

Survey on Android App of Agricultural Production Supply System

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ABSTRACT: Agriculture is one of the main livelihoods in India and great impact In the Indian economy. Agriculture sectors net share in the country's GDP is 17.32 %. Society is going through technological era. Rural mobile subscriber base has been increasing steadily over last seven years. With the widespread availability of smartphones and internet, there is a huge potential for supplying essential information via this means. This paper presents an overview of mobile apps targeted to the agricultural sector currently available in Google Play Store, android operating system. In addition, a solution of the given problem is designed and presented in the form of an android application. The paper also discusses the scope of the applications, and what improvements must be made to make them reach to a wider audience. It bridges the gap between the availability of agricultural input, and delivery of agricultural output and agriculture infrastructure.

KEYWORDS: GDP, Google Play Store

I. INTRODUCTION

Agriculture is the primary occupation of the larger part of Indian population. 65 – 70% of Indian population is being dependent on agriculture for their living.

The progression in the agriculture production straight increases the Indian economy and vice-versa is also true. Mobile apps in the arena of agriculture can be the best option to increase countries agriculture production.

Agriculture involves number of activities like sowing, irrigation, fertilization, etc all these activities must be performed in an appropriate time and also in suitable manner for good productivity and proper utilization of resource moreover weather conditions also affect the productivity of crops but most of the farmers do not have proper or up to date information as a result farmer do not perform these farming activities on time or in proper manner. They just follow hit or trial method or old traditional methods this leads to exploitation and wastage of natural resources, also productivity of their crops get affected and so is economy of county

New opportunities are shaped by smart phone technology for farmers are capable with a low cost smart phone and the particular software to gain facilities which couldn't available on their hands before. In the bays of financial crises, farming is becoming more and more vigorous and much more important to be completed efficiently during the time period. Several mobile applications have been developed for livestock management, agro mobile, etc. this paper deals with the analysis of available android based applications which are useful for farmers.



Fig 1.1 Indian Agri Supply Chain Current Satate

II. LITERATURE SURVEY

2.1 KISAN MANDI APP

Kisan Mandi were a part of kisan mandi online agriculture market private limited. Kisan Mandi.com is the online agriculture market where you can buy or sell or advertise fruit and vegetables. Kisan Mandi is a free for a farmer, and they are not changing anything from farmer. Farmer can sale their product. It's dealing with the customer directly so the prices of the products offered by the farmer to the customer will also be affordable to 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. 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, get in touch with SMS through the cell phones, can gather the knowledge of different schemes and apply as well as check status of application. This website will act as unique and secure way to perform agro-marketing.



Fig 2.1 Workflow of e-kisan Mandi Flow Chart

2. KISAN ABHIMAN APP

The Kisan Abhiman App the purpose of this App connecting farmer wholesaler, retailers and customer on a common digital platform. Buy and sell vegetables, fruit flows etc posted by farmers, wholesalers, and retailers 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 peoples, 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 product making things too much indirect for the farmers due to which the farmer still reaming poor and the intermediates are gaining profit which ultimately makes them rich. So 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 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, get in touch with SMS through the cell phones, can gather the knowledge of different schemes and apply as well as check status of application. This website will act as unique and secure way to perform agro-marketing.

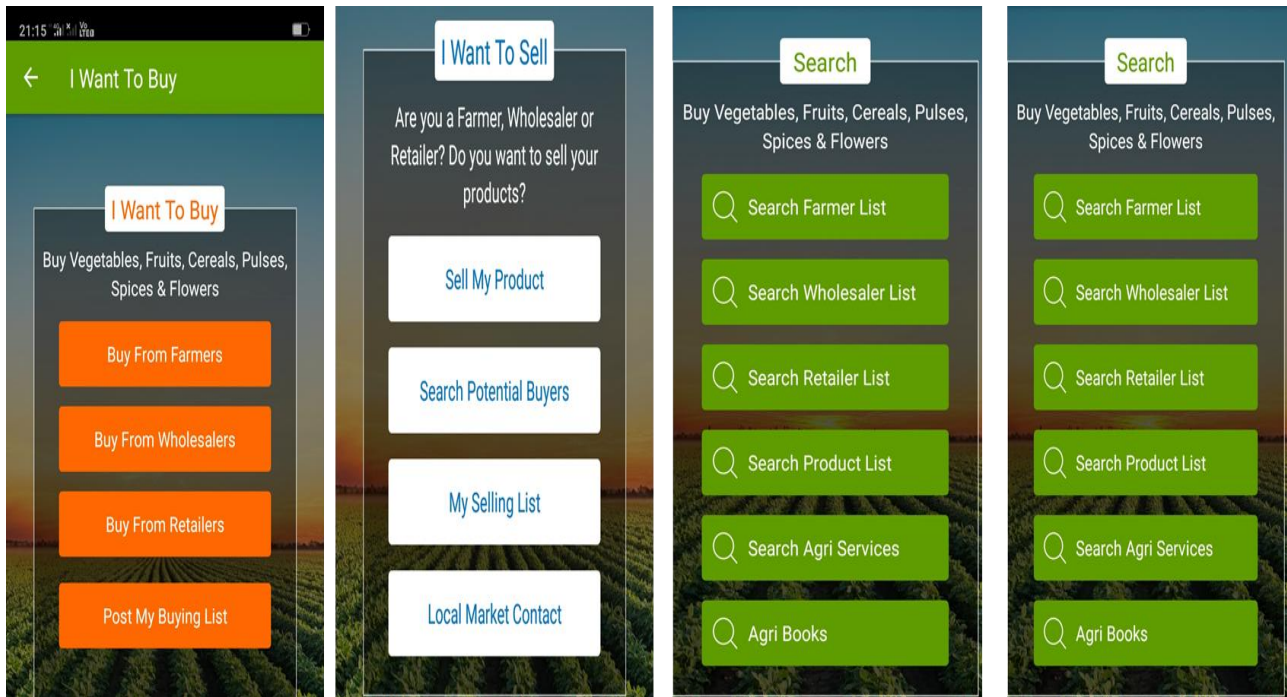


Fig 2.2 Workflow of Kisan Abhinandan App

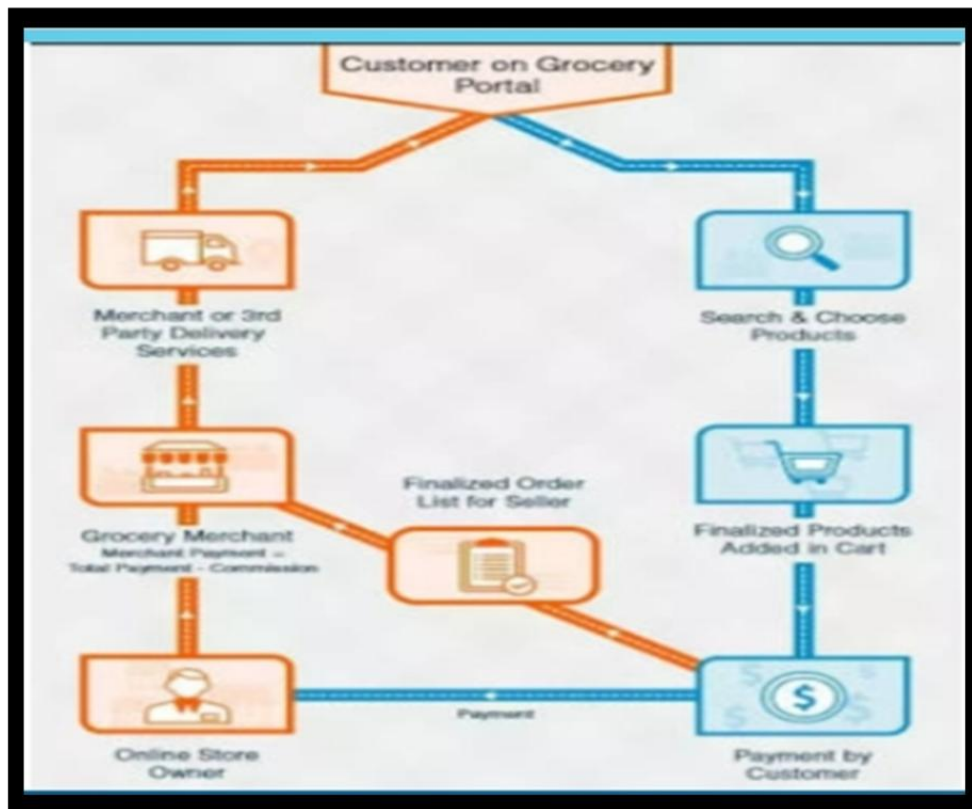


Fig.2.2 Architecture of kisan abhimaan app

3 AGROSTAR APP

Agrostar started in the year 2013 Agrostar provide real time solution to farmer for all their agri needs. Farmer can give a miss calling to access. Agrostar platform provide combination of agronomy advise service this app provides agronomy knowledge give the right solution to the farmer Launched as an on-premises e-commerce platform selling farm supplies in 2008, Agrostar turned to Google Cloud Platform to expand its offering. Today one million small farmers in India use its mobile app to connect to a full-service platform that combines agronomy, data science, machine learning, and analytics to boost yields and improve income. Agrostar has reached over a million farmers through its Android app, the Agrostar Agridoctor. The mobile client is available as a web-based or full-featured native app. Both provide access to the firm’s knowledge base hosted on GCP, a QA forum that connects farmers to each other to help understand and better solve problems and to learn about innovative practices and products. Farmers can also click through to follow local and national market trends that help forecast crop prices. The Agrostar app also provides links to purchase, and then track the delivery of farm tools and supplies such as cultivators and fertilizers. An in-house platform manages fulfilment canters, and a doorstep delivery network simplifies the supply chain while giving farmers what they need, when they need it. By procuring directly from the manufacturers and primary distributors of farm supplies, Agrostar is achieving cost savings, which it passes on to farmers.

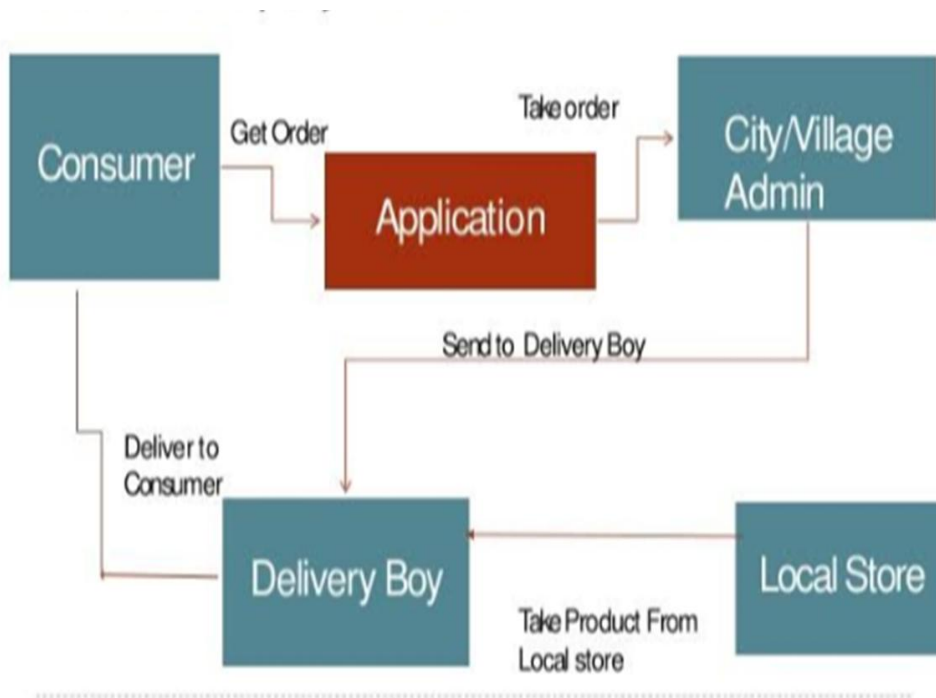


Fig.2.3 Architecture of Agrostar app

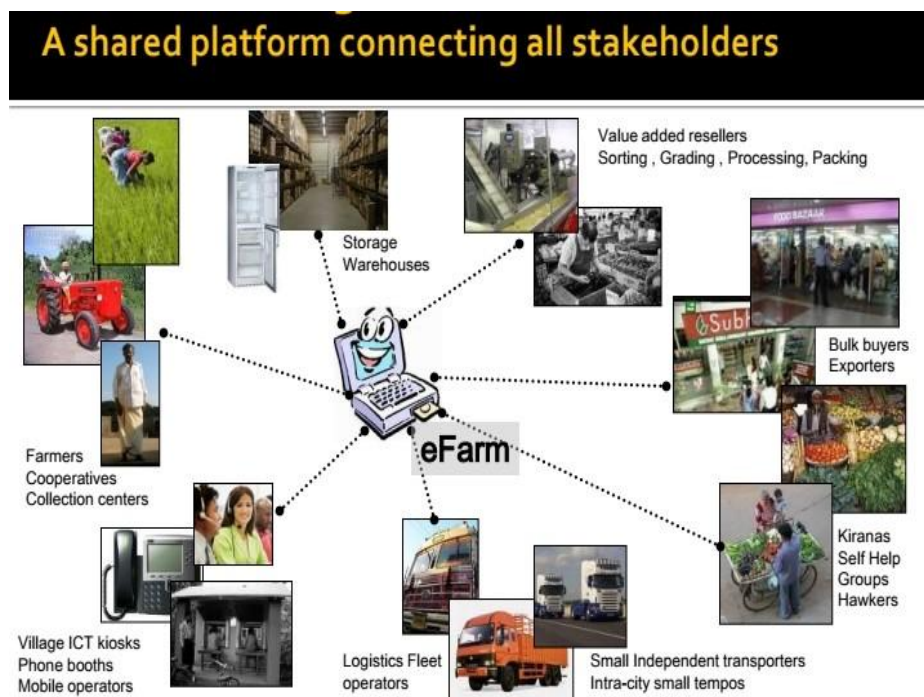
4 . KISAN CREDIT SYSTEMS

Consequent upon the announcement in the budget speech for the year 1998-99, NABARD, in consultation with major banks, formulated a model scheme for issue of Kisan Credit Card (KCC). The scheme aimed at adequate and timely financial support in an flexible and cost effective manner from the banking system to the farmers for their cultivation needs including purchase of inputs. The scheme was circulated to banks by RBI/NABARD. As at the end of December 2000 about 1 corer KCCs have been issued surpassing the target of 75 lakhs fixed in the budget for the year 2000-01. The present study was conducted by Bankers Institute of Rural Development (BIRD), Luck now at the instance of Planning Commission of India with the objectives of: (a) Review the progress of the scheme particularly from the angle of its geographical spread, bank wise progress, coverage of different categories of farmers. (b) Assess the overall impact on flow of ground level credit. The Study also aimed at examining the difficulties and operational problems in the smooth implementation.

III. PROPOSED SYSTEM

Providing the latest technology, and connecting all farmers, customers, wholesalers, retailers, and all other, such as agri product suppliers, manufacturers, traders, etc. related to agriculture sector on common digital platform. Organization which aggregates information and provide technology for agriculture related information.

This portal system is very useful to the farmer today; India is a major supplier of several agricultural commodities like tea, coffee, rice, spices, oil meals, fresh fruits, fresh vegetables, meat and its preparations, and marine products to International market. India is a large producer of several agricultural products. Regarding quantity of production, India is the top producer in the world in milk, and second largest in wheat and rice. An agricultural production is prone to several risks which affect both producers and consumers. To enhance investment and achieve a sustained increase in production, coherent and integrated long-term strategies and policies are required to reduce risk aversion and build flexibility among Indian rural producers. There is a need to provide remunerative prices for farmers to increase the incomes of farmers. Agriculture crops production, export and import of agriculture crop wheat.



Key features:

- To connecting entire agricultural sector under one roof.
- Farmers, wholesalers, and retailers can list their products.
- Individual customers, organizations, hotels, restaurants, etc. can directly get in touch with sellers.
- Easy information assess for local to national level market.
- Direct connect between buyer and seller.
- Farmer gets all agriculture related product.
- Farmer can access all information related every crop.

IV. CONCLUSION

Different apps are developed and are used by the farmers for their specific purpose. Many apps are being utilized for different kind of functionality regarding the farming activities like cropping information pesticides, fertilizer, market rates, online shopping for farmer, irrigation information, estimation of crop production selling of crop, weather information and information regarding the best practice of farming.

A barrier of language is also the cause of problem as half of application currently available for farmer is in English language, and only a few farmers are able to understand the language completely. We conclude that the functionalities



listed in the different applications should be available in a unified one which will be easy to access and in the language easier to comprehend.

REFERENCES

- [1]. Dr. Deshmukh Nilesh kailasrao, Nanded-"An Overview on ICT for Indian Agricultural Informatics Developments", International Journal of Advanced Research In Computer science And Software Engineering Volume 2, Issue 6 June 2012 ISSN :2277128X.
- [2]. Successful Information Technology for Agriculture and Rural Development Seishi Ninomiya National Agricultural Research Center, National Agricultural Research Organization Kannonbai, Tsukuba, Ibaraki 305-8666, Japan.
- [3]. Digital participation in rural empowerment Sujit Chaudhri Deepankar Chakrabarti, apprerred in Geospatial Today,Jan 2005,Vol3, Issue 5
- [4].Sindu M R. et al./(IJCSIT) International Journal Of Computer science And information technology Vol 3(2),2012,3479-3882.
- [5]Agricultural Marketing S.S Acharya ISBN -81-7188387-7 pages-259
- [6] National Level journal on agricultural marketing Vol XLVI,NO.2ISSN0002 1555
- [7] N.L Agarwal (2004),Agricultural Marketing in India 4th edn,Oxfprd and IBH,New Delhi
- [8] A Modern Farming Techniques Using Android Application by Santosh G.Karkhile.Sudarshan G.Ghuges IJIRSET 2015.