

E-Farming Bazaar

Mr. Manoj Dane¹ Mr. Rajkumar Pandey² Mr. Nutan Chaudhary³ Mr. Yogesh Bagade⁴
Dr. V. M. Deshmukh⁵

^{1,2,3,4,5}Department of Computer Science & Engineering
^{1,2,3,4,5}PRMIT&R, Badnera, Amravati, Maharashtra, India

Abstract— E farming is an android application that will help the farmers to perform the agro marketing leading to achieve success and increase in their standard of living and provide the farming community with better solutions for the proper management of their crop management, proper use of Fertilizers, diseased plants in better manner. An Authorized-agent would serve as a way for the farmers to sell their products in the different market. The Centralized market committee will have control on the Agents through business activities review. Application will also provide market-wise, commodity wise report to the farmer in interactive way. In rural area, the SMS facility would give the required market information where internet cannot be availed. Government will put forward the new schemes for the farmers. Unique interface will be provided for applying and viewing the schemes Farmers and the Agents will be provided with a Unique ID for logging into their accounts leading towards secure access.

Key words: E-Farming

I. INTRODUCTION

Farmers are unable to get the exact sources of information related to the farming as they do not have sufficient knowledge regarding technology and also the language barrier. There is no as such an existing system, which uses the previous data from farmers under certain criteria, and tries to analyse the previous history, so based on that it work. There are some applications are present which gives the crop rates in main cities, that works under government. Therefore, we developed a system, which uses a mobile like- Android Mobile, or it can be used on an application.

The Agricultural experts are agricultural scientists who give appropriate recommendation by studying the agricultural information system. They use research data, historical data, and other information to generate appropriate recommendation and store the result in the system. The Agricultural Information System is a computer based information system which contains all the relevant information. For example, it contains the details of the farmer with corresponding to crop information. It also contains information on the status of the crop, which is sent in the form of images and text by the coordinator. From the available agricultural technology, the details of various crops (such as the level of pest resistance, water requirement, and so on) are maintained. Each coordinator is associated with a group of farmers. The farmers register into the system by supplying the relevant information including soil data, water resources, and capital availability through the coordinator. For the purpose of this review a study was considered to be on-farm research if the work was located on a commercial farm where at least the potential for farmer participation existed. As a result of the above definition, studies conducted on research stations were omitted. While consideration of parameter specific data collection and sampling methodologies was not within the

scope of this review, it was noted that occasionally papers would discuss sampling strategy for on farm research. Since this is significantly influenced by the design of the study it was decided to briefly touch on this subject within the main report. .

II. RELATED WORK

In paper “Krishi-Bharati: An Interface for Indian Farmer” studied that Nowadays, advancement of ICT make possible to retrieve almost any information from the global repository (internet). Farmers require information at the right stage of life cycle of farming to take right decision. Due to illiteracy they cannot get information. This paper states that user can interact with the system through the icons and result back with their intended agricultural information in Indian language text and spoken forms both. After selecting the icons, the icon to natural language generation module convert the selected icons to text in Indian language. Then keyword extractor module extracts the proper Indian language query [keyword] from that text [1]. In paper “Krishi-Mitra: Expert System for Farmers” we studied that main aim behind this is that people in rural areas are far away from Internet technology, so get collectively information to farmers about crop, here made an one interface. The semi-illiterate people can get the information in Marathi and English language. In this it contains iconic based interface as well as information in speech format. Also that is audio clip. Also if he has some other queries, he can directly contact to expert calling [2]. In paper “Icon Based Information Retrieval and Disease Identification in Agriculture” Most of farmer are illiterate that’s why they are not able to use internet for possible remedies of their infected crops. This paper discusses mainly two features one with an iconic interface where farmer can interact easily and in return system will return in native language. Another feature is an image processing technique in that farmer has to upload image of diseased crops and result will show disease name and possible solution for infected crop.

III. EXISTING SYSTEM

There is no computerized system for the farmer to sell their product. Currently, the farmer goes to nearest market handover his product to a particular agent, agent ask the farmer to visit the market after a specific time to collect the cash earned out of the sold product. Agent sells the product to another agent or a dealer at the cost of that market. Every Agent tries to cuts 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. Many 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 he doesn't get the maximum profit through the current system. Originally, vegetables were collected from the wild by hunter-gathers and entered cultivation in several parts of the world, probably during the period 10,000 BC to 7,000 BC, when a new agricultural way of life developed. At first, plants which grew locally would have been cultivated, but as time went on, trade brought exotic crops from elsewhere to add to domestic types. Nowadays, most vegetables are grown all over the world as climate permits. Traditionally it was done in the soil in small rows or blocks, often primarily for consumption on the farm, with the excess sold in nearby towns. Later, farms on the edge of large communities could specialize in vegetable production, with the short distance allowing the farmer to get his produce to market while still fresh. The three sisters method used by Native Americans (specifically the Haudenosaunee /Iroquois grew squash, beans and corn together so that the plants enhanced each other's growth. Planting in long rows allows machinery to cultivate the fields, increasing efficiency and output; however, the diversity of vegetable crops requires a number of techniques to be used to optimize the growth of each type of plant. Some farms, therefore, specialize in one vegetable; others grow a large variety. Due to the needs to market vegetables while fresh, vegetable gardening has high labor demands. Some farms avoid this by running u-pick operations where the customers pick their own produce. The development of ripening technologies and refrigeration has reduced the problems with getting produce to market in good condition.

IV. PROPOSED SYSTEM

E-farming will provide unique ID to each user that can be used to perform agro-marketing and can apply for scheme. Architecture we describe the Algorithm, which is used to explain how the system is going to work, i.e. the 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. Algorithm 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 schemes 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. During authorization, Farmer need to provide his bank account number, names of product he farms, his personal details, etc. This information can be used for various purposes of marketing. Once availed with the username and a password for the website the users can perform different operations like marketing, viewing the account information, checking the fund transfer after a sale.

V. SYSTEM ARCHITECTURE

A. System Design

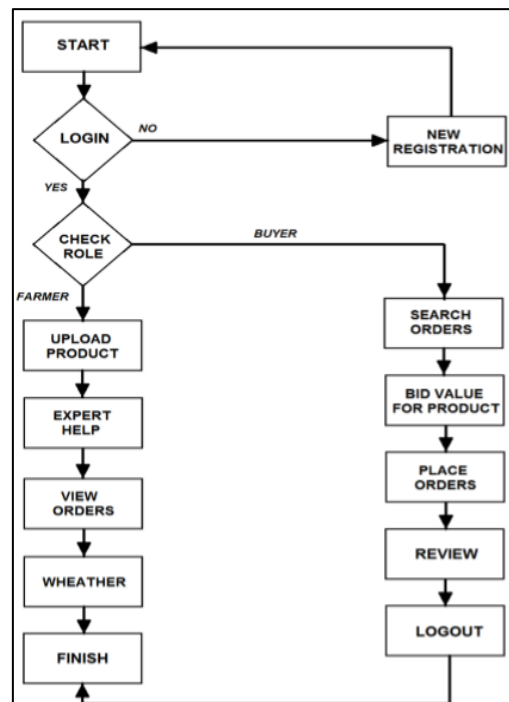


Fig. 1: System Design

B. Flowchart

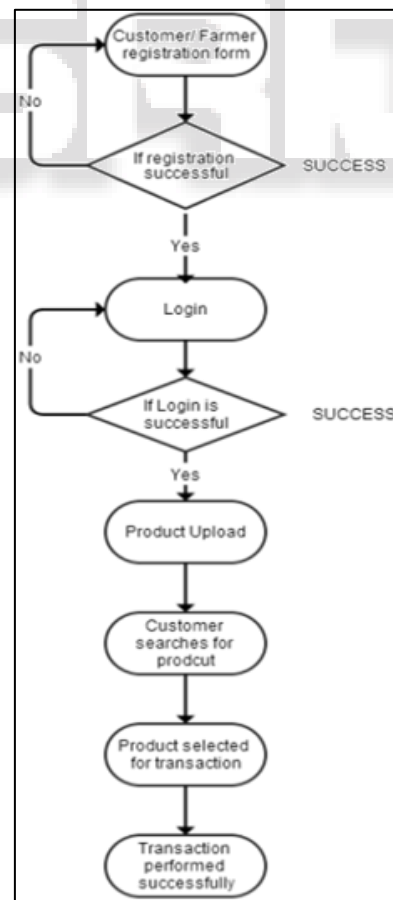


Fig. 2:

VI. ADVANTAGES

- Handy E Farming Transactions
- Free advice from Experts
- Products can be uploaded
- Government schemes can be known

VII. FUTURE SCOPE

E-Farming is very helpful for the young farmer and provide them useful information regarding the plantations that they have grown. Majority of farmers in the state or country are aware that mobile phones can be used to conduct businesses and receive information. Mobile phone costs should be lowered to enable majority of farmers for having access to the current information about agribusiness within the state or country. The government should also conduct sensitization to create awareness for the farmers on how best they can use information technologies to conduct agri business. The present work on E-Farming conveys the information regarding agricultural details to farmers in SMS via SMS gateway. The details such as daily alert, seasonal alert and other additional details can be sent to farmers. The daily alert can be sent to all farmers in the database. Seasonal alert can be sent to farmers only for selected farmers based on clustering result.

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. Development of this application will help farmers to sell their crops and related products. Also Crop diseases can be easily verified and solution can be found out on that.

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