

Review Article

Mandi Farm: Novel Approach for Farmers as E-Market Place

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ABSTRACT

Keywords

E-agriculture,
Middlemen, Right
amount of yield,
service oriented
scheme, searching
and decision
making

This paper focuses on a web based E-agricultural system where it helps the farmer to access the wide market portal across the world or it's nearby areas. The framework basically removes the problem of middlemen because of which farmer's don't get the right amount of their yield. In this farmer will register into the portal and provide information like quality and prices of their produce with the duration of the produce to be sold which the customer will browse through and buy as per his/her requirement. It also provides a service oriented scheme in which the produce is delivered at doorstep. The algorithm used in this project is searching and decision making.

Introduction

E-Mandi is an online fruits & vegetables store that has made available to provide services to people in making online shopping accessible to them. It is an online website which will allow the people to buy produce very easily and also maintain transparency between the farmer and use. This application helps user to buy vegetables and fruits at its best price. The system provides a well defined interface which helps the customer to browse through various items available easily. There are many important reasons for the productivity of a region's farm.

Related Work

Sheetal Bhagwat, Sandhyarani Lavhare, Sneha Ingle, Nirmal Chaudhari, proposed a method of transforming the traditional way of architectural trading into

an electronic means to exchange between the farmers and consumers in agriculture era by using mathematical and preferential evaluation of buyer and naive bayes algorithm.

Ritesh Kumar Bista, Rahul Patidar, Manjunath C R. proposed a mobile application for mandi using E-Auction which help the farmers to sell their produce worldwide and this process is done by a bidding method i.e the highest bid for the produce is finalize for the payment and farmers are able to transport their produce to the buyers.

Samruddhi Suresh Khandare, Prof. Sushopti Gawade, proposed a information communication technology with digital India in agriculture domain in which the digital campaign by the government is done to convert our country into a smart, economy

cautious and digitally legitimized nation with the help of government services and programs in the agricultural field. N. Viswanadham Sridhar Chidananda Y. Narahari Pankaj Dayama, proposed a mandi electronic exchange which orchestrates the indian agricultural markets so that social welfare can be maximized. Here the matching of buyers and sellers take place on the basis of produce they want to buy by using a mixed integer programming model.

Proposed System

After going through several literature reviews, there should be a requirement of a real time system which will be used to develop a E-mandi farm for the farmers and the users. The main objective of the proposed system is to develop a website that will help the farmers to get the right amount from their produce produced. There will be information regarding the produce which will be available up-to-date in the website. The system gives the choice to the farmers of when and where to sell the produce individually. The users then can have a view of the product they sell and then can buy it and can even provide feedback regarding the produce, service etc.

Prediction System

First we will start, then Sign up at the sign up page, then Login into the registered account, if successful go to next step, Else return to login page again, check for updates next we can, add, delete product, view product, buy the product, then payment is processed for the product. If successful, we will proceed to the next step or else go to buy product and finally we will End.

System Flowchart

The flow will work as: start, users search for

farmers and produce area wise. Then the algorithm will check for the mentioned product in the database. If the record is found and matched the expected result is displayed. If required the steps will be repeated for the new product search. The product matched is further proceed to buy now. If the product is available to buy, then the transaction process is carried on. After the success of transaction, we Stop.

Supplier portal

The suppliers include registration page (figure 4), login page (figure 5) and fill product details page (figure 6).

The registration page includes details of suppliers such as name, mobile no, address, password, aadhar card no. Then the supplier login page includes authenticate information like registered mobile no and password. The product details page includes details of the product like category, quantity, name, price, location of the product.

Retailer Portal

The retailer Portal includes Figure 7 (list of product page), Figure 8(supplier details page), Figure 9(card details page).The list of product pages display the list of products which the customer can order.

Then the supplier detail page includes the details of suppliers from which the customer has ordered his/her produce. The card details page gives the payment details of the customer.

Multi Language

The website has a multi language feature that is the pages can be displayed in around 100 plus languages.

Fig.1 Block diagram of proposed system

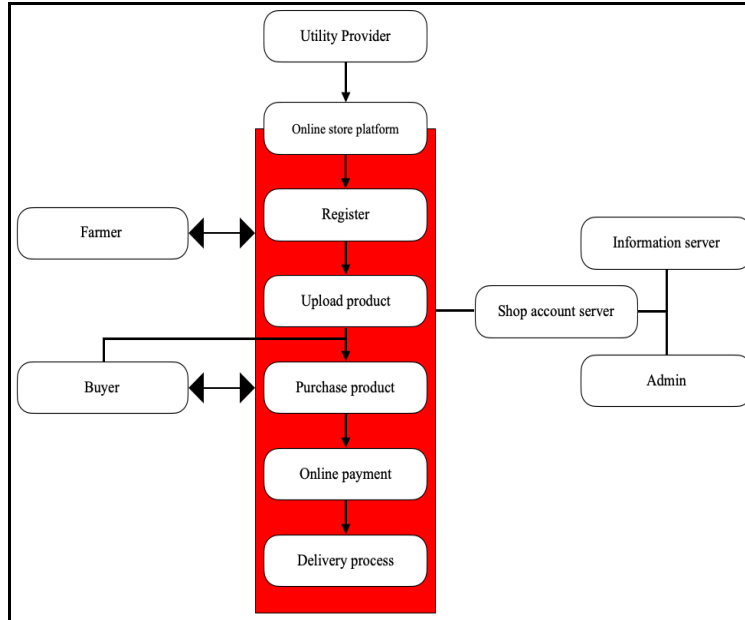


Fig.2 Flow chart

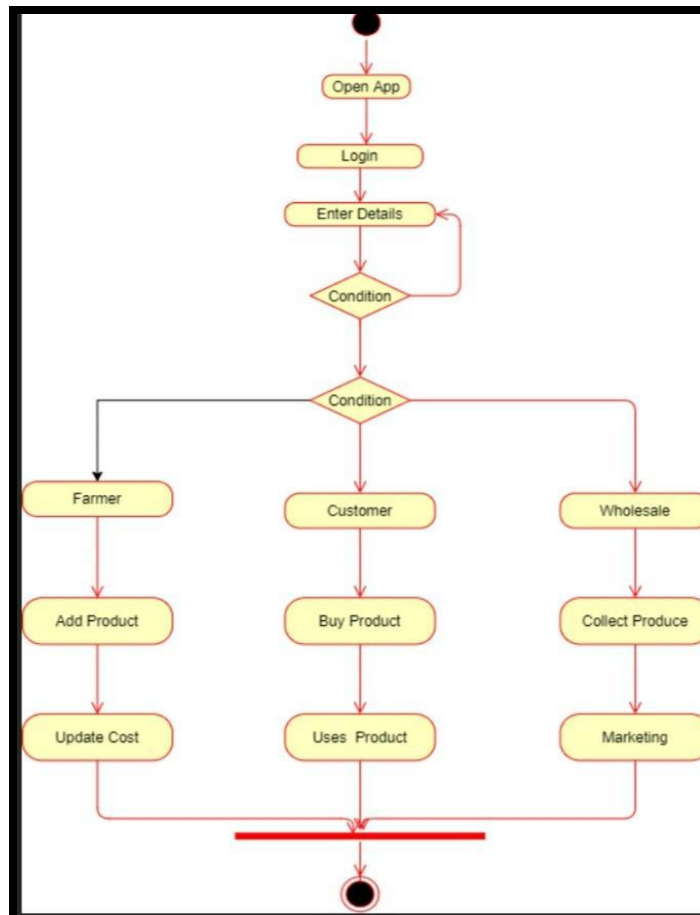


Fig.3 Welcome page of Portal

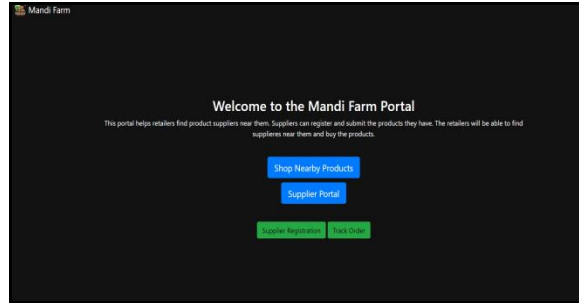


Fig.4 Registration page

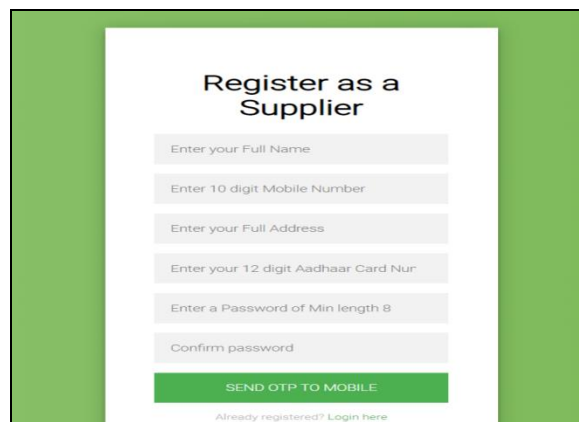


Fig.5 Login Page

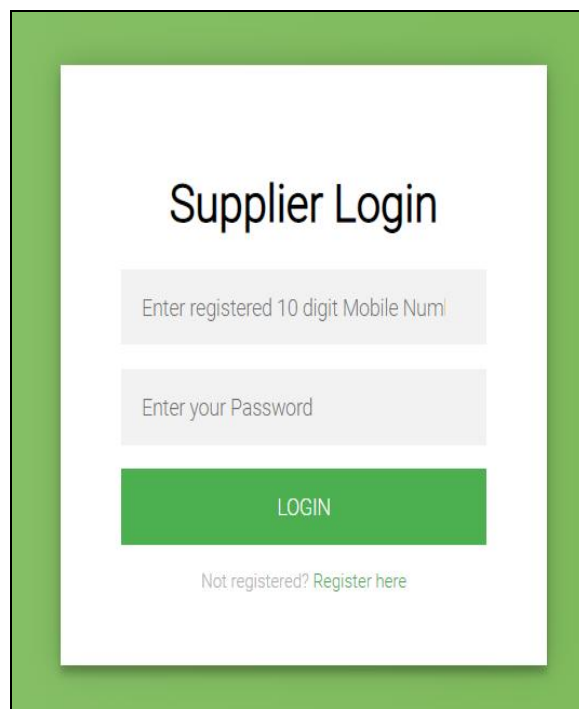


Fig.6 Fill product details page

Fill Product Details.

Select Product Category

Product Name

Enter Product Quantity (Kg/L)

Enter Product Price Per Kg/L

Enter Product Location

Example Format: 23.022306,72.8491124

Upload Product Image(Max File Size is 2MB)
 No file chosen

Fig.7 List of products

List of Products.

Here is a list of products found in your provided range. Check the product details and product images and click on the order button to place an order to the supplier.

Products Near You

Product Id	Last Updated	Product Category	Name	Quantity	Price(Rs/Kg)	Image	Supplier Distance(Km)	Action
22	2020-11-17 00:27:05	Fruits	Apple	1	40	<input type="button" value="View"/>	4.002	<input type="button" value="Order"/>
18	2020-04-17 04:57:38	Honey	Fresh Honey	30	300	<input type="button" value="View"/>	2.478	<input type="button" value="Order"/>
21	2020-11-13 12:22:45	Milk	Cow Milk	20	42	<input type="button" value="View"/>	2.477	<input type="button" value="Order"/>
11	2020-04-16 00:16:15	Milk	Buffalo Milk	20	52	<input type="button" value="View"/>	5.354	<input type="button" value="Order"/>
9	2020-04-16 00:15:21	Milk	Cow Milk	10	40	<input type="button" value="View"/>	5.354	<input type="button" value="Order"/>
23	2020-12-04 18:08:42	Pulses	Moong Dal	1	40	<input type="button" value="View"/>	0.012	<input type="button" value="Order"/>

Fig.8 Supplier details

Supplier Details.

Here are the contact details of the supplier you selected. Fill the below form to place an order.

Supplier Contact Information
 Here is the contact details of the supplier.
Name : Ankita singh
Mobile Number : +91 8369312273
Address : Ahhdkdknxnsb

Place Order.
 Enter the following Details and complete the payment to place an order.

Product Selected - Apple
 Quantity Available - 1
 Price Per Kg/L - 40

Quantity(Max 1): Price(Rs):

First Name: Last Name:

Email: Phone:

Address Line 1: Address Line 2:

City: State:

Country: Pin Code:

Fig.9 Card details

Net Payable Amount ₹ 40.00

Enter Card Details

Card Number
5123 4567 8901 2346

Expiry Date 05 / 23 CVV

Email
manju@gmail.com

Phone
9833270080

PAY ₹ 40.00

By paying you agree to our T&C and Privacy Policy

MasterCard Verified by VISA SECURED BY PayU SafeKey

Fig.10 Details in English

List of Products.
Here is a list of products found in your provided range. Check the product details and product images and click on the order button to place an order to the supplier.

Products Near You

Product Id	Last Updated	Product Category	Name	Quantity	Price(Rs/Kg)	Image	Supplier Distance(Km)	Action
22	2020-11-17 00:27:05	Fruits	Apple	1	40	View	4.002	Order
18	2020-04-17 04:57:38	Honey	Fresh Honey	30	300	View	2.478	Order
21	2020-11-13 12:22:45	Milk	Cow Milk	20	42	View	2.477	Order
11	2020-04-16 00:16:15	Milk	Buffalo Milk	20	52	View	5.354	Order
9	2020-04-16 00:15:21	Milk	Cow Milk	10	40	View	5.354	Order
23	2020-12-04 18:08:42	Pulses	Moong Dal	1	40	View	0.012	Order

Fig.11 Details in hindi

उत्पादों की सूची।
यहाँ आपके प्रदान की गई रेंज में पाए जाने वाले उत्पादों की एक सूची है। उत्पाद विवरण और उत्पाद छवियों की जाँच करें और अनुपूर्विकों को भीतर देने के लिए ऑर्डर बटन पर क्लिक करें।

आप के पास उत्पाद

उत्पाद आई डि	आखरी अपडेट	उत्पाद श्रेणी	नाम	मात्रा	मूल्य (₹ / किलोग्राम)	छवि	आपूर्तिकर्ता दूरी (किमी)	कार्य
२५	2020-12-18 08:45:02	फल	अम	1	40	देखें	0.035 ₹	मना
२२	2020-11-16 18:57:05	फल	सेब	1	40	देखें	0.001	मना
१1	2020-04-16 23:27:38	दूध	गाय का दूध	२०	300	देखें	6.340 ₹	मना
२१	2020-11-13 06:52:45	दूध	गाय का दूध	२०	42	देखें	6.339 ₹	मना
11	2020-04-15 18:46:15	दूध	गाय का दूध	२०	५२	देखें	3.910 ₹	मना

Fig.12 Details in Marathi

उत्पादन आयडी	रोहने अद्ययावत	उत्पादन वर्ग	नाव	प्रमाण	किंमत (रुपये / किगो)	प्रतिमा	पुस्तकादार अंश (किगो)	कृती
25	2020-12-18 08:45:02	फळे	श्रीवा	1	40	मूठ	0.035	अंश
22	2020-11-16 18:57:05	फळे	पर	1	40	मूठ	0.001	अंश
18	2020-04-16 23:27:38	मूठ	राने मूठ	30	300	मूठ	6.340	अंश
21	2020-11-13 06:52:45	दूध	मंडीचे दूध	20	42	मूठ	6.339	अंश
11	2020-04-15 18:46:15	दूध	मंडीचे दूध	20	52	मूठ	3.910	अंश

Fig.13 Details in Malayalam

തയാറിപ്പു ഇ	കാലക്രമം പുതുക്കപ്പെട്ടതു	തയാറിപ്പു വക	പേര്	അവസ്ഥ	വില (രൂ / കി.ഗ്ര)	പ്രതി കി.ഗ്ര	പുസ്തകാ ദാർ (കി.ഗ്ര)	സ്ഥിതി
25	2020-12-18 08:45:02	പഴയ	മാനവ്	1	40	മൂത്ത	0.035	അ
22	2020-11-16 18:57:05	പഴയ	പു.പി	1	40	മൂത്ത	0.001	അ
18	2020-04-16 23:27:38	മൂത്ത	പു.പി മൂത്ത	30	300	മൂത്ത	6.340	അ
21	2020-11-13 06:52:45	പാൽ	മാറ്റി പാൽ	20	42	മൂത്ത	6.339	അ
11	2020-04-15 18:46:15	പാൽ	മൂത്ത പാൽ	20	52	മൂത്ത	3.910	അ

The paper describes an E-agricultural system which basically allows each and every farmer to sell their produce directly at the doorstep of the customer. The database stores the information of the registered farmers, buyers, and the produce information. The farmers of this website handles several activities like updating, deleting, modifying the information of the produce. The payment in this portal is either done through online or as Cash on delivery and payment goes directly to the farmers account. Hence this website will let the farmers get their right amount at their right time without any middlemen or any other involvement of commission agency.

This portal will be easily accessible and even can be comfortably used by both the users and the farmers. This is one of the most important steps for the transformation of agriculture in India.

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