

Android App to sell the products directly by Farmers

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Abstract:

Farmers are facing lot of problems, They will cultivate crops and other agricultural products (fruits, flowers, vegetables), They want to sell their products according to the market price but lack of knowledge they will sell their huge amount of products for small amount of money to the brokers available in the local and customers will directly approach to the brokers because of this farmers are losing lot of money, they are getting cheated, Farmers know that they are selling products to broker for small amount of money, but lack of knowledge to the farmer we thought of doing an application that can help farmers can directly sell their own products to customer with no brokers. Customers can directly contact to farmers, Farmers can sell their own products retail or wholesale according to their quantity of production in the farming to the customer directly, To get aware of all these problems and to get knowledge to the farmers this application is needed and, To bring the choice to any kind of farmer to create an environment that will let them buy or sell their agricultural products, Languages used Java, Language available Hindi, English, Technologies using Android Application.

INTRODUCTION

As we step forward into the modern era of technology, we may find many engineering related applications very beneficial for improvements into the society. This is the world of technology where people use smartphones for completing their daily tasks like shopping, paying bills, managing work and much more. The idea of this project is to add its features into the lives of the people so that the food which they buy can be bought directly from the farm so that the profit can reach directly to the farmers. Because in India we follow a supply chain of farm products making things too indirect for the farmers due to which the farmer still remains poor and the intermediates are gaining profit which ultimately makes them rich. So in order to break that supply chain of indirect sales, we can make use of this application

so that the farmer can be connected directly to the customer and the selling can be done accordingly. Since the farmer will be dealing with the customer directly so the prices of the products offered by the farmer to the customer will also be affordable to the customer, which will help both the farmer and the customer where the customer can save some money and the farmer will gain extra profit that he deserved.

Agriculture is the main occupation of the bigger part of Indian population. 60-70 % of Indian population is totally depends on agriculture sector for their living. The main difficult task for farmers is information access and management for the quantity of data and the complication of processes in precision farming. The data for farming like crop life cycle detail, seeds, crop selection, crop processes weather, pesticides, fertilizer etc. are

accessible from a lot of different sources like newspaper, printed media, audio and, mobile, TV, internet, visual aids etc. but the structures and formats of data are different. So it's extremely hard for farmer to get exact information and to know variety of information which have distributed from diverse sources. Sometime several manual steps are essential to handing out data for translating data from one format to another format. The succession in the crop growing production directly increases the Indian economy and vice-versa is also correct. To modernize farmer's life there is necessary to give finest technological solutions to the farmers. A lot of techniques and methods are being developed in order to assist the agricultural routine activities. Mobile apps in the field of farming can be the most excellent option to boost farming production in country. The new inventions in technology in

agriculture area are not easily getting to the farmers due to lack of knowledge. They don't know the source from where they can get valuable information. Hence, no of farmers are being unsuccessful to gain probable production rate. Therefore it is necessary to develop a user friendly system from where the essential information is accessible by farmers. Many new opportunities are produced by smart phone technology for farmers. Farmers are easily capable to get agriculture mobile application on their smart phone to obtain various facilities which couldn't existing on their hands before. In the days of economic crisis, agriculture is becoming very important. Numerous mobile applications have been developed for gaining of information in the field of agriculture like livestock

management, Agro Mobile, Krishiville etc. This paper deals with the study of existing android based applications which are helpful for farmers and design and development of best app for agriculture which include various diverse services for farmers.

LITERATURE REVIEW

There are a variety of Mobile app developments in the marketplace, designed to make farming easy. Some mobile applications have designed to specifically provide information services to farmers. In this work various research paper and Mobile App have reviewed related to agriculture sector.

Santosh G. Karkhile, Sudarshan G. Ghuge "A Modern Farming Techniques using Android Application" 2015[1]-In this paper researcher given a entire idea about develop a mobile phone based solution that helps in farm management, leads to agricultural yield improvement and helps in farm maintenance. Researcher explain that traditional farming tolerated unexpected environment where as, Modern farming provide expected environment by weather forecasting. Traditional farming requires large amount of labor and different activities for conducting farming. Alternatively Modern farming does not require huge amount of labor as the mobile, machines and new technology take care of the whole thing. This mobile application provides real time weather information, news and market prices at diverse locations and all information is provided in local languages. So, all the outcomes of researcher application are aid farmer to improve their agriculture to yield more earnings. author expand the System

Architecture for the farmer app which include different operations like registration of farmers Weather forecasting, News and feeds, Multiple language support, Market trading.

Suporn Pongnumkul, Pimwadee Chaovalit, Navaporn Surasvadi “Applications of Smartphone-Based Sensors in Agriculture: A Systematic Review of Research” 2015[2] This research represents reviews on Smartphone applications that use Smartphone built-in sensors to give agricultural solutions. According to agriculture function applications are categorized. Researcher literature review describe different types of agriculture application like farming applications, farm management applications, information system applications and extension service applications. Various functionality in farming make simple using this application like Disease Detection and Diagnosis, Soil Study ,Crop Water Needs Estimation, HR Management, Information System Applications , Extension Service Applications This review paper focus that GPS and cameras are the most trendy sensors used in the smart phone application for farming.

Alcardo A. Barakabitze , Edvin J. Kitindi “New Technologies for Disseminating and Communicating Agriculture Knowledge and Information: Challenges for Agricultural Research Institutes in Tanzania”2015[3]-In this paper researcher explores how a extensive range of Information and Communication Technologies (ICTs) accessible in Agricultural Research Institutes (ARIs)and how farming researchers make

effective use of a wide range of ICT tools allied to ,crop variety, land use, irrigation, soil nutrients requirement, weather report, pest and disease control, awareness about crops, pollution control, and new farming techniques.

K. Lakshmisudha and SwathiHegde “Smart Precision based Agriculture using Sensors” 2016[4] Author represents wireless sensor networks which can help bring about a great revolution in automating agriculture field. This research project makes plant monitoring process easy as well as reduced human effort in farming day to day activity. User can produce customized environment to the plants. This application provides most favorable growth conditions using different sensors.

Hemlata Channe and Sukhesh Kothari “Multidisciplinary Model for Smart Agriculture using Internet-of-Things (IoT), Sensors, Cloud- Computing, Mobile-Computing & Big-Data Analysis”[5]-In this research the proposed architecture of multidisciplinary model is shown which consists of the five modules: 1) Sensor Kit Module. 2) Mobile App Module. 3) Agro Cloud Module. 4) Big-Data Mining, Analysis and Knowledge Building Engine Module. 5) Government &Agro Banks UI In second module researcher explores uses of Mobile applications for farmers. researcher focus on main three part a. UI for farmer b. UI for agro marketing agency c. UI for agro vendors including fertilizer. By this module all the agriculture related entities are linked together, this model also make possible supply of harvested crops to the agro marketing agencies and different agriculture products and services from

agro venders can get by farmers on this app. This model also facilitates estimates of total production per crop in region wise and state wise, total fertilizer requirements. This will be helpful to keep the cost of agricultural products in control. Through notifications farmers also informed about current schemes for agriculture.

Shailaja Patil and Anjali R. Kokate “Precision Agriculture: A Survey” 2015[6]-In this paper researcher explores how different mobile phone application and precision agriculture services have impacted the farmer’s life in their agricultural activities. Android apps offer proficient functionality to be grown-up with technology. In the ground like precision agriculture farmers get extra benefits from the mobile apps which are developed for the agriculture monitoring purpose and vital information exchange. Mobile apps that are use for agriculture monitoring are of special types which provide information like weather information, market rate and availability, government scheme details etc. Author provides following some apps details used for monitoring and data information exchange purpose. 1) Mkisan application: This android app is designed and developed by CDAC Pune. This app is useful for assistances to farmers. 2) Shetkarimasik android app “ShetkariMasik” is extremely popular monthly magazine in the farming sector since 1965. Department of Agriculture in Maharashtra published Shetkarimasik mobile app. The important feature of this app is after registration process without use of internet user can upload information on the portal 3) Farm -o-Pedia this app has been developed by CDAC, Mumbai.

Multiple language support facility is provided by this app. This Android application is intended for farmers or anybody linked to agriculture in rural Gujarat. This application is available in English and Gujarati language. The functions of the app are: Obtaining crop-wise information, Monitoring suitable crops according to soil and season, monitor weather and managing cattle in the herd etc. 4) Markets near me -This mobile app is use to get the market price of crops in the markets in the area near of 50 km of user location. It captures the location of mobile user through sensor and displays the crop’s market price of markets nearer to the user.

Shubham Sharma, Viraj Patodkar, Sujit Simant, Chirag Shah Prof. Sachin Godse “E-Agro Android Application“(Integrated Farming Management Systems for sustainable development of farmers) 2015[7]-In this paper author explain software application which is essentially for sustainable growth of farmers. A lot of time farmer is confused to get decision regarding selection of pesticide, fertilizer and specific time to do particular farming actions. So to minimize such type of problem this application is very useful for farmers. Fertilizer schedule is registered for various crops. Based on sowing date of crop, farmers get reminders about use of fertilizer as per plan. Additional advice are also given based on soil type, climatic condition etc. This system merges modern Internet technique and mobile communication systems with GPS for proficient and smooth farming.

Existing System

There is no computerized system for the

farmer to sell their product. Currently, the farmer goes to the nearest market handover his product to a particular agent. The agent asked 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 reduce his commission out of that. There is no way for farmers 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. In spite of all the

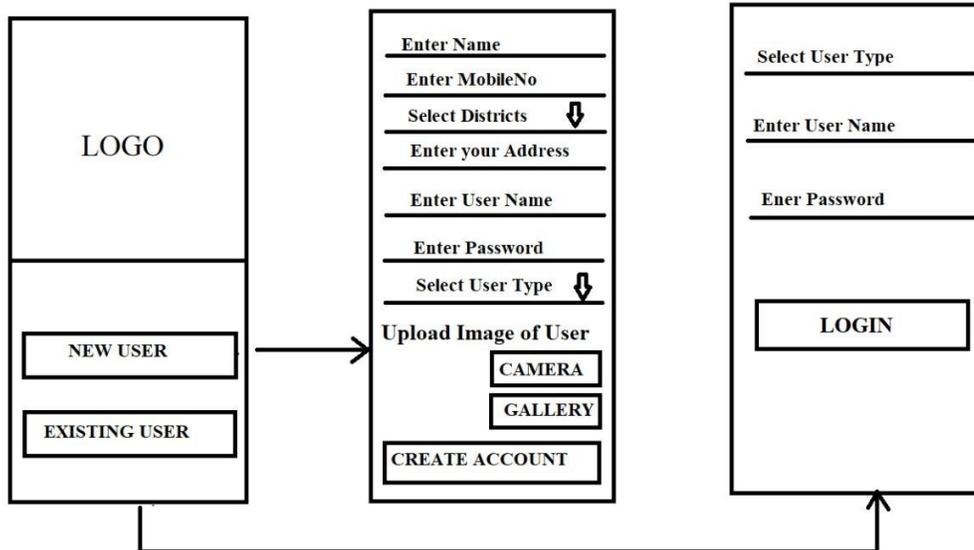
opportunities banging the doors the farmers are not able to benefit out of those. So he doesn't get the maximum profit through the current system.

Disadvantages:

Here farmers are unaware of market prices , by thus the vendors will buy the products for less price and sell them at a high price. Farmers are getting less returns for their investment due to manual selling of their products. Due to middle-men and their commission farmers are getting low profits. No transparency of current market prices and demand for their products.

learning to the market information they can perform marketing, get the current rates of market, This mobile application

Proposed System



The main objective of this project is building a mobile 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

will act as a unique way to sell their products.

Advantages:

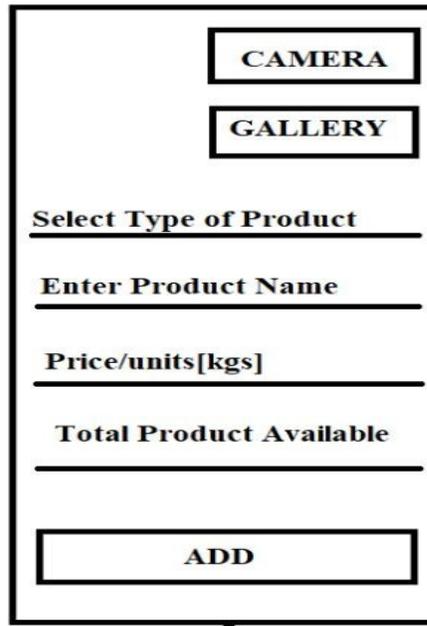
Farmers will get to know the current market prices and demand of their products. Farmers can earn more profits by selling their products in my mobile application. There will be transparency

about current market prices and demand for their products. Elimination of middle-men and their commission.

DESIGN



CONCLUSION



imperative information services and platform for interaction in one app. This mobile app will fulfill all the agricultural needs of the farmer in one touch on any time at any place.

GAP ANALYSIS

The researcher has reviewed various articles which are related to agriculture and development of mobile applications for farmers. Researcher also found that there are many mobile applications made for farmers in different countries related to diverse services but to fulfill rural farmers demand researcher will design and develop user friendly mobile application which provides multiple features in one app like diverse information services as well as interaction platform for farmers and agriculture people along with information about organic farming. This will more beneficial to farmers to get all

In the rapidly expanding digital ecosystem, the mobile apps has surfaced and attained enormous importance. For the advancement of the agriculture sector, mobile apps are introduced – to help the farming community. India is the country which is mostly depended on agriculture. There are various new technology develop for agriculture. Indian government also provides extra facilities for the farmers to improve their productivity. All the imperative information and plans regarding farming is not timely reach to the farmers due to unfair management. The majority of the farmers do not know about uses of new technologies in agriculture. Thus, in order to bridge this

gap between farmers and new technology as well as government aids to improve agricultural growth researcher will develop a novel solution. This mobile app will define the necessary procedure and model to make farmers aware about new diverse knowledge about agriculture and also help them to improve agriculture in our nation.

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