**Garden Plants Management Information System**

**A CASE STUDY OF: El Amor Garden**

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**BBICT/2022/48870**

**A research project submitted in partial fulfillment of the requirements**

**For the award of a degree in bachelor of business information**

**Communication technology of Mount Kigali University**

**MAY 20****25**

# DECLARATION

I hereby declare that this project report is based on my original work except for citations and quotations which have been duly acknowledged. I also declare that it has not been previously and concurrently submitted for any other degree or award at Mount Kenya University.

**Name: BAGENZI Vanessa**

Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: ………/………/2025

**SUPERVISOR**

1. The undersigned do hereby certify that this is a true report for the project undertaken by the above-named student under my supervision and that has been submitted to Mount Kigali University with my approval.

**Name**: …………………………

Sign \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date……. /……. /2024

# DEDICATION

To the Almighty God,

To my lovely family especially my parents

For their support during all the time of my studies,

To all my friends and relatives, without also

Forgetting my supervisor for his guidance,

This work is dedicated.

# AKNOWLEDGEMENTS

Would like to express my sincere gratitude to Mount Kenya University for providing me with the opportunity to pursue my studies, The knowledge and skills I have gained during my time at the university have been invaluable in the completion of this research project.

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I would like to express my appreciation to my family and friends for their unwavering support and belief in my abilities. Their encouragement has been a constant source of motivation.

I would also like to acknowledge the participants of this research project for their valuable contributions.

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## ****CHAPTER ONE: INTRODUCTION****

### ****1.1 Introduction****

The proposed Garden Plants Management and E-commerce System is a comprehensive solution designed to transform the way garden plants are managed, marketed, and sold online. This system aims to automate essential processes such as inventory management of plant species, order tracking, delivery coordination, customer communication, and sales reporting. By integrating a user-friendly interface with real-time data management and e-commerce functionality, the system empowers garden plant businesses to operate more efficiently and reach a wider audience. It centralizes plant catalog information, customer data, and transaction records, enabling a seamless and personalized online shopping experience. With this solution, garden plant vendors can streamline operations, improve customer satisfaction, and enhance overall business performance in the competitive e-commerce environment.

### ****1.2 Background of the Study****

In the modern digital age, the sale and management of garden plants through online platforms present unique challenges and opportunities. Many local nurseries and plant sellers still rely on manual methods for tracking inventory, processing customer orders, and managing deliveries, leading to inefficiencies, stock inconsistencies, and poor customer service. These challenges limit their ability to scale, adapt to market demand, and compete effectively in the growing e-commerce sector.

This study focuses on the development of a Garden Plants Management Information System that aims to address these issues. The system will automate inventory tracking, enable efficient order management, provide accurate delivery scheduling, and facilitate secure online payments. The case study centers on a selected e-commerce platform that sells garden plants, highlighting the system’s potential to enhance operational efficiency, customer engagement, and profitability. By transitioning from manual to automated systems, garden plant sellers can ensure timely delivery, maintain accurate stock levels, and build strong, lasting relationships with their customers.

## ****1.3 Problem Statement****

The current manual methods of managing garden plant inventory and selling operations lead to significant inefficiencies and limitations. These include inaccurate stock tracking, delayed order fulfillment, lack of real-time updates, and challenges in managing customer interactions. These issues hinder garden plant sellers from delivering a smooth and reliable online shopping experience, scaling their business, and making data-driven decisions to improve sales and customer satisfaction. The absence of an integrated digital system limits operational efficiency and affects the competitiveness of garden plant businesses in the growing e-commerce market.

## ****1.4 Objectives of the Study****

### ****1.4.1 General Objective****

The general objective of the study is to design and implement a Garden Plants Management information System.

### ****1.4.2 Specific Objectives****

i. To develop a system that records and manages garden plant inventory in real-time.

ii. To implement an interface that allows users to interact with the system

iii. To Design an application that will generate reports

**1.5 Scope and Limitations**

This project focuses on the development of a Garden Plants Management and E-commerce System for businesses selling garden plants online. The system will handle core functionalities such as plant inventory tracking, customer order processing, and delivery scheduling, and reporting. However, limitations may include: The system faces technical constraints related to the platform or hosting environment, as well as a dependence on the accuracy and timely entry of data by users. It is primarily designed to address internal operations and does not directly manage external digital marketing, SEO, or promotional campaigns. Additionally, ongoing maintenance and updates will be necessary to ensure optimal performance.

## ****1.6 Justification of the Study****

The adoption of an automated Garden Plants Management and information System is essential for businesses looking to digitize their operations and scale in the online marketplace. By replacing manual methods with a centralized and automated system, plant sellers can improve inventory accuracy, shorten delivery times, enhance customer satisfaction, and increase profitability. This project is particularly valuable in helping small- to medium-sized garden businesses transition into the digital space and compete effectively in the e-commerce sector.

**1.7 Project Risk and Mitigation**

The development and deployment of the Garden Plants Information Management System carry potential risks, including technical difficulties, system integration issues, and data security vulnerabilities. To mitigate these risks, comprehensive system testing and quality assurance will be conducted throughout development to ensure reliability, while data encryption and user access control mechanisms will safeguard security. A structured project timeline with clear milestones will help minimize delays, and continuous communication with stakeholders along with early user feedback will guide system improvements and increase the likelihood of successful adoption.

## 1.7 BUDGET AND RESOURCES

Table 1: project budget

|  |  |
| --- | --- |
| **Item description** | **Amount** |
| Internet | 25,000 Rwf |
| Transport | 20,000 Rwf |
| External storage | 20,000 Rwf |
| Printing | 20,000 Rwf |
| Laptop | 450,000 Rwf |
| **TOTAL** | 515,000 Rwf |

# 1.8 PROJECT SCHEDULE

The table below shows a brief description of the project activities through different chapters against the time schedules Gantt structure.

**Table 2: project activities schedules (Gantt chart)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Activities | June | | | | July | | | | august | | | |
| W1 | W2 | W3 | W4 | W1 | W2 | W3 | W4 | W1 | W2 | W3 | W4 |
| Project proposal |  |  |  |  |  |  |  |  |  |  |  |  |
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| Chapter7: Recommendation and conclusions |  |  |  |  |  |  |  |  |  |  |  |  |
| Final Presentation and Demos |  |  |  |  |  |  |  |  |  |  |  |  |

Source: primary data (2025)