AGRICULTURE EQUIPEMENT RENTAL APP

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***Abstract*: Farmers are facing lot of problems, They will cultivate crops and other agricultural. 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 formers 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. Mobile internet will help the farmers to sell their products directly to consumer. This paper provides market information to a farmer using its easy interface on the mobile application. The mobile application is intended to be used for fast and updated information delivering system for farmers. Also, it has native language support to make the transaction easy for farmers. The mobile application treats farmers as a seller and a buyer. The intention behind this paper is to help farmers so they buy or sell their agriculture goods and products. Market prices provided by data.gov.in lets the system to keep the selling and buying prices in control. As the products are to be browsed and there may be plenty of products for the user. To make browsing easy many filters can provide. Farmers face many problems while selling their goods and products, this system promises to provide an easy and recreational way to sell the products. The system lets the farmers to sell goods at a reasonable price and makes business even fair and transparent. Consumers are the opposite side of the same coin. This system lets consumer to choose from a wide variety of products, select the product as per their requirement and also to apply price filters. Location is a one of parameter for consumer and producer while selling or buying their product it will helps the user to get the product nearby their location. The basic objective of the system is to considers every one need and full fills their requirement with fair and transparent agriculture business.

***Keywords*: Android App, Users, Market, Rental, Agriculture.**

INTRODUCTION

In today's world, Farmers are the spine of India. 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 smart phones 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

1. PURPOSE

Most of the day-to-day activities are done using mobile apps, even the same for the farmers. The mobile apps have given many benefits to farmers starting from better land management judgements to quality yield. Farmers are using different types of apps to review the health of the crops during the crop cycle. Some of the mobile applications are developed to help the farmers in lots of ways like horticulture, crop management etc. Also, some mobile framer applications inform the farmers about the weather forecast, agricultural field opportunities, expert suggestions, answer to the questions, etc. Aloof, some of the apps also offer details related to the quality of soil, the utilization of fertilizer's, etc. The solution for solving such various problems occur on farmers regarding to agriculture can be overcome using this android application. This android application is an application that is accessed over a network such as internet or intranet. Both users can use this application in Marathi and English language also. Therefore, with this new method the process will be more efficient and safety of hiring agricultural equipment as well as secure. It is also the best way to increase the quality of agriculture management, productivity and can reduce the time constraints for farmers. We proposed a system to make the farmers aware of the current market rate of the product. This type of system is much beneficial for the young generation to adopt to the traditional farming technique. The benefits of our project is Avoid bidding problem and Cost is not the issue because of the mobile based application.

EXISTING SYSTEM

In today's world, Farmers are the spine of India. 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 smart phones 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.

OBJECTIVE OF SYSTEM

- To support requesting for required data within less time.
- All users will have easy and fast access to the information.
- To create a mobile application that the farmers can use to hire agricultural equipment as well as other machineries related to agriculture at a normal amount using their mobile phones.
- To create an interface between farmers who want to hire and those who want to let out

equipment.

- To save time and money of Users.
- The system which shows and helps you to farmer for buying equipment's .
- To undertake the business of letting big farm machinery for farming at village level.
- To take available service centre of sophisticated and costly farm implements.

LITERATURE SURVEY:

Gauravjeet Dagar in his study stated that the fundamental motivation behind promoting data framework Marketing Information System (MIS) is to support farmer to understand the different marketing strategy which advertising basic leadership and showcasing endeavors of business people and agriculturists. The Author said efficient information about the real market prices should know by the farmer and if it would be available in a single platform then the farmer will get the benefit. In any case, the data is additionally helpful for different sorts of associations, for example, government, advancement associations, academicians, and scientists. The accessibility of auspicious and exact data to every single invested individual is on sequent fundamental, regardless of whether it be given by the administration itself or by the private part. This paper investigates the different sorts of farming advertising data frameworks pre-dominant and endeavors to give a wide point of view on promoting data framework. Utilizing an illustrative approach, it endeavors to portray applicable horticulture advertising data frameworks, and examine them to create thoughts and bits of knowledge which might be valuable for creating and fortifying MIS in agribusiness segment [1].

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Shakeel-Ul-Rehman et al stated that there is a need to change the marketing strategy of the agriculture business author said its time to adopt the technology for selling and buying the agriculture products. It's also stated that there are various problems and challenges for agriculture business marketing lack of knowledge of the market, lack of knowledge in agriculture.[2]

"Abdul Razaque and Md Salleh Hassan in their study stated that the mobile phone playing the important role in agriculture development mobile phone use in developing nations is assuming a crucial part for the upgrade of farmer business towards farming. As of late, correspondence through mobile phones is viewed as essential in improving ranchers' entrance to better comprehend rural market circumstance. The usage of mobile phones internet is increasing rapidly among people for obtaining the information about related issues, problems and their solutions in the field of agriculture the mobile phones are playing important role in developing country like India it has also reducing the communication cost and information cost in agricultural business. Cultivating people

group acknowledges mobile phone as a simple, quick and helpful approach to convey and find provoke solutions of individual issues. These days, the cell phone has created an open door for the ranchers particularly to get the data about promoting and climate. Through this critical innovation, they straightforwardly stay in contact with advertise personals and offer they are creating with sensible costs. The utilization of mobile phone additionally keeps them mindful of climate conjecture for farming information application like compost and pesticides which may be influenced by unanticipated fiascos as imparted by the metrological office. This gadget has given new course and way to deal with ranchers to impart straightforwardly and share about late advances with each other. The examinations demonstrated that cell phones have spared vitality and time of agriculturists and eventually enhanced their wage. Cell phones have given a chance to the ranchers to discuss straightforwardly with showcase representatives and clients for offering their item at a great cost. [3]

The data correspondence innovations are expanding in creating nations for the advancement of various individuals, for example, educationist, specialists, and agriculturist. The ranchers are one of the huge groups in creating nations where they have not offices in their general vicinity for increment their item and pay. The cell phone is expanding among agriculturists yet at the same time, there is whole accessible among business, clients, and ranchers.There is a need to upgrade diverse task about cell phone advancements where agriculturists could get simple access to speak with individuals to offer their products in the showcase. The administration and other related division ought to likewise plan to achieve these ranchers and give the most recent data about seed, climate, and market on the time and give a great cost of their item [4].

PROPOSED SYSTEM

Android has an incredible ability to solve real life problems. Problems are mainly based on two factors, time and money. The problem encountered was to create a provide a platform to the farmers where the produce from the farms can be easily sold at better rates, pooling or sharing of the transport to take the produce to the markets and to help farmers in to take precautions based on the forecast of weather. Since it is an android application, it is supported by all android devices or smart phones which are easily accessible to the users. The availability of various functionalities like buy/sell, transport and weather forecast helps farmer to get what they want saving their effort and money.

This android application will help the farmer to sell their produce quickly under the right price. The transportation feature will help the farmer to transport the produce from one place to another because the transportation cost will be shared. The freshly cultivated product can be bought directly from the farmer at the right price. It is indeed a very long process to grow crop. They expect to get some profits. For this system where the farmer can upload his produce details and can directly contact the customer is developed. Sharing of transport can help in reducing the overall transportation cost for farmers. Precautions based on weather forecast of rainfall can prevent loss of stored produce. Also, crop guidance based on seasons will be provided in this application

SYSTEM ARCHITECTURE

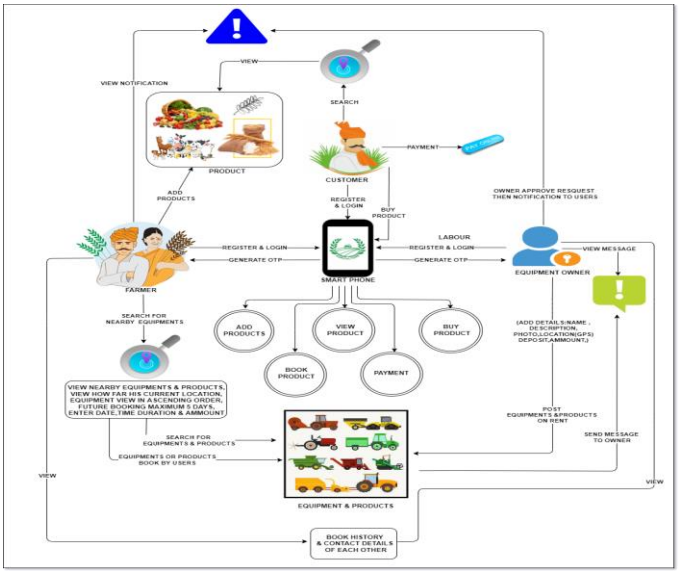

Fig -1: System Architecture Diagram

ADVANTAGES

1) **Enhance Business Processes:** To be able to use internet technology to improve the process of demand and supply of Equipment.
2) **Availability:** Equipment can be booked instantly without even going out of the home.
3) **Transparency:** Users will get information about Equipment and will get prior information about the rent he/she has to pay according to hour of service.

4) **User friendly:** We have used two languages in this app. One is English other one is Hindi. It will make it easy for farmers to use this application.
5) **Flexibility:** The farmer can choose long term or short term hire depending upon their needs and can choose any type of equipment they need.

APPLICATION:

1. It is an open source android application.
2. Very affordable as only require the android device.
3. Can be used as a general renting service for farmers.
4. Can be used as an interface between farmers who want hire and those who want to let out equipment.
5. Can be used for large scale agriculture (corporate farming).
6. 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.
7. Use anywhere
8. Low cost rent basis

E R DIAGRAM:

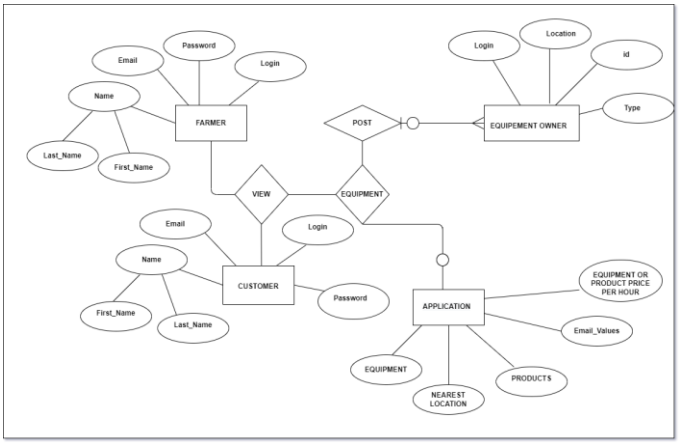

Fig-2: ER Diagram

CONCLUSION

We have designed a mobile application, Our application is user-friendly, open source and is Free to use. It positively impacts the environmental situation by using fewer products a greater number of times. Concentrating on customer satisfaction and the four dimensions, “Reliability”, “Responsiveness”, “Tangibles” and “Quality” helps us to serve the users in a better manner and thus give us a competitive edge over the others. By implementing the project, we conclude that the problem statement is totally being eliminated through the deployment of this project. And the objective is achieved through the android application. The part of our system has been developed with much care that it is free of errors and at the same time it is efficient and less time consuming. The important thing is that the system is robust. We have tried our level best to make the site as dynamic as possible. Also provision is provided for future developments in the system. The entire system is secured. The main motive for the project was to provide dynamic online farmers’ management system to help farmers in every possible way and provide them a stable platform where they can perform every transaction with ease. This system will help farmers and user to get the better return. It protects the interest of both consumers and producers. The communication gap between farmers and retailers/ will be reduced by the app as it will provide a platform for farmers to sell their goods at an affordable price.

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