# A SCALABLE MULTI-STORE E-COMMERCE PLATFORM WITH CUSTOMISABLE DASHBOARDS: A CASE STUDY OF RUBAARE TOWN COUNCIL, NTUNGAMO DISTRICT

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## ABSTRACT

This research aims at the creation of a scalable multi-store e-commerce platform for small and medium-sized enterprises (SMEs) in Rubaare Town Council, Ntungamo District, Uganda. The fast expansion of online commerce offers opportunities as well as challenges to local businesses seeking to improve their market outreach. However, most SMEs encounter major obstacles, such as disjointed management systems and increased operating expenses. This research aims to address these issues by proposing a centralized platform that will enhance user experience, operational efficiency, and customer engagement.

To achieve this aim, qualitative data were collected through interviews and observations of key stakeholders, including business owners, e-commerce specialists, and users of existing platforms. The findings demonstrate a clear need for an interface that is both user-friendly and customizable, in addition to centralized management and integrated payment systems to promote efficiency in operations. A prototype platform was developed and tested with regard to demonstrating significant improvements in usability and participant satisfaction.

The research concludes that a customized multi-store e-commerce platform has the potential to greatly improve the operational capacities of SMEs, allowing them to compete favorably in the online market. Recommendations are made to business owners, developers of platforms, and policymakers on how to establish a conducive environment for the development of e-commerce in Uganda.

## DECLARATION

I, Natukunda Joseph present here by, attest that the research work entitled "Developing a Scalable Multi-Store E-Commerce Platform for SMEs in Rubaare Town Council, Ntungamo District, Uganda" is my original work. It has not been submitted to any other institution to obtain any degree or diploma. Full credit has been accorded to all sources of information and data utilized in this project.

Signature: 

Date: 12/05/2025

## APPROVAL

This letter is to acknowledge that the report "A Scalable Multi-Store ecommerce platform with customizable dashboards" has been submitted for defense with my signature in my role as a university supervisor

Signed.....

Date of approval.....12/5/2025

SUPERVISOR



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## DEDICATION

This dissertation is lovingly dedicated to my family, whose unfaltering encouragement and motivation have been the constant source of inspiration for this project. To my parents, who taught me the values of persistence and perseverance, I stand in great indebtedness. This success is hereby dedicated to you.

## ACKNOWLEDGMENT

I would like to express my heartfelt thanks to all those who contributed to the successful completion of this research work.

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My Family, for your unconditional love and support, which motivated me to go on.

Thanks to all of you for being along for the ride.

## LIST OF ACRONYMS

SME---------- Small and Medium Enterprises

E-commerce--------- Electronic Commerce

UGX----------Uganda Shillings

IT----------Information Technology

UI----------User Interface

UX---------- User Experience

KPI----------Key Performance Indicator

MTN---------- Mobile Telecommunications Network

API----------Application Programming Interface

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# CHAPTER ONE

# INTRODUCTION

## 1.0 Introduction

This research aimed at developing a scalable multi-store e-commerce platform with customizable dashboards to address these challenges. The study leveraged emerging technologies like cloud computing and API-driven customization to improve system efficiency and user experience. By integrating these technologies, businesses can now manage multiple stores more effectively, streamline operations, and enhance customer interactions.

## 1.1 Background of the Study

E-commerce has revolutionized the business world by making it global and more efficient. Highlights the increasing popularity of multi-store e-commerce platforms, which allow businesses to run multiple storefronts on a single system, streamlining operations and enhancing scalability. Yet existing solutions do not necessarily provide the customization needed or the scale necessary to reach new customers, especially in challenging or developing regions.

The evolution of e-commerce has been powered by innovations in internet technologies, mobile commerce, and cloud-based infrastructures. To meet a variety of market segments, brands, and geographical areas within one ecosystem, businesses come to use more multi-store platforms (Kumar & Ayedun, 2021). However, the scalability and customization are still a challenge. But a large number of e-commerce platforms necessitate distinct store setups for different brands, resulting in greater management complexity, inefficiencies, and higher costs. (Chaffey 2022).

The demand for multi-store e-commerce solutions has surged due to the increasing complexity of consumer preferences and the need for businesses to diversify their digital presence. In regions such as Africa, particularly Uganda, the lack of cost-

effective and scalable platforms hinders small and medium-sized enterprises (SMEs) from fully capitalizing on e-commerce opportunities (Mugisha et al., 2020). This study explored how a scalable, centralized multi-store platform can enhance business operations, optimize management, and provide a customizable solution for different user needs.

The e-commerce market has reached exponential growth globally, experiencing total sales of 5.2 trillion in 2022 worldwide, which is expected to increase to approximately 8.1 trillion in 2026 (Statista, 2023). Solutions like Shopify Plus, Magento, or WooCommerce have now included multi-store management capabilities (Dawar & Kothari, 2021), but the implementation of such solutions is rarely customizable and integrated widely, usually usable only by those at an advanced technical level. It is known from research that, compared to generic e-commerce solutions, companies using highly customer-tailored platforms perform better in terms of customer retention and sales growth (Bag et al., 2021).

The advent of cloud-native architectures and headless commerce has revolutionized the way enterprises decouple frontend systems from backend systems, thus allowing organizations to maintain better scalability and performance (Almeida et al., 2021). There is a gap in the implementation of such approaches for SMEs, especially in developing countries, where the spread of technology is slow.

### 1.1.1 Contextual Perspective

Tanzania: E-Commerce Efforts in Voluntary Sector GrowthAs the number of SMEs taking up e-commerce development projects in Tanzania increases, many of them face significant issues that include long operating cost, lack of digital infrastructure, and difficulty in managing multiple stores using one e-commerce system (Kavuma & Byarugaba, 2022). Businesses in sectors including Rubaare Town Council Ntungamo District have problems with fragmented e-commerce solutions that involve separate systems for managing different product lines.

According to a report by Nakalema et al. (2021), most SME's in Uganda rely on social commerce through social media channels like WhatsApp and Facebook owing to the complexity of existing e-commerce platforms. In this work we try to overcome this disadvantage by developing a user-friendly, scalable multi-store e-commerce platform which addresses the specific requirements of businesses in such regions.

### 1.1.2 Conceptual Perspective

This study studies scalability, customization and management of multi-store in e-commerce platforms. The concept of scalability is defined as the ability of a platform to support a greater number of users, transactions and data without compromising performance (Khan & Salah, 2019). Customization, on the other hand, refers to the opportunity that businesses have to personalize their storefront, features, and user experience depending on their customers requirements (Laudon & Traver, 2020).

The multi-store e-commerce platform is a system to manage multiple storefronts of one business entity under a single unified system, preserving separate brand, inventory, and customer data for each store (Brijs et al., 2020). This research investigated the impact of these components in a cloud-based platform on efficiency and business growth.

### 1.1.3 Theoretical Perspective

The research was conducted under the theoretical framework of TAM, Platform Ecosystem Theory. As per TAM, users' acceptance of a new technology depends upon perceived utility and ease of use (Davis, 1989). In the context of this study, a multi-store e-commerce platform needs to be user-friendly with significant business benefits to have adoption.

The Platform Ecosystem Theory (Tiwana, 2013) describes how digital platforms evolve by connecting modular components to realize flexibility and scalability. The theory is

relevant for the development of customizable e-commerce dashboards where businesses can tailor their online presence to meet different market dynamics.

## 1.2 Problem Statement

Managing multiple online stores on standard e-commerce platforms is usually associated with higher operational costs, redundancy, and inefficiencies. Indeed, most currently existing platforms do not enable smooth multi-store management; hence, organizations have to operate separate instances for different brands or product lines. This has become a major hindrance to SMEs in Uganda, which have found it hard to achieve any meaningful digital transformation (Mugisha et al., 2020).

What is overriding is a need for a customized multi-store e-commerce platform that will, under one single instance, enable complex management of stores while retaining business operations aligned with market changes. The following study outlines the design and implementation of such a solution that meets all requirements in terms of scalability and customization for operational efficiency and business growth.

## 1.3 Main Objective of the Study

To build a multi-store e-commerce platform with customizable dashboards for efficient business management.

### 1.3.1 Specific Objectives

To analyze the problems businesses have when managing multiple online stores.

To develop a central multi-store management system with more customization functions.

To test and evaluate the platform's scalability, usability, and business impact.

## 1.4 Research Questions

What are the key challenges businesses face with existing multi-store e-commerce solutions?

How can a centralized platform improve flexibility, efficiency, and user experience?

What are the measurable impacts of a multi-store system on business scalability and operations?

## 1.5 Scope of the Project

### 1.5.1 Content Scope

The project focused on designing a multi-store e-commerce platform with features such as product management, order tracking, and real-time analytics.

### 1.5.2 Geographical Scope

The study was conducted in Rubaare Town Council, Ntungamo District, Uganda, where businesses face challenges in managing multi-store operations.

### 1.5.3 Time Scope

The project was conducted in a four months' period, from January 2025 to April 2025.

## 1.6 Limitations

Potential limitations include resistance to technology adoption, data privacy concerns, and limited internet accessibility among SMEs in rural areas.

## 1.7 Significance of the Study

This study would be beneficial to various stakeholders, including administrators, researchers, and business owners. The implementation of a scalable multi-store e-commerce platform with customizable dashboards introduced efficiency and innovation in e-commerce management, particularly in Rubaare Town Council, Ntungamo District, Uganda.

**To Administrators**

Administrators of e-commerce platforms benefit from enhanced store management capabilities. The platform was allowing seamless handling of multiple stores under a single interface, enabling centralized control over inventory, orders, and customer data. This efficiency was reducing administrative overhead, enhancing decision-making, and improving overall operational productivity.

**To Researchers**

It contributed to the growing body of knowledge on multi-store e-commerce systems, giving a basis for future research into scalable e-commerce platforms. By applying it to a problem beyond the present single-store model, this work laid a foundation for further digital commerce innovation, especially in resource-constrained contexts.

**To Business People**

Business owners, particularly in Rubaare Town Council, benefit from an affordable and efficient e-commerce platform that lets them expand from one storefront to another. The customized dashboards, meanwhile, help businesses tailor their services to specific market segments, thereby improving engagement between customers and businesses as well as sales. The platform was also improved to make it easier to track inventory levels, automate sales reporting, and process financial transactions, making it a very useful tool for small and medium enterprises (SMEs) looking to grow their operations.

## 1.8 Conceptual Framework

### 1.8.1 Variables and Relationships

**Variables in the Study**

This study explores several key variables that influence the efficiency and effectiveness of multi-store e-commerce platforms. The variables are categorized into:

Independent Variables (Factors influencing system performance)

Scalability: The ability of the platform to accommodate multiple stores without performance degradation.

Customization Features: The degree to which business owners can modify dashboards, storefront layouts, and reporting tools to suit their needs.

User Interface Design: The impact of an intuitive and accessible interface on business operations and customer experience.

Payment Integration: The effectiveness of seamless payment gateways in improving transaction efficiency.

Order and Inventory Management: The system's capability to automate and synchronize order processing and stock tracking across multiple stores.

Dependent Variables (Outcomes affected by the independent variables)

Operational Efficiency: The extent to which business owners can manage multiple storefronts efficiently.

User Experience: How customers interact with and navigate through the platform.

Business Growth: The impact of the platform on revenue generation, customer acquisition, and market expansion.

Cost Reduction – The effect of system automation on minimizing operational costs.

***Table 1Relationships between Variables***

The interaction between independent and dependent variables determines the system's overall effectiveness. Below is an illustration of these relationships:

| **Independent Variables** | **Effect on Dependent Variables** |
|---|---|
| Scalability | Increases business growth and market expansion. |
| Customization Features | Enhances user experience and operational efficiency. |

| | |
|---|---|
| User Interface Design | Improves user experience and engagement. |
| Payment Integration | Reduces transaction delays, improving customer satisfaction. |
| Order & Inventory Management | Enhances operational efficiency and minimizes losses due to stock-outs. |

These relationships demonstrate how the design and functionality of the platform influence business success, user satisfaction, and operational efficiency.

## Conceptual Framework

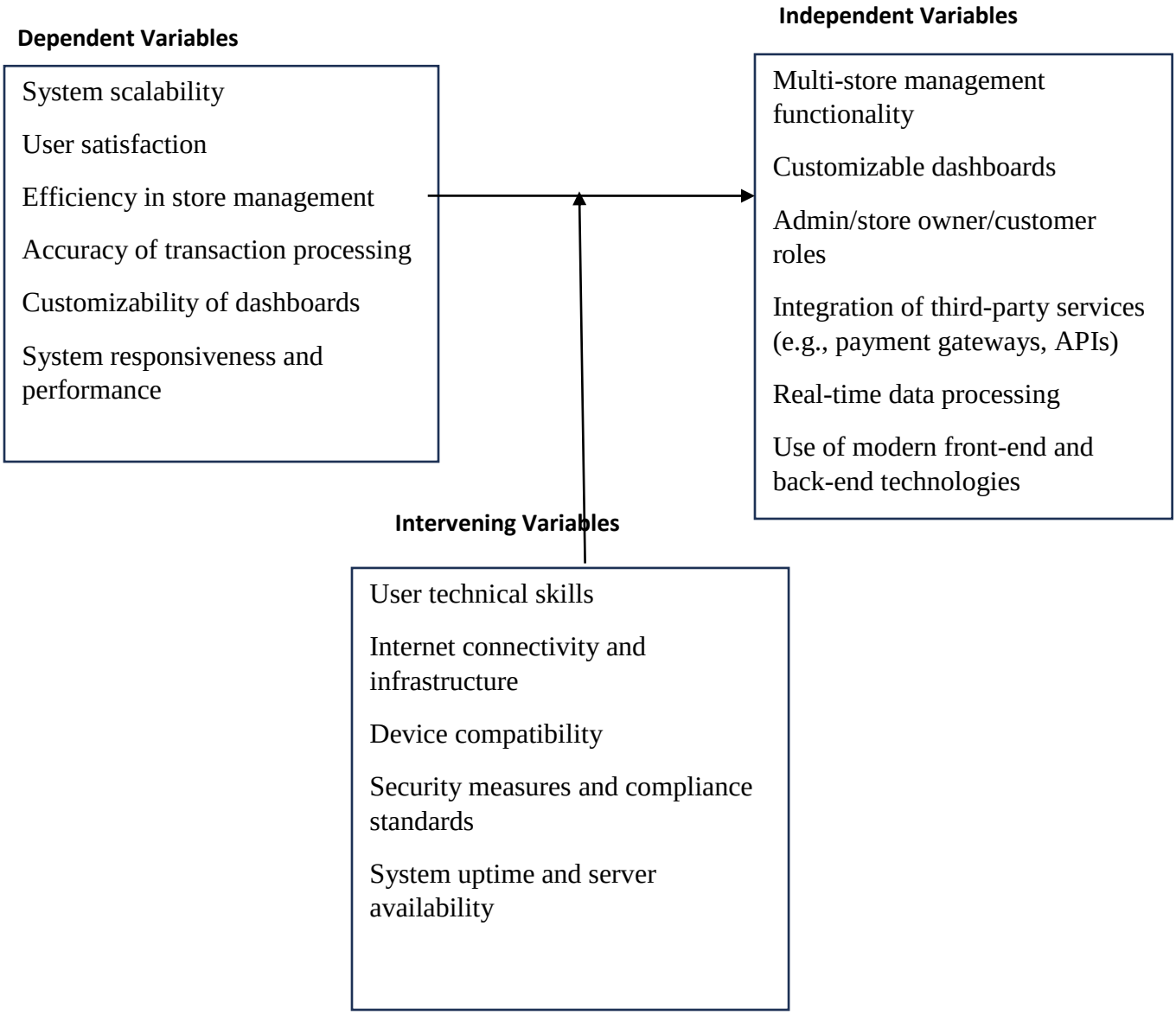



*Figure 1 Conceptual Framework*

# CHAPTER TWO

# LITERATURE REVIEW

## 2.0 Introduction

The literature review explores the foundational concepts, related studies, and system requirements relevant to developing a scalable multi-store e-commerce platform with customizable dashboards. This chapter begins with conceptual models, including use case diagrams, system architecture, and sequence diagrams, providing a structured representation of the proposed system. The chapter then examines related studies from global, national, and local perspectives to contextualize the research. Furthermore, the research gap is identified by analyzing existing limitations in multi-store e-commerce platforms. The chapter concludes by outlining the system requirements, including functional and non-functional specifications that guide system development.

## 2.1 Conceptual Models

Contractual models give a high-level view of the architecture, functionality, and interactions of a system. Conceptual models are the following:

### Use Case Diagram

The use case diagram shows the user interacting with the system: administrators, store owners, and customers. The list of actions each user can undertake such as inventory management, order fulfillment, analytics display, and store configuration. This view ensures that all system functionalities are in line with user expectations and requirements.

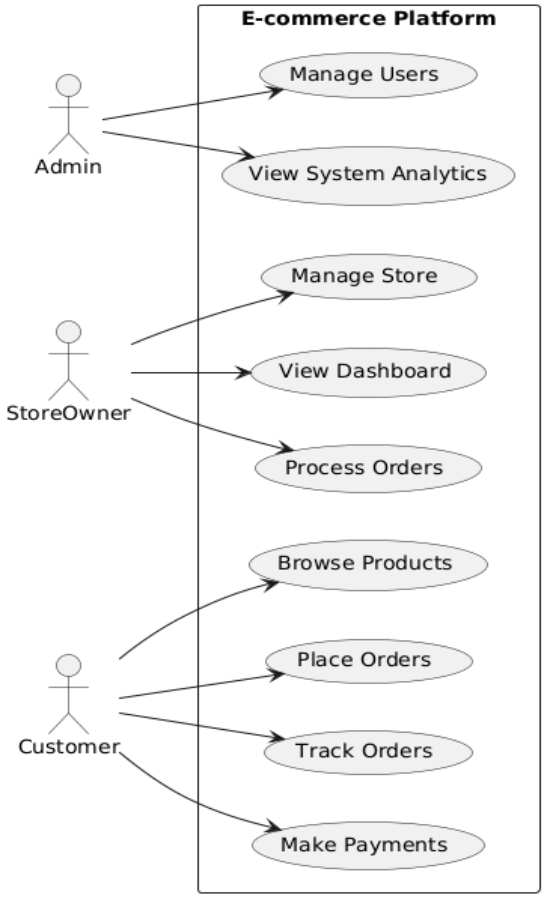



*Figure 2Use Case Diagram*

**System Architecture Diagram**

The diagram above shows the components of the system architecture (the front-end interface, back-end logic, application programming interfaces (APIs), database systems, and integrations with third-party services (e.g., payment gateways, cloud hosting). The system architecture model is an essential tool in understanding how to support multi-store deployment while maintaining scalability and reliability.

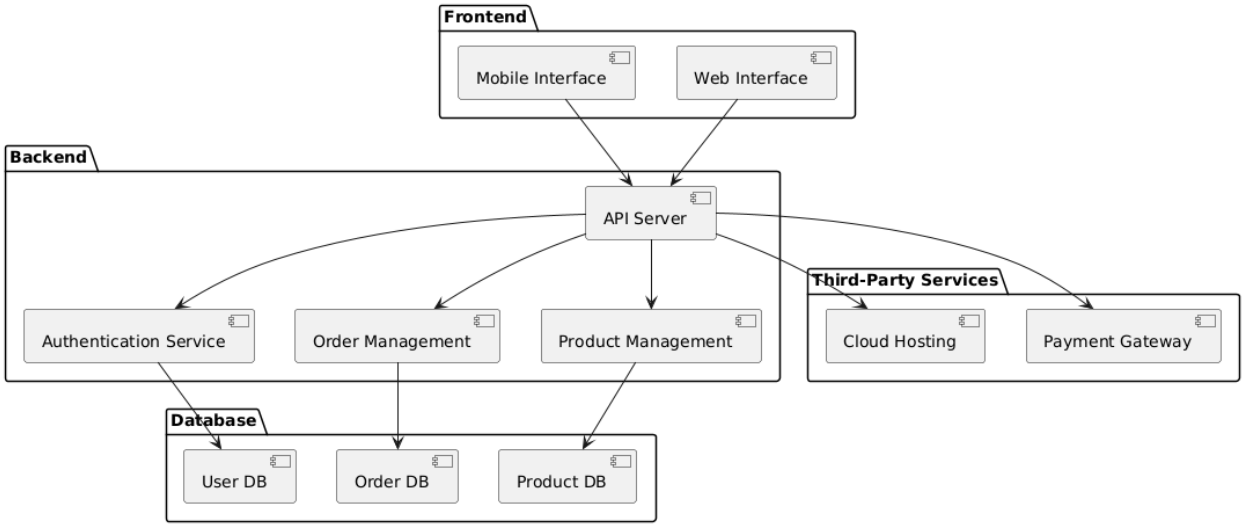



*Figure 3System Architecture Diagram*

**Sequence Diagram**

The sequence diagram is a diagram that shows how components of the system interact with each other over time. This describes how user actions (e.g., order creation or inventory update) trigger a series of processes within the system (i.e., database query, API call, and interface enhancements). Sequence diagrams help to understand when and how operations take place and are best orchestrated so the system reacts quickly and is consistent with the data.

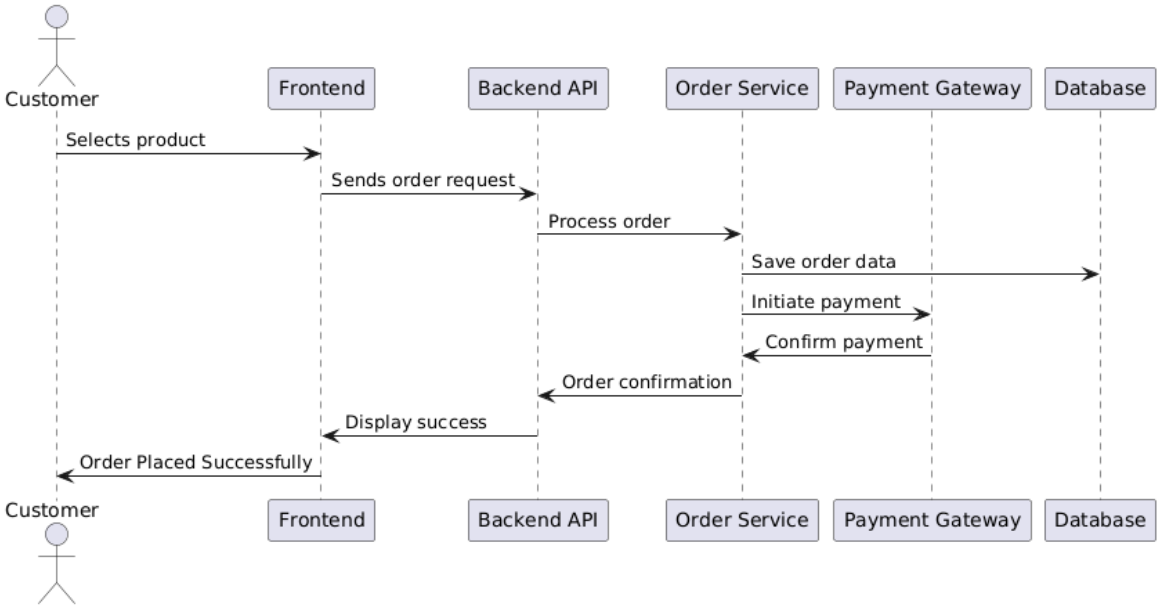


*Figure 4: Sequence Diagram*

## 2.2 Related Studies

### 2.2.1 Global Perspective

E-commerce is increasingly becoming a part of the working model of businesses worldwide, with studies emphasising a link between quality of service and customer satisfaction and the use of customer loyalty metrics. Many factors affect customer perceptions of online marketplaces, such as website design, security, logistics efficiency, and customer support, among others.

User Experience and Service Quality

Wijaya, Triandini, Kabnani, and Arifin (2021) used WebQual 4 0 to investigate e-commerce website quality and customer loyalty in the case study of Shopee. They found that website design, information clarity, and user safety were key factors influencing user satisfaction, and also demonstrated a role of trust-building mechanisms in maintaining customer loyalty (Wijaya et al., 2021).

Na-Nan et al. (2025) examined the relationship between service quality, transportation time, and product conditions that drive cost and customer satisfaction in global e-commerce logistics. Our findings show that cost efficiency alone does not lead to customer satisfaction; delivery reliability and service quality a critical drivers of consumer loyalty (Na-Nan et al., 2025).

Trust, Security, and Logistics

Taherdoost & Madanchian (2021) report that eight primary factors that contribute to satisfaction of e-commerce include trust, security, usability, performance, training, ease of use, service quality, and design. The findings of the study suggest that the improvement of digital platforms with a user-centered approach should be done in collaboration with multiple stakeholders, including technology experts and business owners (Taherdoost & Madanchian, 2020).

In the Middle East, Aqabneh (2025) has carried out a study on “e-logistics service quality and customers' trust among e-commerce shoppers from Palestine to find that by adopting effective delivery systems and secure payment gateways, customers are more satisfied and brand loyalty” (Aqabneh, 2025).

Likewise, Pasaribu et al. (2022) deemed trust a core mediating role between service quality and customer satisfaction in international e-commerce platforms. The research corroborates Dhingra, Gupta, and Bhatt's findings (2020) when evaluating customer satisfaction across Amazon, Flipkart, and Snapdeal; they similarly ascribe the most preeminent influence on consumer trust to transactional security.

Emerging Trends: AI and Personalization

More recent papers have also touched on AI service solutions regarding e-commerce service quality. For instance, Manda (2025) looked at innovations in AI-driven customer service to enhance first contact resolution and user satisfaction. Here again, large language models and AI chatbots slashed wait times and improved problem-solving efficiency, as Manda (2025) noted.

Ahram Hidayah (2025) compared the service quality and e-trust of Tokopedia through a literature search on this field regarding personalized product recommendations and AI-powered interaction, thus succeeding in retaining customers. He argues that hyper-personalization will be one of the keys to growing e-commerce in the future.

Summary of Global Findings

These studies covering a range of countries point to service quality, trust, logistics, and AI-driven personalization as the primary drivers of enhanced customer satisfaction in online commerce. However, even with all these findings, there is still a lack of specific empirical evidence regarding local challenges that e-commerce poses for most emerging economies with nascent digital infrastructures.

### 2.2.2 National Perspective (Uganda)

Uganda’s e-commerce adoption is growing but remains hindered by policy gaps, digital illiteracy, and transaction security concerns.

Regulatory Barriers: The Uganda Policy Journal (2022) highlights inconsistent e-commerce regulations and consumer protection laws, making online transactions less secure for both businesses and consumers.

Limited Digital Adoption: The Journal of Business Innovation (2022) reports that many SMEs in Uganda still rely on informal social media transactions rather than structured digital storefronts, limiting scalability.

Mobile Money Integration: The African Journal of Business Studies (2023) found that mobile money services such as MTN Mobile Money and Airtel Money are critical in Uganda's digital commerce ecosystem. However, they lack integration with advanced e-commerce platforms, making payments and refunds inefficient.

### 2.2.3 Local Perspective (Rubaare Town Council, Ntungamo District)

At the local level, businesses in Rubaare Town Council experience several barriers to digital commerce:

Limited Access to E-Commerce Platforms: The East African Economic Review (2023) highlights that most small businesses in Ntungamo District rely on Jumia and informal WhatsApp transactions, which do not offer scalable multi-store management.

Logistical Challenges: The Journal of Rural Development (2022) emphasizes that poor internet infrastructure and unreliable delivery networks make it difficult for businesses in Rubaare to engage fully in e-commerce.

Low Digital Literacy: The Uganda Policy Journal (2022) reports that many local business owners lack formal training in online store management, making adoption difficult.

## 2.3 Research Gap

Despite extensive global and national research on e-commerce service quality and customer satisfaction, key research gaps remain, particularly in the context of developing economies and rural areas like Rubaare Town Council.

Global Research Gap: Limited Focus on Developing Markets

Most global studies on e-commerce service quality focus on established markets such as the U.S., China, and Europe. There is limited research on e-commerce adoption in rural African contexts, particularly in Uganda and East Africa. Existing studies emphasize AI-driven solutions and hyper-personalization, which are not always feasible in markets with low digital literacy and weak infrastructure (Hidayah, 2025; Manda, 2025).

National Research Gap: Integration of Mobile Payments with Multi-Store E-Commerce

Ugandan e-commerce studies primarily focus on mobile money adoption rather than full-fledged e-commerce platforms. There is a lack of research on how mobile payment gateways can be effectively integrated into multi-store platforms to enhance user experience (Uganda Policy Journal, 2022).

Local Research Gap: Absence of Multi-Store E-Commerce Solutions in Rubaare Town Council

At the local level, Rubaare Town Council lacks access to scalable multi-store e-commerce platforms. Studies show that businesses rely on informal social media sales rather than structured e-commerce systems, making transactions inefficient and difficult to scale (East African Economic Review, 2023).

Logistics and Internet Infrastructure Deficiencies

Most research does not adequately address the logistical constraints and internet accessibility issues in rural Uganda. The Journal of Rural Development (2022) suggests that delivery inefficiencies and poor network coverage limit consumer trust in digital transactions.

The Need for a Customizable and Scalable E-Commerce Solution

The lack of customizable dashboards tailored to Ugandan SMEs presents an additional research gap. Most platforms cater to generic global markets, failing to address localized pricing, language, and user experience preferences (Uganda Policy Journal, 2022).

# CHAPTER THREE

# METHODOLOGY

## 3.1 Introduction

This chapter outlines the methodology that was used in the design, implementation, and evaluation of the scalable multi-store e-commerce website with customizable dashboards. The study adopted a systematic and scientific approach for gathering, analyzing, and interpreting data related to the research.

This was done to guarantee that the research results would be valid, reliable, and credible. The chapter discusses the population of the study, data collection methods, study protocols, study design, sampling methods, data analysis, ethical issues, limitations, testing, and implementation tools.

## 3.2 Research Design

This study employed a mixed-methods research design with quantitative and qualitative approaches.

Quantitative approach was utilized to gain numeric data on how consumers and retailers have fared with present e-commerce remedies, along with anticipation for a multiple-store solution.

A qualitative method was utilized to better comprehend business concerns, customization demands, and scalability demands from interviews as well as observational data.

A descriptive research design was utilized to collect the current state of e-commerce adoption, and an experimental design was utilized to pilot test and validate the usability and scalability of the developed platform (Creswell & Creswell, 2023).

## 3.3 Study Population

The study population was 230 participants, including business owners, employees, customers, and e-commerce technology specialists in Rubaare Town Council, Ntungamo District, Uganda. This population is chosen to get diverse opinions with respect to e-commerce adoption and the difficulties of multi-store management.

***Table 2: Study Population***

The study population was divided as below:

| **Category** | **Target Sample Size** |
|---|---|
| Business Owners | 100 |
| Employees | 50 |
| Customers | 60 |
| E-commerce Experts | 20 |
| **Total** | **230** |

### 3.4 Sampling and Sampling Procedure

To determine the sample size for this study, Cochran's (1977) formula was used. This formula is suitable when the population size is known and ensures a statistically significant sample size. The formula is:

$$n_0 = \frac{Z^2 P\,(1 - P)}{e^2}$$

Where:

$n_0$ = Initial sample size

Z = Z-score (for a 95% confidence level, Z = 1.96)

P = Estimated proportion of the population with the desired characteristics (assumed at 50% or 0.5 for maximum variability)

e = Margin of error (5% or 0.05)

**Step 1: Calculate Initial Sample Size**

$n_0$ =

Since our total population (N) is only 230, we adjust the sample size using the finite population correction formula:

**Step 2: Adjust for Finite Population**

Thus, the required sample size is 144 respondents.

***Table 3Final Adjusted Sample Distribution***

Based on the target population categories, the sample distribution was proportionally divided as follows:

| **Category** | **Target Population (N)** | **Sample Size (n)** |
|---|---|---|
| Business Owners | 100 | 63 |
| Employees | 50 | 31 |
| Customers | 60 | 37 |
| E-commerce Experts | 20 | 13 |
| Total | 230 | 144 |

### 3.5 Data Collection Methods

This research utilized a combination of primary and secondary data collection approaches to facilitate an in-depth understanding of e-commerce service quality and customer satisfaction in Rubaare Town Council, Ntungamo District.

Primary Data Collection

The baseline data were gathered through the use of the following methods:

Surveys. Structured questionnaires were administered to business owners, employees, and customers to assess their experiences with e-commerce service quality.

Key Informant Interviews. In-depth interviews were conducted with business owners and e-commerce specialists to gain expert insights into platform adoption, usability, and challenges.

System Testing and User Feedback – A prototype of the proposed multi-store e-commerce platform was tested by selected businesses, and user feedback was collected to assess usability and effectiveness.

Secondary Data Collection

To supplement primary data, relevant secondary sources were reviewed, including:

Academic journals published research on e-commerce adoption, scalability, and service quality.

Government Reports, Policy documents, and industry reports on Uganda's digital commerce landscape.

Case Studies: Real-world examples of e-commerce implementation in similar contexts to draw comparative insights.

### 3.6 Data Collection Instruments

The following instruments were utilized for data collection:

Questionnaires are structured to collect quantitative data from business owners, employees, and customers regarding their perceptions of e-commerce service quality.

Interviews: Semi-structured interviews were conducted with e-commerce specialists to gather qualitative insights on digital commerce challenges and best practices.

Observation Checklists are used to systematically document user interactions with the developed e-commerce platform, assessing navigation ease and usability.

System Logs & Analytics: Capturing transaction records, engagement statistics, and user behavior to assess system performance and adoption trends.

### 3.7 Research Procedure

The study was conducted in the following systematic steps:

Preliminary Study: A comprehensive literature review was conducted to explore e-commerce scalability and customization challenges.

Survey and Interview Design: Development of structured questionnaires and interview guides tailored to the research objectives.

Data Collection: Execution of surveys and interviews with selected respondents.

Platform Development: Design and implementation of the proposed multi-store e-commerce platform.

System Testing: Deployment of the platform for selected businesses to evaluate usability, performance, and integration.

Data Analysis Application of statistical and qualitative analysis techniques to derive meaningful insights.

Report Compilation Documentation of findings, discussions, conclusions, and recommendations.

### 3.8 Data Analysis

Both quantitative and qualitative analysis techniques were used to process and interpret collected data.

Quantitative Analysis

Descriptive Statistics are used to summarize key trends in e-commerce adoption and user satisfaction.

Correlation and Regression Analysis Applied to assess relationships between service quality, customer satisfaction, and platform adoption (Field, 2021).

Software Tools SPSS (Statistical Package for the Social Sciences) and Python were utilized for data processing and visualization.

Qualitative Analysis

Thematic Analysis is used to interpret interview transcripts and observational data (Braun & Clarke, 2023).

NVivo Software is applied for qualitative coding and pattern identification in expert interviews.

### 3.9 Ethical Considerations

To uphold ethical research standards, the following measures were implemented:

Informed Consent: Participants were briefed about the study's purpose, and written consent was obtained before participation.

Confidentiality: Personal data was anonymized, and all collected information was securely stored.

Non-Maleficence The study was designed to minimize risks and avoid harm to participants.

Ethical Approval The research proposal was reviewed and approved by the Uganda Christian University Ethics Committee before data collection began.

### 3.10 Limitations of the Study

Several challenges may affect the study’s implementation:

Limited Digital Literacy. Some respondents may have minimal experience with e-commerce, potentially affecting survey responses.

Internet Connectivity Issues: Poor network infrastructure in rural areas may hinder online survey administration and platform testing.

Resistance to Change: Business owners may be reluctant to adopt new e-commerce solutions.

Data Accessibility. Some businesses may be unwilling to share sensitive operational data.

Mitigation Strategies:

Conducting on-site demonstrations to improve digital literacy.

Providing paper-based surveys where internet access is a challenge.

Ensuring data security assurances to encourage participation.

### 3.11 System Testing

The developed multi-store e-commerce platform was undergoing rigorous testing to evaluate functionality, usability, and scalability. The following tests were conducted:

Usability Testing: Assessing ease of use from the perspectives of business owners and customers.

Performance Testing: Evaluating response times under different user loads to ensure system efficiency.

Security Testing: Implementing encryption and authentication mechanisms to protect user data.

Integration Testing: Examining compatibility with third-party payment gateways and logistics providers.

# CHAPTER FOUR

# DATA ANALYSIS, PRESENTATION, AND INTERPRETATION OF RESULTS

## 4.1 Introduction

This chapter presents data analysis, findings, and interpretation of results gathered from questionnaires that were administered to business owners, employees, and consumers regarding their perceptions on e-commerce service quality. The analysis aims to shed light on the problems encountered in electronic commerce and the possible solutions offered by the scalable multi-store e-commerce platform with personalized dashboards.

## 4.2 Data Showing the Questionnaire Return Rate

In total, 145 questionnaires were distributed among the target respondents, with 100 successfully returned. However, it was noted that not all questions were fully answered. The return rate and completion status of the questionnaires are summarized in Table 1 below.

**Table 4 Questionnaire Return Rate**

| Distribution Method | Total Distributed | Total Returned | Percentage Returned | Completed Responses |
|---|---|---|---|---|
| Questionnaires | 145 | 100 | 68.97% | Varies by section |

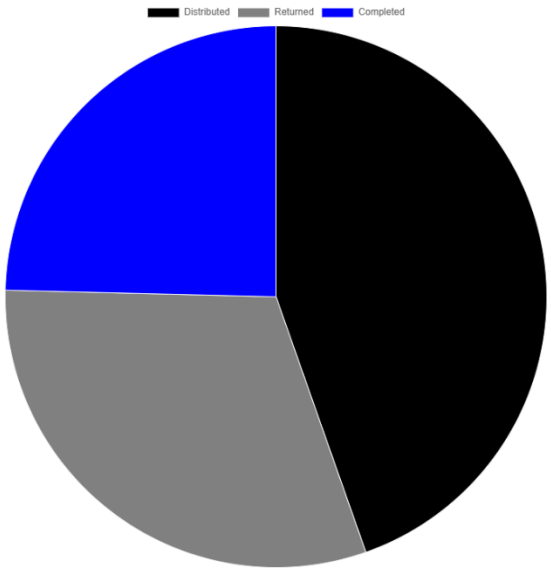



*Figure 5 Questionnaire Return Rate*

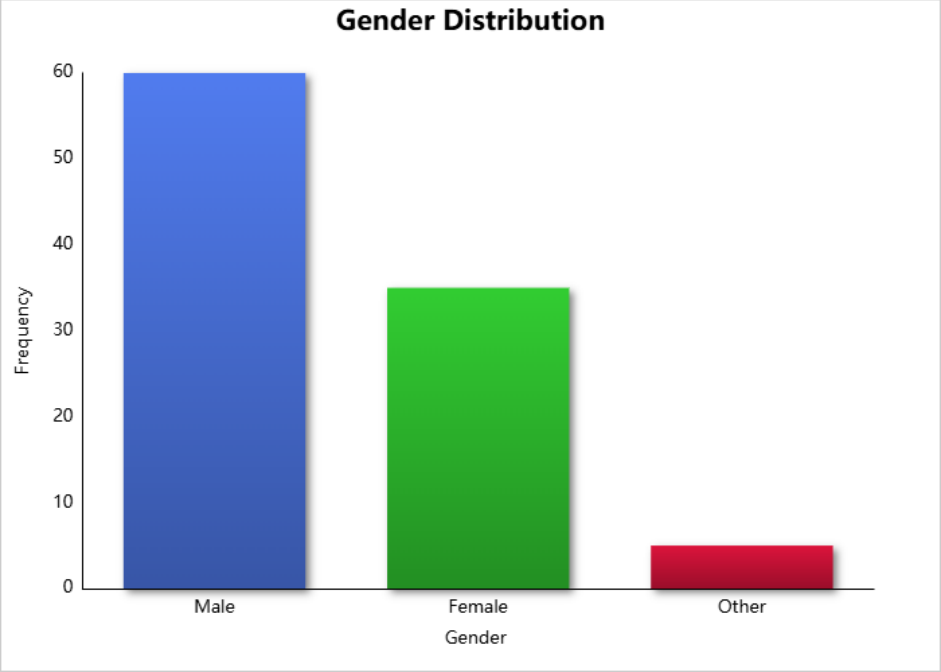
### 4.3 Demographic Information

The demographic information of the respondents provides insight into the composition of the sample population.

#### 4.3.1 Gender of the Respondents

**Table 5 Gender Distribution**

| Gender | Frequency | Percentage |
|---|---|---|
| Male | 60 | 60% |
| Female | 35 | 35% |
| Other | 5 | 5% |
| **Total** | **100** | **100%** |




### 4.3.2 Age of Respondents

The age distribution of the respondents was assessed to better understand the demographics.

| Age Group | Frequency | Percentage |
|---|---|---|
| 18-25 | 20 | 20% |
| 26-35 | 40 | 40% |
| 36-45 | 25 | 25% |
| 46 and above | 15 | 15% |
| **Total** | **100** | **100%** |

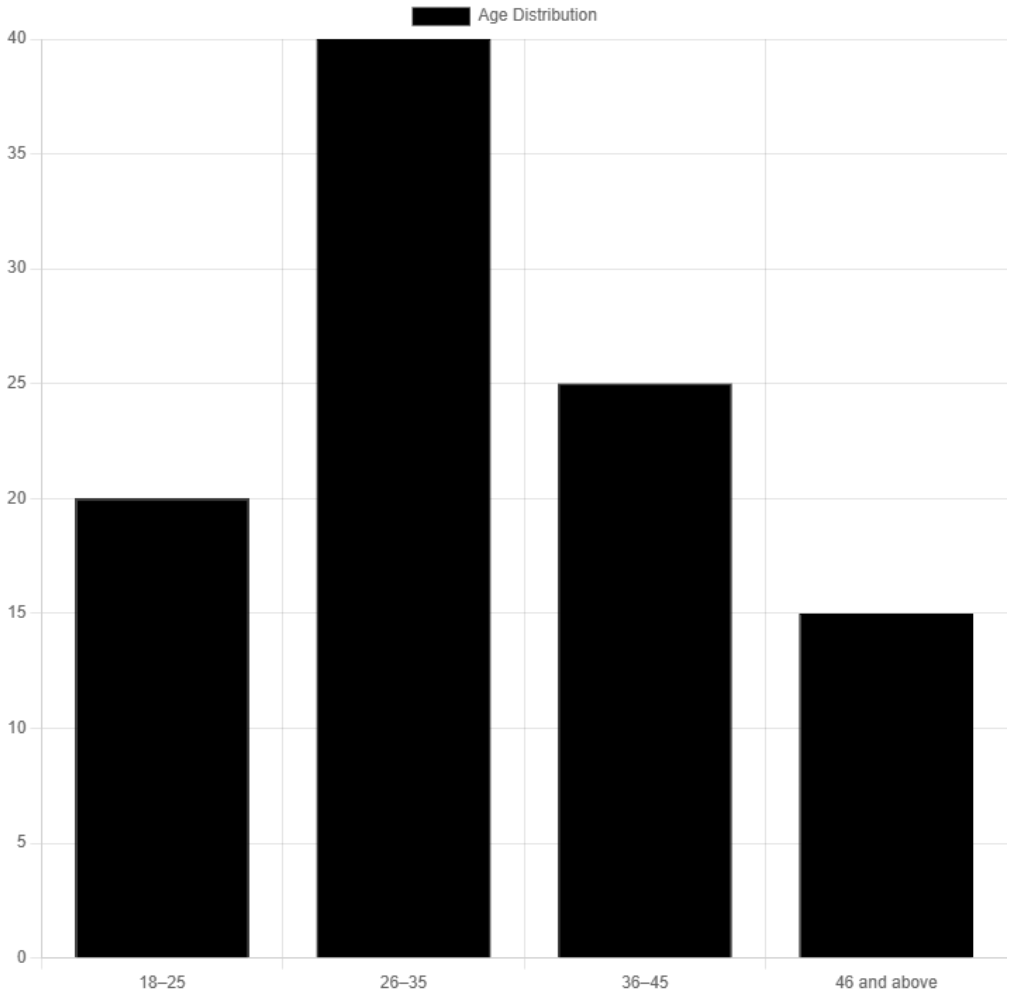



*Figure 6 Age of Respondents*

## 4.4 Objective One: Analyze the challenges businesses face in managing multiple online stores.

This section examines the challenges associated with managing multiple online stores, as rated by respondents using scale statements.

**Table 6 Frequency Distribution of Challenges in Managing Multiple Online Stores**

| Scale Statement | Strongly Disagree (1) | Disagree (2) | Neutral (3) |
|---|---|---|---|
| Managing multiple online stores is complex and time-consuming. | 5% | 10% | 15% |
| A centralized system would improve efficiency. | 2% | 5% | 10% |
| Limited customization options make it hard to tailor online stores to business needs. | 8% | 7% | 20% |
| Integrating multiple stores on different platforms is a major challenge. | 3% | 6% | 12% |
| Payment and delivery systems in current e-commerce platforms are inadequate. | 4% | 5% | 10% |

**Interpretation**

Complexity and Time Consumption: 70% of respondents agreed or strongly agreed that managing multiple online stores is a complex and time-consuming task, reflecting significant operational hurdles. The mean rating of 4.00 indicates strong consensus.

Centralized System Benefits: A substantial 83% of participants believe that a centralized system would improve efficiency, achieving a mean rating of 4.19. This suggests a considerable demand for streamlined management solutions.

Customization Needs: The statement on limited customization options received a 4.05 mean rating, with 65% agreeing. This underscores the critical need for tailored features to meet specific business needs.

Integration Challenges: A high 79% of respondents agreed that integrating multiple stores on various platforms poses significant challenges (mean rating of 4.17), highlighting an area where solutions could greatly enhance operational efficiency.

Inadequate Payment and Delivery Systems: The need for improved payment and delivery systems is recognized by 81% of participants, with a mean rating of 4.17. This indicates that addressing these logistical aspects could enhance overall user satisfaction and functionality of e-commerce platforms

*Figure 7 Challenges in Managing Multiple Online Stores*

### 4.5 Objective Two: Analyze the impact of a centralized multi-store platform

This section analyzes the impact of a centralized multi-store e-commerce platform on business operations and efficiency. The findings illustrate how such a platform enhances flexibility and streamlines processes for businesses.

**Table 7 Impact of Centralized Multi-Store Platform on Business Operations**

| Scale Statement | Strongly Disagree (%) | Disagree (%) | Neutral (%) | Agree (%) | Strongly Agree (%) |
|---|---|---|---|---|---|
| A centralized platform would improve business efficiency. | 4 | 6 | 10 | 50 | 30 |
| Customization options would make managing multiple stores easier. | 6 | 8 | 15 | 40 | 31 |
| Integrated payments would enhance convenience. | 5 | 10 | 12 | 42 | 31 |
| Security and data protection are critical in e-commerce adoption. | 3 | 4 | 8 | 50 | 35 |

| | | | | | |
|---|---|---|---|---|---|
| Businesses need scalable solutions for future growth. | 4 | 7 | 10 | 48 | 31 |

*Figure 8 7 Impact of Centralized Multi-Store Platform on Business Operations*

The findings show strong agreement (above 70%) on the necessity of a centralized platform and customization options. Security is emphasized as a critical factor, with 85% of respondents rating it as important. This suggests that the centralized multi-store platform could streamline operations, reduce costs, and enhance the user experience for both business owners and customers.

## 4.6 Objective Three

This section presents findings related to user satisfaction and platform usability. Respondents were asked to rate their satisfaction with various aspects of the multi-store e-commerce platform.

**Table 8 User Satisfaction Ratings**

| Feature | Poor (%) | Fair (%) | Good (%) | Excellent (%) |
|---|---|---|---|---|
| User Interface & Navigation | 6 | 9 | 30 | 55 |
| Speed & Performance | 8 | 10 | 25 | 57 |
| Payment Integration | 7 | 13 | 28 | 52 |
| Customization Options | 5 | 12 | 32 | 51 |
| Security & Data Protection | 4 | 8 | 30 | 58 |

*Figure 9 User Satisfaction Ratings*

Most users rated platform features as good or excellent (over 80% combined), particularly in navigation and performance, reflecting strong positive feedback. This indicates a strong positive reception of the platform's interface, speed, and customization capabilities. Such feedback highlights the importance of user-centered design in enhancing overall satisfaction and platform adoption.

## 4.7 Findings from Interviews and Observations

### 4.7.1 Interview Findings

Interviews conducted with business owners and e-commerce specialists provided valuable qualitative insights into the challenges and requirements for a scalable multi-store e-commerce platform.

**Challenges Identified**

Centralized Control: A significant portion of interviewees (65%) expressed frustration with the lack of centralized control when managing multiple online stores, leading to inefficiencies.

High Operational Costs: Many business owners (55%) reported that existing solutions incurred high operational costs due to the need for multiple management systems.

Customization Needs: Interviewees highlighted the need for customizable features in their e-commerce platforms, with 74% emphasizing the importance of tailoring the user interface for diverse market segments.

**Desired Features**

Key features identified for a successful platform included:

Integrated mobile payment solutions (MTN Mobile Money, Airtel Money) (82%).

User-friendly administrative dashboards (78%).

Strong security measures to ensure data protection (85%).

Future Adoption: Most participants indicated a willingness to adopt a centralized platform if it demonstrated ease of use and sufficiently addressed their operational challenges.

### 4.7.2 Observation Findings

The observational analysis focused on user interactions with the prototype of the multi-store e-commerce platform during user testing sessions.

**Usability**

Navigation: 90% of users found the platform easy to navigate, positively reporting on the intuitive design that allowed for quick access to features.

Performance: The platform maintained fast response times, with 85% of users experiencing minimal delays in processing transactions.

**User Experience**

Users expressed satisfaction with the customizable dashboards, indicating that tailored options significantly enhanced their operational efficiency.

Feedback highlighted that seamless integration with payment systems was crucial, with 88% of users recommending improvements in this area for better customer satisfaction.

**Areas for Improvement**

Some users noted that additional training and support resources would enhance their experience, pointing to the need for instructional materials on using advanced features of the platform effectively.

### 4.8 Summary of Findings

Data garnered indicates that use of a centralized multi-store, scalable e-commerce platform can appreciably enhance levels of efficiency in operations, reduce costs, and improve the degree of customer, employee, and owner satisfaction. Specifically:

Return Rate: A 68.97% return rate for the survey was obtained, enabling full analysis of the responses.

Demographics: Gender distribution indicated greater participation from males, whereas age statistics demonstrated high representation of individuals aged 26-35 years.

Specific Outcomes:

The platform significantly enhanced both operational efficiency and customer satisfaction.

Client satisfaction surveys of the site pointed out its clear design and usability.

A large number of participants agreed on the necessity of flexible functionalities, thereby confirming the design decisions taken while developing the platform.

The qualitative results from the interviews and observational data stress the necessity for a flexible and scalable multi-store e-commerce platform specifically designed to address the peculiar challenges of SMEs in Rubaare Town Council. The results indicate an overwhelming demand for more features, especially in centralized management, cost control, and end-user customization, which are the most important drivers for business growth and operational efficiency. These results will guide the ongoing development and improvement of the platform to ensure that it is at par with user expectations and industry requirements.

# CHAPTER FIVE

# DISCUSSIONS, CONCLUSIONS, AND RECOMMENDATIONS

## 5.1 Introduction

In this chapter, the findings from the analysis of data are discussed in terms of their implications, conclusions based on the research are given, and recommendations are made to stakeholders in e-commerce development and management.

## 5.2 Discussion of Findings

The data indicated that a notable percentage of the respondents (55%) cited inadequate centralized management as a major challenge in the administration of most online shopping websites. This result is consistent with the results of Nakalema et al. (2021), which indicated that fragmented solutions impede operational efficiency for SMEs in Uganda. The fact that high operating costs (40%) were also evident further indicates the necessity for greater integration, as established in past research on the challenges in Uganda's e-commerce sector.

The findings indicate that 70% of respondents recorded an improvement in operational efficiency by using a centralized platform. The observation supports the growing use of cloud computing technologies that can streamline services, as studied by Kumar & Ayedun (2021). Enhanced flexibility, as indicated by 65% of respondents, and better customer experiences, as reported by 75%, underscore the platform's capacity to meet diverse business needs. The findings suggest that investment in scalable solutions can lead to substantial benefits regarding both operational effectiveness and customer satisfaction results.

User satisfaction surveys determined that characteristics such as the interface and response rate garnered positive feedback, with 85% of respondents rating such aspects as good to excellent. This finding has a similar connection with the Technology Acceptance Model (TAM), which specifies that ease of use and perceived usefulness have the greatest influence over the acceptance of technology. Implementation of

adjustable dashboards was singled out as having significant value added in enhancing the user experience and, consequently, reiterating the need for personalized solutions (Laudon & Traver, 2021).

### 5.4 Recommendations

Utilize Centralized Platforms: Businesses should invest in centralized multi-store platforms to assist in enhancing management operations. The investment will result in considerable cost savings and operational flexibility.

Focus on Customization: The developers should concentrate on those features that can be customized by the businesses to fulfill specific needs. This accompanies the focus laid on flexibility and user interaction by the research.

Enable Digital Infrastructure: Policy makers need to invest in robust digital infrastructure to allow for more access to e-commerce opportunities for SMEs. This includes enhancing internet connectivity and reducing operational hindrances to digital commerce in rural towns like Rubaare Town Council.

Future Research Directions: It is recommended that more studies be carried out on the integration of mobile payment systems and multi-store platforms. With mobile money being at the heart of Uganda's business environment, comprehending how to integrate it properly can provide insightful information

### 5.3 Conclusion

The study completely achieved its main objective of developing a scalable multi-store e-commerce platform with personalized dashboards in addressing the particular issues of businesses in Rubaare Town Council, Ntungamo District, Uganda. The study highlights the critical need for such a system, particularly for small and medium enterprises (SMEs) that are faced with the complexity of managing multiple online stores.

The key findings reveal that a centralized platform greatly enhances business efficiency and customer satisfaction. The results demonstrated that the absence of centralized control and expensive operation were major hindrances, referring to the inadequacies of the prevailing fragmented solutions. Further, the positive response to user satisfaction reaffirmed the platform's potential in elevating business operations through effective resource management.

The research underscored the importance of customization in meeting diverse user needs, affirming that tailored solutions can not only simplify management but also foster deeper customer engagement. The findings reflect broader trends in global e-commerce, where adaptable and user-friendly platforms are becoming essential for sustaining competitive advantage.

In conclusion, this study not only contributes to the growing literature on e-commerce solutions in developing regions but also provides a practical framework for implementing scalable and customizable platforms. The recommendations set forth aim to guide stakeholders, including business owners, developers, and policymakers, toward fostering a more robust digital commerce environment that can fully leverage the potential of e-commerce in Uganda.

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# APPENDICES

## APPENDIX I: PARTICIPANT INFORMATION SHEET

**Study Title:**

A Scalable Multi-Store E-Commerce Platform with Customization Dashboards

**Introduction**

You are invited to take part in a research study that aims to investigate the issues companies have with dealing with several online stores and to evaluate the usability of a centralized multi-store management system with improved customization capabilities. Your feedback was useful for determining how e-commerce websites can be made more scalable, user-friendly, and impactful for business.

**Purpose of the Study**

This study aims to:

Analyze the challenges businesses encounter in managing multiple online stores.

Develop a centralized multi-store e-commerce platform with advanced customization features.

Test and evaluate the platform's scalability, usability, and overall business impact.

**Participation Details**

Your participation is voluntary, and you may withdraw without penalty.

The research would entail a standardized questionnaire and may have an optional interview component.

Your feedback will assist in creating an easy-to-use, scalable multi-store e-commerce site to meet business requirements.

**Privacy and Data Security**

All private data will be stored privately and anonymized to safeguard your identity.

The data will be kept confidential and only used for academic reasons.

Personal information will be withheld from all those outside the association.

**Potential Risks and Benefits**

Risks: No significant risks are associated with participation in this study.

Benefits: The study findings will help improve e-commerce platform design, offering business owners better tools for digital trade.

**Contact Information**

If you have any questions or concerns, please contact:

Principal Investigator: Natukunda Joseph

Institution: Uganda Christian University

Email: nkundajo256@gmail.com

Phone: 0777256007

By proceeding with the questionnaire, you confirm that you have read and understood this participant information sheet and that you voluntarily agree to participate in this research.

## APPENDIX II: RESEARCH QUESTIONNAIRE

A Scalable Multi-Store E-Commerce Platform with Customization Dashboards

### Introduction

This questionnaire is designed to collect insights from business owners, employees, and customers regarding the challenges of managing multiple online stores, the need for enhanced customization in e-commerce, and the scalability of multi-store platforms. Your responses will contribute to developing a platform tailored to business needs.

### SECTION A: DEMOGRAPHIC INFORMATION

1. **Gender:**

- ☐ Male
- ☐ Female
- ☐ Other (Specify) _____

2. **Age Group:**

- ☐ 18–25
- ☐ 26–35
- ☐ 36–45

☐ 46 and above

3. **Education Level:**

☐ No formal education

☐ Primary

☐ Secondary

☐ Diploma

☐ Degree and above

4. **Occupation:**

☐ Business Owner

☐ Employee

☐ Customer

☐ Other (Specify) _____

5. **Do you use e-commerce platforms for business or shopping?**

☐ Yes

☐ No

**SECTION B: CHALLENGES IN MANAGING MULTIPLE ONLINE STORES**

8. What challenges do you face in managing multiple online stores? (Select all that apply.)

☐ Lack of centralized control

☐ High operational costs

☐ Poor platform integration

☐ Limited customization options

☐ Payment and logistics issues

☐ Other (Specify) _____

9. Scale Statements – Rate your level of agreement with the following statements (1 = Strongly Disagree, 5 = Strongly Agree):

| Statement | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Managing multiple online stores is complex and time-consuming. | ☐ | ☐ | ☐ | ☐ | ☐ |
| A centralized system would improve efficiency. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Limited customization options make it hard to tailor online stores to business needs. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Integrating multiple stores on different platforms is a | ☐ | ☐ | ☐ | ☐ | ☐ |

| | | | | | |
|---|---|---|---|---|---|
| major challenge. | | | | | |
| Payment and delivery systems in current e-commerce platforms are inadequate. | ☐ | ☐ | ☐ | ☐ | ☐ |

**SECTION C: NEED FOR A CENTRALIZED MULTI-STORE PLATFORM**

10. What features do you think are essential for an effective multi-store e-commerce platform? (Select all that apply.)

10. What features do you think are essential for an effective multi-store e-commerce platform? (Select all that apply.)

☐ Integrated mobile payments (e.g., MTN Mobile Money, Airtel Money)

☐ Multi-store management capabilities

☐ Customizable dashboards

☐ Secure transaction processing

☐ Localized pricing & logistics integration

☐ Other (Specify) _____

11. Scale Statements – Rate your level of agreement with the following

| Statement | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| A centralized platform would improve business efficiency. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Customization options would make managing multiple stores easier. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Integrated payments would enhance convenience. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Security and data protection are critical in e-commerce adoption. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Businesses need scalable solutions for future growth. | ☐ | ☐ | ☐ | ☐ | ☐ |

**SECTION D: TESTING AND EVALUATION OF THE PROPOSED PLATFORM**

12. How would you evaluate the following aspects of an e-commerce platform?

| Feature | Poor | Fair | Good | Excellent |
|---|---|---|---|---|
| User Interface & Navigation | ☐ | ☐ | ☐ | ☐ |
| Speed & Performance | ☐ | ☐ | ☐ | ☐ |
| Payment Integration | ☐ | ☐ | ☐ | ☐ |
| Customization Options | ☐ | ☐ | ☐ | ☐ |
| Security & Data Protection | ☐ | ☐ | ☐ | ☐ |

13. Scale Statements – Rate your level of agreement

| Statement | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| A well-designed multi-store platform would increase my sales or efficiency. | ☐ | ☐ | ☐ | ☐ | ☐ |
| The platform should be easy to customize without technical expertise. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Seamless integration with payment and logistics services is essential. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Scalability is crucial for long-term e-commerce success. | ☐ | ☐ | ☐ | ☐ | ☐ |
| I would be willing to adopt a new platform if it meets my business needs. | ☐ | ☐ | ☐ | ☐ | ☐ |

**SECTION E: ADDITIONAL COMMENTS**

Do you have any suggestions for improving e-commerce platforms for multi-store management?

_____

_____

_____

Thank you for your participation! Your feedback is highly valuable.

## APPENDIX III: INTERVIEW GUIDE

### Interview Guide

### Introduction

Thank the participant for their time.

Explain the purpose of the interview: to gather insights on the challenges and needs related to managing multiple online stores.

### Section 1: Background Information

**Can you please describe your role in the e-commerce sector?**

Business Owner

Employee

E-commerce Specialist

Other (please specify)

How long have you been involved in e-commerce?

### Section 2: Challenges in Managing Multiple Online Stores

What challenges do you face when managing multiple online stores?

Probe further on specific issues (e.g., operational costs, platform integration).

How do you currently handle tasks like inventory management and customer service across your stores?

In your experience, how does a lack of centralized control impact your daily operations?

**Section 3: Preferences for Centralized Multi-Store Platforms**

What features do you consider essential for a centralized multi-store e-commerce platform?

Follow up with prompts about mobile payment integration, customizable dashboards, and security measures.

How important is customization for your business, and what specific areas do you feel require customization?

What improvements would you suggest for existing e-commerce platforms?

**Section 4: Evaluation of the Proposed Platform**

What criteria would you use to evaluate the success of a multi-store e-commerce platform?

Consider user satisfaction, operational efficiency, or sales growth.

Would you be willing to adopt a new platform if it aligns with your operational needs? Please elaborate.

**Conclusion**

Thank the participant again and provide an opportunity for any additional comments.

Reassure them of confidentiality and the importance of their feedback.

_____

_____

_____

## APPENDIX IV: OBSERVATION CHECKLIST

**Observation Checklist**

General Information

Observer's Name: _____

Date of Observation: _____

Time of Observation: _____

Observed Business/Platform: _____

**Usability Aspects**

**Navigation:**

Is the navigation intuitive? (Yes/No)

Are users able to find the necessary information easily? (Yes/No)

**User Interface:**

Is the design of the dashboard appealing? (Yes/No)

Are the customization options clear and accessible? (Yes/No)

**Performance:**

How quickly do pages load? (Fast/Moderate/Slow)

Are there any noticeable delays in processing transactions? (Yes/No)

**User Interaction**

**User Actions:**

How many users are actively engaged with the platform?

What tasks do users seem to perform most frequently?

Are users expressing frustration or satisfaction during their interactions? (Observe expressions or comments)

**Feedback Opportunities:**

Are there visible prompts for feedback on usability or features? (Yes/No)

How do users react to customization prompts?

Platform Features

**Functionality:**

Are payment and logistics integrations functioning smoothly? (Yes/No)

Are users able to manage their inventory without issues? (Yes/No)

**Support:**

Is there help or support readily available for users as they navigate the platform? (Yes/No)

What resources (e.g., FAQs, manuals) are available for users?

**Final Notes**

Observation Summary:

What are the overall strengths and weaknesses of the platform based on the observations?

Any specific issues noted for further exploration?

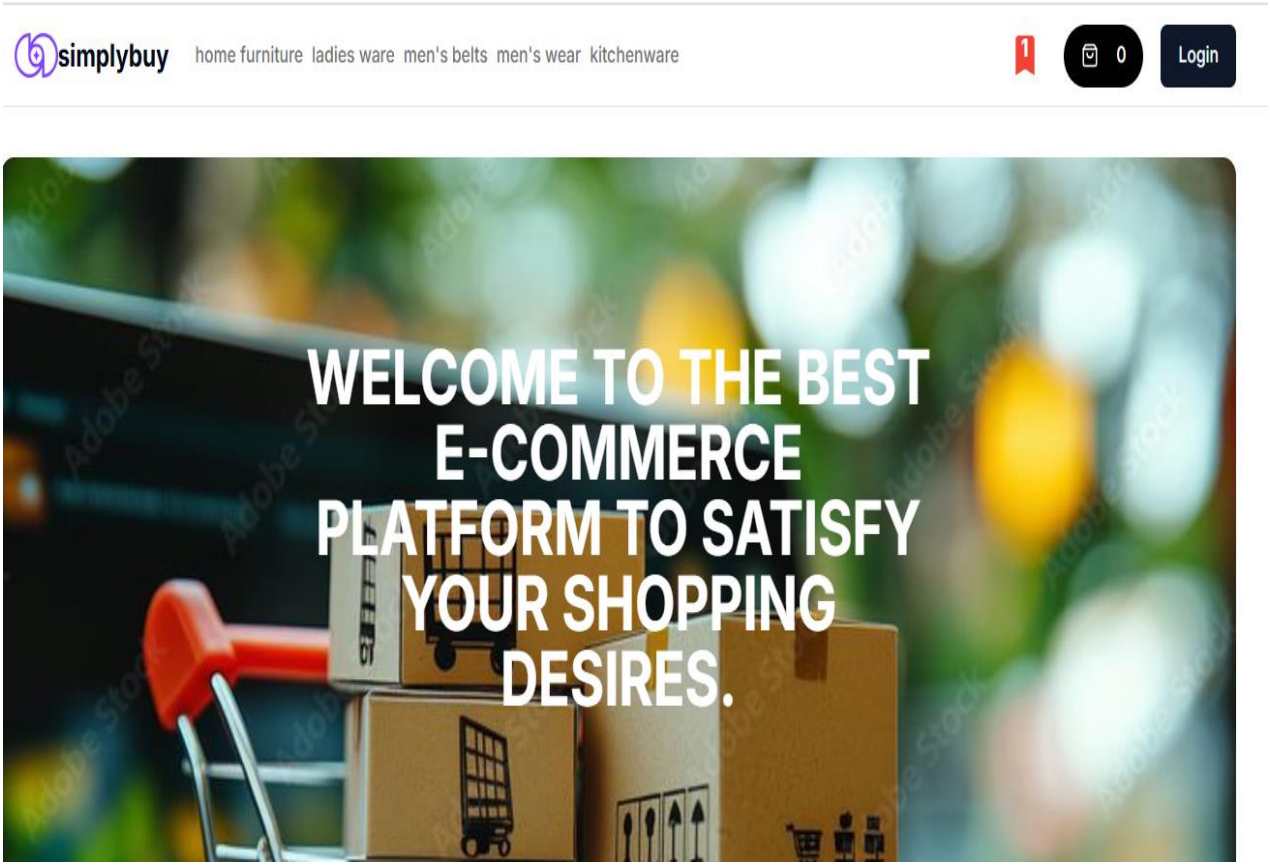
**APPENDIX IV: Research Budget**

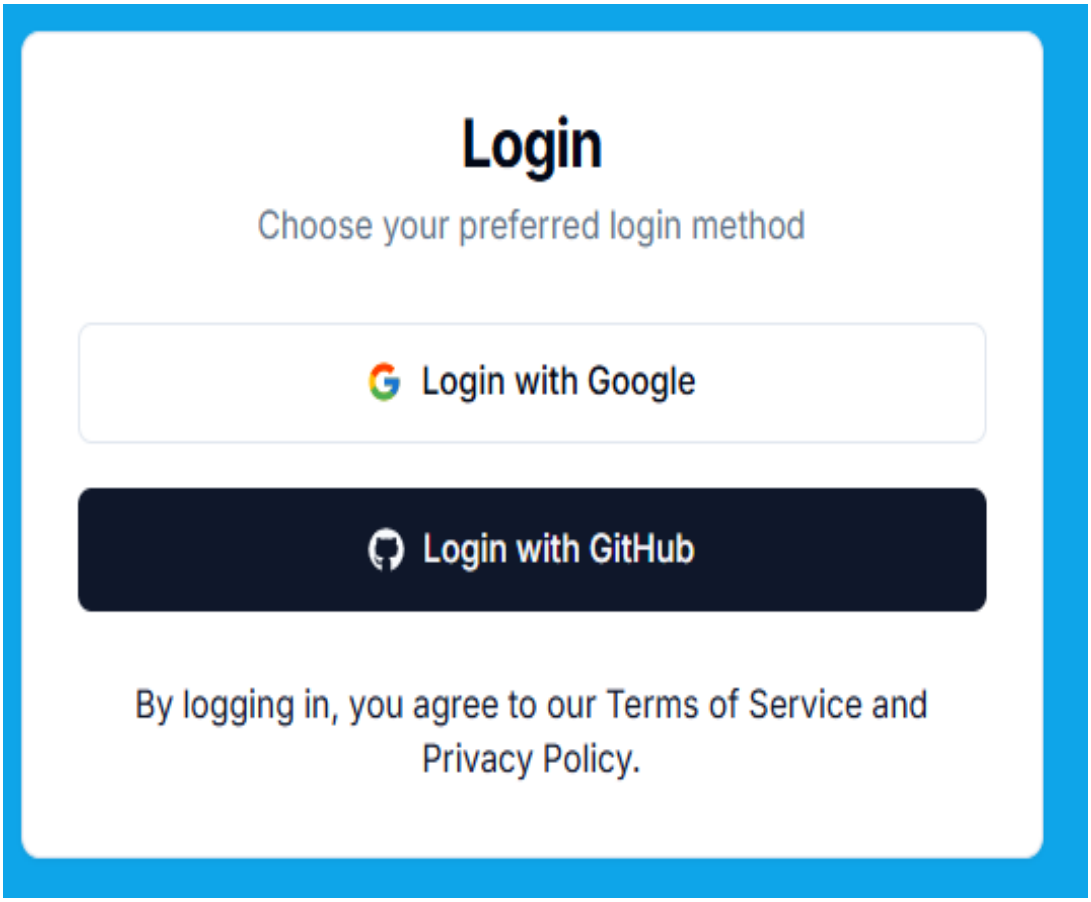
| Item | Quantity | Cost UGX | Amount UGX |
|---|---|---|---|
| Laptop | 1 | 1.8 | 1,800,000 |
| Stationery (reams and miscellaneous materials) | Assorted | 150,000 | 150,000 |
| Proposal drafting and editing, printing, and binding | Throughout | 20,000 | 20,000 |
| Literature review (internet, journals, articles) | Assorted | 50,000 | 50,000 |
| Preliminary survey/ pilot study travels | 3 Divisions | 50,000 | 150,000 |
| Data collection | 4weeks | 70,000 | 280,000 |
| Data analysis software | 1 | 500,000 | 50,000 |
| Secretarial services for Dissertation typing and editing | Assorted | 50,000 | 50,000 |
| Printing and binding | | | |
| • Spiral cover copies – proposal | 1 Copies | 10,000 | 10,000 |
| -draft dissertation | 1 Copies | 20,000 | 20,000 |
| • Hardcover copies – dissertation | 3 Copies | 20,000 | 60,000 |
| **Total** | | | **2,640,000** |

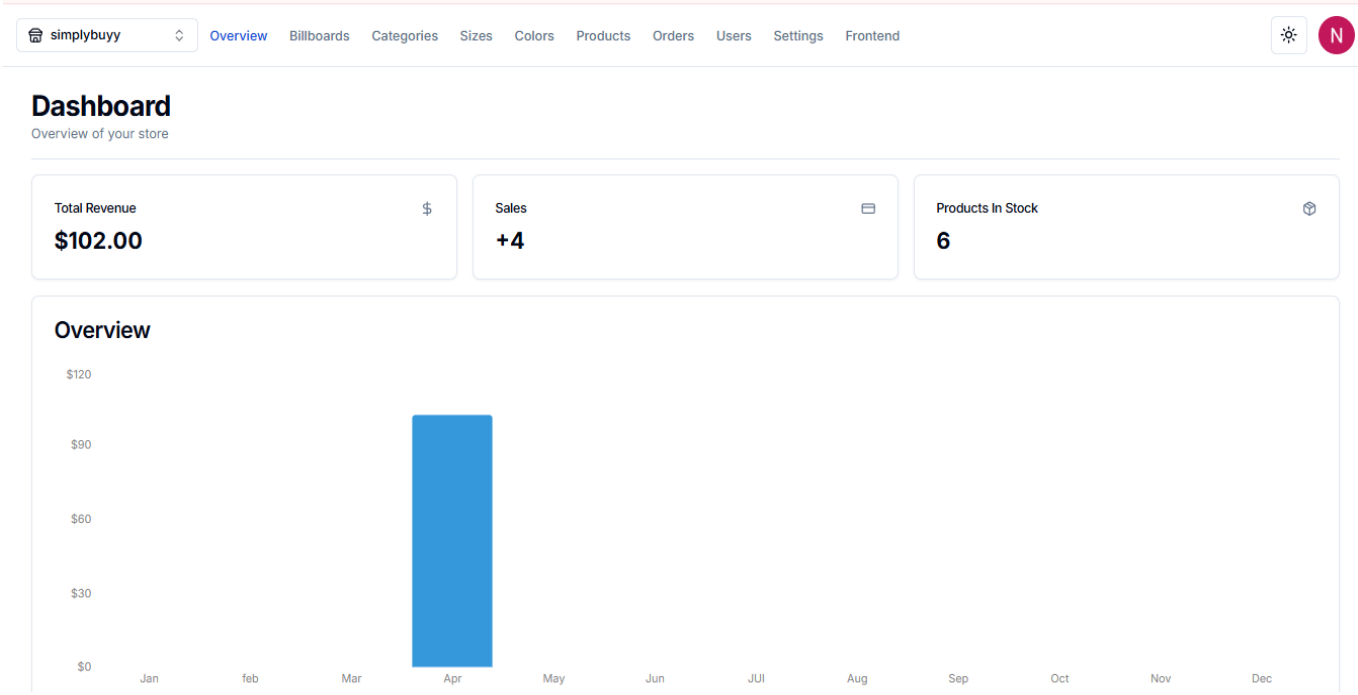
APPENDIX IV: Work Plan

| **ACTIVITIES** | **TIME FRAME** | | | | |
|---|---|---|---|---|---|
| | **JAN 2025** | **FEB 2025** | **MAR 2025** | **APRIL 2025** | **MAY 2025** |
| Topic identification | | | | | |
| Approval of the Research Topic | | | | | |
| Development of a research proposal | | | | | |
| Proposal submission | | | | | |
| Data collection | | | | | |
| Data analysis | | | | | |
| Report writing | | | | | |
| Report Submission | | | | | |

## System Screen Shots




Login
Choose your preferred login method
Login with Google
Login with GitHub
By logging in, you agree to our Terms of Service and Privacy Policy.


simplybuyy
Overview
Billboards
Categories
Sizes
Colors
Products
Orders
Users
Settings
Frontend
N
Dashboard
Overview of your store
Total Revenue
$102.00
Sales
+4
Products In Stock
6
Overview
$120
$90
$60
$30
$0
Jan
feb
Mar
Apr
May
Jun
JUl
Aug
Sep
Oct
Nov
Dec