

E-Farming by means of E-Mandi Process

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Abstract – Software are majorly developed on the various domain related issues but they are not much focused on agriculture or bio development issues. Thus the paper focus on the enhancement of agricultural and rural development through improved information and communication processes. It also involves the information and communication technologies in the rural domain, with a primary focus on agriculture. E-Farming is a relatively new term and we fully expect its scope to change and evolve as our understanding of the area grows. This project describes farmer and consumer communication, E-Mandi process and crop rates with daily updates.

Keywords - E-Farming, Communication, Crop Rates and E- Mandi.

I. INTRODUCTION

The World rotate in android based applications now day's. But not so much impacts in field of agriculture , thus it is a necessary that we should develop a software in agriculture field , better known as E-Farming is the android application that will help the farmers to perform the agricultural in most successive way. Information and communication technologies (ICT) play a vital role in Development and Economic growth of the developing countries of the world. E-Farming helps farmers and consumers to take customized agricultural information related to their needs. E-Mandi process helps the farmers and consumers Communication problems using this kind of multimedia gadgets certainly increase the usage of technology more easy and thus its lead to more enhancements in the field of agriculture

II. OBJECTIVES

The main objective of this project is building a android application which will help farmers from Indian villages to sell their products to different city markets. It is a computerized approach for better and clear marketing. Farmers will get unique interface where they can avail everything right from learning to the market information they can perform marketing, get the current rates of market and also apply through E-Mandi process as well as check status of the application. This application will act as unique and secure way to perform agricultural Marketing.

III. E-FARMING

E-Farming will provide unique ID to each user that can be used to perform agricultural marketing and can apply for scheme.

DESIGN AND ARCHITECTURE

We describe the algorithm, which is used to explain how the system is going to work, i.e.he process logic behind it, the flowchart, which represents the pictorial representation of the process logic and finally the Data Flow Diagram of the E-Farming. There is no need of login for normal user who has the curiosity to know about the market information and different schemes. Farmers who want to perform marketing and apply for scheme must have the login username and password. Along with farmers, the agent which will perform the selling of farmer's product must be authorized through the market committee for their license of marketing and after authorization, they will be given authorized agent ID and password. Once availed with the username an password for the application the uses can perform different operations like marketing, communication with farmers and consumers, viewing and uploading the market rates and if the users are uneducated they can upload their information through E-Mandi.

IV. METHODOLOGY

a. MARKET INFORMATION:

It includes the farmer and consumer to communicate with eachother and also they provide the information about their product rate. This will also consists of different product, market wise daily report. Farmers can also search for specific product in particular duration of specific market. SUPPLIER: It includes the information about the tractors, machine's and also the pesticides for the plants for the consumers who need. In this the users can also upload the information about the machines,products. E-MANDI: In this application it consists of mandi system, where farmers get a

very low share of the rupee due to a long chain of intermediaries and cartelisation at the physical marketplace, which adds two major costs: the intermediaries margins as well as multiple handling costs.

V. IMPLEMENTATION

The system will be having login forms for farmer, consumers, admin, E-Mandi where they can login using their user name and password. As per the user name and password the system will know whether user is farmer/agent/consumer/govt officer

7.1 Scenario of Project

Scenario 1: *Farmer*

- Farmers can create new account, login to their existing accounts which will give them the authority to use the services provided by the system.
- Authenticated farmers can sell their products, communicate with the consumers and also they can see the status of machines and pesticides. □ If user select as farmer then there is option to select foe selling the product, check status and for daily updation of crop rates.
- If the user is already familiar with online buying and selling he can directly go to sell his product.

Scenario 2: *Consumer*

- Consumers can also create a new account, log in to the existing accounts which will give them the authority to use the services provided by the system.
- They can communicate with the farmers regarding the product sale.
- The can also check the order status and also gather information regarding the updation.

Scenario 3: *E-Mandi*

- Central authorities can login to their accounts as created by administrator.
- Authorities can access all the details of the market with daily updation.
- They can also view turnover of the market daily, weekly or monthly.
- Validate farmers eligibility for compensation and schemes.

Scenario 4: *Administrator*

- Create and monitor accounts of users.
- Maintain the application.
- Provide the user name and authorities as per user.
- Updates the application.

6.2 Software Implementation

Proposed application is mobile application build using android.

1. First android device sends Sender id, application id to GCM server for registration.
 2. Upon successful registration GCM server issues registration id to android device.
 3. After receiving registration id, device will send registration id to our server.
 4. Our server will store registration id in the database for later usage.
- a) Whenever push notification is needed, our server sends a message to GCM server along with device registration id(which is stored earlier in the database).
- b) GCM server will delivers that message to respected mobile device using device registration id.

VI. RESULTS AND DISCUSSION

There are no computerized and mobile applications for the farmers to sell their product. Currently, the farmers go to nearest market handover his product to a particular agent; agent will ask the farmer to visit the market after a specific time to collect the cash earned out of the sold product. Agent will sell the product to another agent or a dealer at the cost of the market. Every agent tries to cut his commission out of that. There is no way for farmer to know about the deal and the exact amount at which their product was sold. There is no transparency. No facility is present for the farmers to know the product rates at different markets where they can sell their products for achieving high profits. Any times, farmers are not even aware of the schemes and compensation provided by government. In spite of all the opportunities banging the doors the farmers are not able to benefit out of those. Current system does not provide the way of e-learning for farmer that will provide the knowledge of new techniques in farming. So the farmer doesn't get the maximum profit through the current system.

VIII-CONCLUSION

This project will be helpful for farmers to know more about market information; will act as unique interface of schemes and compensation. Through this they will be always in touch of new technique and trends of farming. But some extends, new user may feel some kind of stress about its use. Overall this system is faster, secure and comfortable.

REFERENCES

- Nandagopal S, Karthik S, and Arunachalam VP., “Mining of meteorological data using modified apriori algorithm”, European Journal of Scientific Research, Vol.47 No.2, pp.295-308, 2010.
- Saveetha P and Arumugam S, “Study on Improvement in RSA Algorithm and its Implementation”, International Journal of Computer & Communication Technology, Vol.3 No.6, pp.78, 2012.
- Nithya K, KalaivaaniPCD and ThangarajanR, “An enhanced data mining model for text classification”, International Conference on Computing, Communication and Applications, pp.1-4,2012.
- DhivyaCR, NithyaK and SaranyaM, “Automatic detection of diabetic retinopathy from color fundus retinal images”, International Journal on Recent and Innovation Trends in Computing and communication, Vol.2 ,Issue 3,ISSN:2321-8169,2012.
- Vijayakumar, M., Prakash, S. and Parvathi, R.M.S. “Inter Cluster Distance Management Model with Optimal Centroid Estimation for K-Means Clustering Algorithm,” WSEAS Transactions on Communications, Issue 6, Vol. 10, pp. 182-191, June 2011.
- Vijayakumar M and Parvathi RMS, “Concept mining of high volume data streams in network traffic using hierarchical clustering”, European Journal of Scientific Research, Vol.39,No.2, pp:234-242,January 2010.
- Prakash S, Vijayakumar M and Parvathi RMS, “A novel method of mining association rule with multilevel concept hierarchy”,International Journal Computer Application(IJCA),pp.26-29,2011.
- Saranya M and Nithya K, “Campus Navigation and Identifying Current Location through Android Device to Guide Blind People”, International Research Journal of Engineering and Technology (IRJET), Vol.02, Issue : 08,Nov 2015.
- Nandagopal S, Arunachalam VP and Karthik”A Novel Approach for Mining Inter-Transaction Item sets”, European Scientific Journal, Vol.8,No:14,pp.92-108,2012.
- Gokulraj P and Kiruthikadevi K, “Revocation and security based ownership deduplication of convergent key creating in cloud”, International Journal of Innovative Research in Science, Engineering and technology. Vol. 3, Issue 10, ISSN: 2319-8753, October 2014.
- Saveetha P, Arumugam S and Kiruthikadevi K, “Cryptography and the Optimization Heuristics Techniques”, Int. Journal of Advanced Research in Computer Science and Software Engg , volume. 4, Issue.10, ISSN: 2277 128X, October 2014.
- Vijayakumar M and Prakash.S“An Improved Sensitive Association Rule Mining using Fuzzy Partition Algorithm”, Asian Journal of Research in Social Sciences and Humanities, Vol.6,No.6,pp.969-981,2016.
- Prakash S and Vijayakumar M, “Risk Assessment in Cancer Treatment using Association Rule Mining Techniques”, Asian Journal of Research in Social Sciences and Humanities, Vol.6,No.10,2016.