PUSL2021

Computing Group Project

GroupA 46

System Proposal
Submission Date: 25th October 2023

Faculty of Computing

Group Members

Student No.	Name
10899541	D Gunathilaka
10899611	T P G M Mahedani
10899664	A M H Prathibhani
10899627	K A Nawoda
10900367	N G U Madhushani

GreenBunny
Digital Marketplace for Distribution of Agricultural Produce

Project Proposal

Table of Contents

4

Table of Contents

Overview

Nations have long relied on the significance of agriculture and the dedication of their farmers. Agriculture and farmers have consistently been the fundamental pillars of nations. The agriculture sector forms the very foundation of a country, and it is of great importance to ensure its growth and long-term sustainability. While agriculture significantly contributes to both local and global economies, farmers play a crucial and an irreplaceable role in this process. The Sri Lankan agriculture sector contributes about 7 percent to the national GDP, and over 30 percent of Sri Lankans are employed in the agricultural sector (International Trade Administration, 2022). In a rapidly advancing world, it is essential to recognize and support the importance of the agriculture sector and farmers. All in all, there is a growing need for a platform that connects farmers, buyers and transportation providers in order to enhance agricultural business operations. Therefore, the development of an integrated digital platform that brings farmers, transportation providers and buyers together, creating a unified and efficient digital market is bound to further revolutionize the agricultural industry. "AgriConnect" is a digital platform that facilitates efficient and effective communication, collaboration and transactions among the three key parties that will in turn result in improved accessibility, agricultural productivity, growth and profitability. This digital platform will create a central hub for agricultural transactions and aims to simplify the process of connecting farmers, buyers and transportation services, thereby, transforming and further developing agricultural commerce. AgriConnect will provide a digital space for farmers to showcase their produce, buyers to place orders and transportation providers to view the locations of farmers and buyers and accept and fulfill deliveries. This platform creates a mutually beneficial setup by enabling farmers to reach a wider market, facilitating quality product sources for buyers and enhancing the efficiency of delivery operations for transportation providers.

Objectives

The objectives of the AgriConnect digital platform are mainly:

1. A wider market reach for farmers – Both small-scale and large-scale farmers are often subjected to limitations when reaching the market to sell their produce. AgriConnect is a digital space that brings farmers and buyers together, allowing buyers to have easy access to products and this in turn enables farmers to reach a much wider market and contributes to cost saving, reduced waste and increased sales and income.

2. Optimized transportation services – Finding a suitable transportation service with a manageable cost is often an inconvenience faced by the buyers. AgriConnect not only solves this issue for the buyers but also provides job opportunities for transportation providers who need it.

3. Enhanced efficiency in the agriculture sector – The overall efficiency provided by this digital platform reduces costs, minimizes wastage, and increases overall efficiency which will in turn lead to improved economic sustainability.

4. Economic growth in agriculture – Through improved efficiency of agricultural transactions and enhanced income of farmers, this platform aims to improve economic growth in the agriculture industry thus resulting in a positive improvement on the overall economy.

5. Enhanced trust leading to fair and just transactions – AgriConnect aims to create a reliable platform for farmers, buyers and transportation providers to engage in transactions with confidence by introducing features such as reviews and ratings.

6. Fresh products for consumers – AgriConnect do not require an intermediary between farmers and buyers which will result in the availability of fresher products for consumers and a higher profitability for both farmers and buyers.

Target Users

The AgriConnect platform is primarily targeted at:

1. Farmers: Both small and large-scale farmers seeking to reach a wider market by showcasing their produce and engage in efficient transactions.

2. Buyers: Businesses, retailers and wholesalers looking for a convenient market to locate quality product sources efficiently with reliable transportation services.

3. Transportation Providers: Companies, logistic services and individual transporters who are seeking to optimize their deliveries by connecting with farmers and buyers and selecting deliveries of their convenience.

Application Features

Features of the AgriConnect platform include:

- ❖ Profiles – The three involved parties, farmers, buyers and transportation providers can create user profiles.

    - Farmer profiles
    - Buyer profiles
    - Transportation provider profiles

- ❖ The online marketplace – An online market is available for farmers to promote their agricultural products where buyers can place orders directly and negotiate prices.

- ❖ Reviews and ratings – A review and ratings system to enhance trust and confidence.

- ❖ Alerts and notifications – Real-time notification of new orders, available products and transportation updates.

Project Timeline

Process	2023				2024			
	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Planning Background Research	███	███						
Analysis System Proposal	███	███						
Design Technical & Functional Specification		███	███					
Interim 01			███	███				
Interim 02					███	███		
Implementation Completed System					███	███	███	███