in the set objectives. It also recommends areas that need further attention and draws conclusions for the project findings.

6.2 Discussion of Results

The study managed to achieve the four main objectives of the project that generated the themes that is; requirements determination, system design, implementation and system testing. The study resulted to the development of the Financial Information System Management through the following;

6.2.1 Determination of System Requirements

The study was successful and achieved its objectives of literature review in order to determine the requirements that would suit project development.

6.2.2 System Design

The system was successfully designed through defining the different design tools for examples Context Diagram, Data Flow Diagram (DFD), ERD and were used in order to realize the functionality of the requirements.

6.2.3 System Implementation

The design of the FIMS which is a web-based system with two parts that is the front-end and the back-end was successfully implemented through the use of different implementation software tools such as PHP, HTML, JavaScript, Xampp server with its databases linked by MYSQL query language that provides an efficient storage of financial records.

6.2.4 System Testing

All components of the system were tested to ensure the proper functionality of the system. System testing was done to discover the strength and weaknesses of the system.

6.3 Conclusion

Basing on the findings of the study, it was established that Soroti Catholic Diocese has a lot to do with financial records. The use of ICT resources like computers, internet at Soroti Catholic

Diocese is lacking thus leading to inefficient support for users and staff to manage financial records efficiently. This therefore requires Soroti Catholic Diocese to adopt a computerized system which is digitalized other than managing financial collection and records manually for the success of the system and to enjoy various advantages of ICT software.

6.4 Recommendations

The FIMS requires further work to be done in different areas for example training both the staff and users on how to use the computerized system, instantly sending and receiving of notifications. This will help to improve on the functionality of the design system.

6.5 Limitations

The researcher encountered a number of constraints which to some extent slowed the success of the study. These includes the following;

6.5.1 Financial Constraints

There was a problem of financial support since study was self-sponsored. This made some of the activities to delay in the study, however through hard work and commitment it has come to an end successfully.

6.5.2Time Constraints

The time that was allocated for study was not enough, given the fact that there were lectures, coursework, tests, exams and school practice to do alongside the study.

6.5.3 Power Constraint

The unstable electric power supply was another problem that was not favorable to the researcher during research study. This resulted into unproper planning and progress for the system development.

6.5.4 Busy Schedules

The Bishop of Soroti Catholic Diocese was always busy all the time and this made the collection of data for the current system to delay for some time.

6.6 Future Work

The future improvements to the system project require adding additional functionalities to the system for example adding the option of contributing by making it using the phone, improving on the navigation within the web and sending back the notifications back to the person who has contributed, among others.

The system project study also requires expansion of the diocese structures in order to allow expansion of finance offices specifically to handle finance collection and managing.

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APPENDICES

APPENDIX I: QUESTIONNAIRE (DATA COLLECTION TOOL)

I am ETOJU FRANCIS conducting academic research which is one of the fundamental requirements that shall lead to the award of a Bachelors degree of science and education in computer department in the faculty of science and education in Busitema University. I therefore request for your utmost cooperation in this exercise. I assure you that this study is bound by research ethics, so your responses were treated with maximum confidentiality and was used for academic purposes only. Thus, you can freely share your experiences and knowledge in this insightful exercise. Thank you!

1. What is your name? (*optional)

……

……

2. What is your age? (tick) 18-24 ☐ 25-39 ☐ 40-49 ☐

3. What is your gender? (tick) MALE ☐ FEMALE ☐

4. How long have you finished in the in the catechist ministry?

……

.

5.Which outstation church do you work?

……

.

6.Which methods do you use for collecting money and keeping the money?

APPENDIX 2: FOCUS GROUPS (OPEN ENDED QUESTIONS)

1. Why is it important to manage church finances?
2. How do you collect church money and manage finance?

3.Have you ever used any kind of electronic system to manage funds? (For example, project management systems, compliance systems, E-mail, personnel management systems, etc.)

4. Have you ever had of the computerized financial information management system? What does it do?

5. How does the computerized financial information management system different from the manual records system?

6.How do feel when using manual method of collecting and managing finances from the parish to the diocese?

7. How do you rate the services of the manual records system and the computerized?

Thank you for your co-operation!