E-Commerce Application for Farmers

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Abstract: Indian farmers faced many challenges and one of them is that to get a good profit for the efforts and investment that they had put in. There exist different reasons like season limitation, crop life due to which farmer get very limited amount of time to study the market conditions. The study of flourishing crops and products in current market under agriculture sector is very necessary in order to obtain good price. Since it is not feasible to reach all merchant physically for farmers as it consume much time and efforts wherein our farmers has limited amount of time. Also traditionally, methodologies implemented by farmer created limited access to client (merchants) enabling less options to sell the crop product in the market. So by introducing new marketing method wherein farmer can sell his crop or product at each layer of marketing chain (merchants, markets or directly to end user) along with multiple options becomes necessary. Also there was no transparency from government’s point of view wherein the selling of crop at minimum base price was not traceable ultimately, which was not fulfilling the changing demands. Thus the platform and modern techniques will help to sell the crops at different layers of marketing chain providing multiple options. In traditional marketing scheme, farmers had limited option for selling their crops/product due to which they cannot optimize their crop profit at optimum level. When government set minimum price for maximum quality of crop/product, it’s quite difficult to set and implement such rules and regulations. Thus it becomes necessary to establish such system which will help to resolve farmer’s problem time to time using digital platform and technologies in order to remain updated with changing requirements.

I. INTRODUCTION

Agriculture is an essential livelihood for 2/3rd population in India. Farmers do this agriculture not only for their survival but also to serve their country. Majority of the farmers are economically backward due to several reasons. One among them is being misleading by fraud agents by buying agricultural products at lower rates and letting them to be in loss. After yielding crop/product farmer has a limited amount of time to find out nearest market, current stock details & to determine which market will be more profitable for his crop. The study of market situation takes a lot of time. In traditional marketing scheme, farmers had limited option for selling their crops/product due to which they cannot optimize their crop profit at optimum level. When government set minimum price for maximum quality of crop/product, it’s quite difficult to set and implement such rules and regulations. It is difficult for government to handle overhead raised price due less availability of stocks in markets as well as fill up the necessity of crop/product in the market. Because government do not have necessary data to predict such conditions before facing actual problem & figure out possible solutions.

Thus it becomes necessary to establish such system which will help to resolve farmer’s problem time to time using digital platform and technologies in order to remain updated with changing requirements.

II. LITERATURE SURVEY

An Android Agriculture Commodity Price Information Application by Utilizing Restful Web Services

This paper proposes the utilization of information mining to supply recommendations to farmers for crops rotation and identification of acceptable plan. [1].

Agriculture Marketing Using Web and Mobile Based Technologies

This paper involves necessary reforms coupled with proper price discovery mechanism through regulated market system will help streamline and strengthen agricultural marketing. Through this web Application we can make sure it is profitable for both the farmers and consumers[2].

An Effective Agriculture Marketing By Using Android Based Application

This android based application on agricultural marketing is a very effective way for farmers to sell and buyers to buy their products. This application is portable and can be easily installed and used on any mobile phones supporting Android OS.
use of this application can result in a reduction of fraud agents who try to get the products from farmers without proper intimation. It also provides an interface between the farmers and buyers where the communication is done directly. This is the easiest way of agricultural marketing[3].

Digital Market : E-Commerce Application For Farmers

Analysis of Market location, stock details and its demand can be done within less time and with less effort.Crop profit can be optimized to maximum level due to multiple options, modern marketing methods and market analysis details that is available for the study.Government module has the authority to set the minimum price for minimum quality of product/crop[4].

Web-based Agricultural Support Systems

Web-based agricultural support systems are based on the combination of agricultural science and computer science. By synergizing computer technology and agricultural science, we examine the characteristics of agricultural support systems with focus on the assembling and integration of existing computer systems to agricultural support system. Some preliminary and scattered ideas on the topic were discussed. The WASS may play a significant role in agriculture development in future[5].

III. DESIGN AND DEVELOPMENT OF THE APPLICATION

The mobile application is constraint to particular markets within the mobile phone. Since there are multiple markets the prices may vary for particular product. As the number of farmers who sell the product are also different. Their price and quantity constraints differ from others. Mobile application will be constrain by the capacity of the data base, it may be forced to queue incoming requests which increases the time to fetch the data.

System is providing platform such as android application at government level wherein farmer can see the minimum selling price of the crops and the market rate. This platform will help farmers to find out nearest markets, its current stock details and its demand for particular product within less time & with less effort. This analysis will thereby help to determine which market will be more profitable for his crop/product. here we are providing a complaint box for farmers to launch complaint, e.g. :- suppose any merchant offers less price than the government’s specified price for minimum quality of crop/product then farmers can directly launch complaint against him via the complaint box. This complaint will be registered in government’s database so that government can take action on it.

This application also provides youtube links to the farmers who would like to know about the modern farming. The farmers from ages have been using traditional methodology which might not give the same output as the modern technology. The blog support has been provided in this application where users or farmers can share their views about the different agricultural methodology. Farmers can sell their second –hand equipments through this application which can be usefull for many users.

Figure 1.1: Design of Agricultural Application

This diagram is for better understanding for Agricultural Marketing. Mainly intended for Farmers, Buyers, Admin and Products. This detail given above guides every normal user to how to go through this document for better understanding. The sequence to follow for better understanding is here purpose, scope, features, operating requirements. Modules present in.
The main functionality of this application is to display in various markets of Karnataka and the prices of every agriculture product. It provides a best interface for the farmers to sell their products through android mobile phone application. Quantity, buyer and seller information. The app contains different components such as Buyer, Seller, and Agricultural Marketing Executive, Administrator and Product price, quantity details. This app functions can be described in the below lines.

Sellers: The sellers are the farmers who are producing the variety of food grains for mankind. Produced items can be selling through mobile phone which gives complete information about the market place and their product cost.

Buyers: The buyers are the customer who wants to purchase food grains from farmers. Buyers can contact these farmers using the details provided in mobile app. They can access farmer’s details by clicking the buy option seller’s details.

Market Executive: The Market Executive is a government employee who decides pricing of every agricultural product. He updates time to the rates of products on daily basis and made available to the farmers. He also gives price list the administrator to provide these details on the online portal.

Administrator: The role of administrator is to add the buyers and sellers, and provides the price list to both buyers and sellers. He controls and monitors the system. The app provides the options for language selection like Kannada and English for registering the product and buying the product. It also provides the list of items available in the market and their price list. It can intimate to buyers and sellers about the stock details at various market places in Karnataka.

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V. CONCLUSION

This application is portable and can be easily installed and used on any mobile phones supporting Android OS. The use of this application can result in a reduction of fraud agents who try to get the products from farmers without proper intimation. It also helps farmers to sell second-hand agricultural equipments to different users. This also provides youtube links for farmers who want to know about modern agricultural methodology.

This application can be further enhanced and several other functionaries can be added. The system can be made login independent. The present system logs in using Internet all the times. We can enhance the system by implementing offline also.

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