UNIVERSITY OF SCIENCE AND TECHNOLOGY OF SOUTHERN PHILIPPINES

AGRICART: AGRICULTURAL E-COMMERCE PLATFORM

Elay, Judy Amor Gaviola, Emmanuelle Braindale Mapano, Jelleah Rozette Maturan, Anjaenet Pailagao, Kyle Andrew Parinasan, Evamae Posadas, Michaia El



INTRODUCTION

Agriculture plays a vital role in the economies of many countries, serving as the backbone of food production and providing livelihoods for millions. However, traditional agricultural practices often face significant challenges such as limited market access, inefficient supply chains, and fluctuating prices. These obstacles prevent farmers from reaching broader markets and optimizing their profits.

With the rise of digital technology and e-commerce platforms, there is a unique opportunity to address these challenges. Platforms like Agricart, an agricultural e-commerce platform, aim to close the gap between farmers and customers by providing an online marketplace for agricultural products. This facilitates direct communication between farmers and buyers, reducing reliance on intermediaries and ensuring fair pricing.

This study is driven by the need to address these pressing issues faced by farmers in accessing markets and achieving economic sustainability. By examining the implementation and impact of Agricant, the research seeks to explore how e-commerce platforms can contribute to the growth and development of the agricultural sector.

Objectives



- To create an online platform
- To streamline the supply chain process
- To analyze the impact of Agricant
- To identify the challenges and opportunities
- To enhance market transparency
- To promote sustainable agricultural
- To increase consumer awareness and engagement
- To ensure general

Scope and Delimitation



This study focuses on the development and evaluation of Agricart, an agricultural e-commerce platform designed to connect farmers and students of USTP - CLAVERIA. The platform aims to address challenges in traditional agricultural markets, such as limited market access, inefficiencies in the supply chain, and price differ.

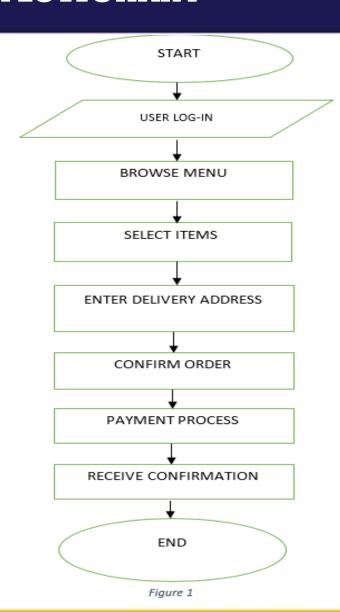
Scope and Delimitation



The study on Agricart: Agricultural E-Commerce Platform is confined to specific parameters to ensure a focused and manageable scope. These delimitations ensure that the study remains focused on the platform's core objectives while addressing practical challenges within the identified boundaries.

FLOWCHART



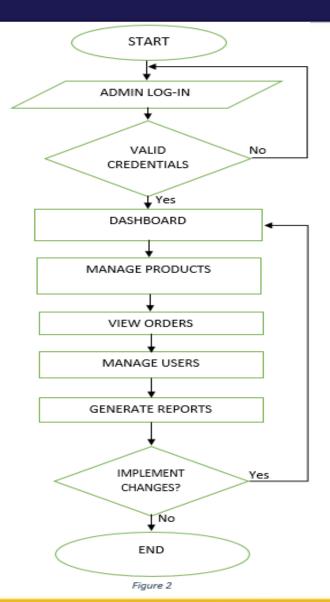


USER

The process begins with the User Log-In. After the user logs in, they proceed to **Browse the Menu** - The user can look through the available items and **Select Items** they wish to purchase. Next, the user is required to **Enter the Delivery Address** (if applicable) - After entering the address, the user proceeds to Confirm the Order. This step allows the user to review the selected items, address, and any other details before finalizing the purchase. Following confirmation, the Payment Process begins. The user completes the payment through the available methods. Once the payment is processed, the user receives a **Confirmation** of the order, indicating that the transaction is successful, and the order is in progress. The process then concludes, leading to the **End** of the session

FLOWCHART





ADMIN

The process begins with the 'Admin Log-In'. Once the admin attempts to log in, the system checks whether the credentials provided are valid. The admin is then granted access to the 'Dashboard'. The dashboard serves as the central hub from which various administrative tasks can be managed. From the dashboard, the admin has several options. First, 'Manage **Products'**, the admin can add, remove, or update products within the system. Second, 'View **Orders'**, the admin can view the list of orders placed by customers, along with relevant details. Third, 'Manage Users', the admin can oversee user accounts, including adding new users, modifying user information, or deleting users. Lastly, 'Generate Reports', the admin can create reports based on various metrics or data points within the system. After performing any of the above tasks, the system asks whether the admin wants to 'implement changes'. If 'no changes are needed', then process ends and If the 'admin decides to implement **changes**', the admin may continue managing the platform to implement changes. The process is then complete, leading to the **End** of the session.

GANTT CHART

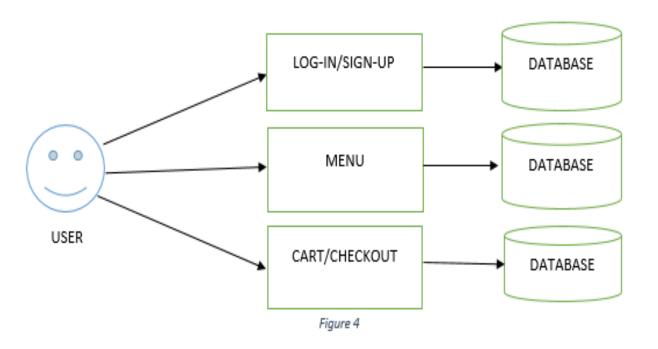


AGRICART: AGRICULTURAL E-COMMERCE PLATFORM					
PROCESS	AUG	SEPT	OCT	NOV	DEC
Planning					
Research					
Design					
Process					
Development					
Database					
Implementatio					
n					
Testing					

- **Planning**: To ensures Agricart's functionality, user acceptance, and scalability, contributing to the digital transformation of the agricultural sector.
- **Research**: Aims to investigate the feasibility, development, and impact of an online marketplace designed to connect farmers with consumers and businesses.
- **Design Process**: Agricant ensures a well-planned and user-centric platform that effectively addresses the challenges in the agricultural marketplace while promoting digital transformation in the sector.
- **Development**: Ensures that Agricart is a robust, scalable, and user-friendly platform that effectively addresses the needs of farmers and students in the agricultural marketplace.
- Database Implementation: Ensures efficient data management, secure storage, and seamless retrieval of information essential for platform functionality.
- **Testing**: Operates as intended, with all features performing according to the defined requirements. The goal is to verify the correctness of specific functionalities and provide users with a seamless experience.

SYSTEM DESIGN

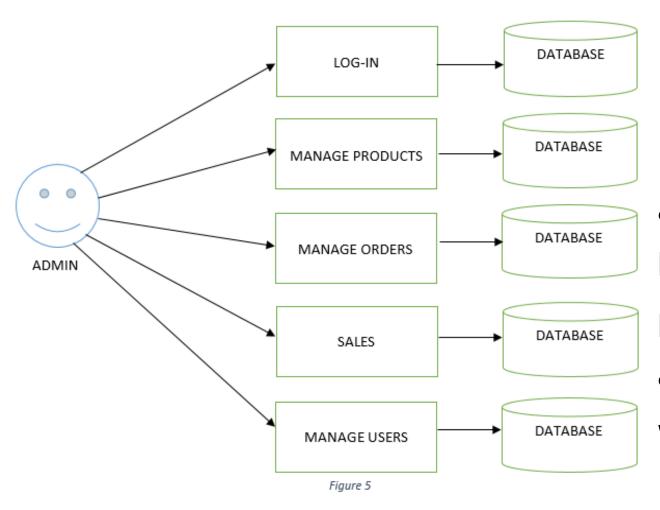




The user interacts with the system by first logging in or signing up. Then, they browse the menu, add items to their cart, and proceed to checkout. Each of these actions interacts with the appropriate database to store or retrieve information.

SYSTEM DESIGN





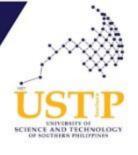
The "Campus Snacks and Fruitful Finds" system uses a centralized administrator (ADMIN) to manage four key areas: order management, product management, sales tracking, and user accounts. Each area interacts with its own database.

CONCLUSION



The development of Agricart seeks to address key challenges in agriculture, such as limited market access, inefficient supply chains, and differ prices, by providing a reliable platform for farmers and students. Through its design e-commerce implementation, Agricart creates a direct link between producers and consumers, ensuring fair pricing and enabling farmers to maximize their profits and expand their market reach. This study highlights the potential of e-commerce platforms like Agricant to drive economic sustainability and equitable growth in the agricultural sector, emphasizing the role of digital innovation in enhancing the well-being of farmers and strengthening food systems.

RECOMMENDATION



Implementing these recommendations will significantly enhance the effectiveness of Agricart, making it a more inclusive and efficient platform. By addressing the diverse needs of farmers and students, expanding market access, and improving logistics, Agricart can play a pivotal role in transforming the agricultural sector. Furthermore, ensuring platform security, offering user education, and fostering sustainable practices will contribute to long-term growth and sustainability in the agricultural e-commerce space.

