

# VYAPARI KISAN: AN E-COMMERCE APPLICATION FOR FARMERS

Santosh Pandurang Mane<sup>1</sup>, Shravani Vivek Chougule<sup>2</sup>, Aditya Mahesh Deshmukh<sup>3</sup>, Avinash Pratap Budaragade<sup>4</sup>

<sup>1,2,3</sup>Student D.Y.Patil College Of Engineering And Technology, Kolhapur, Maharashtra, India

<sup>4</sup>Asst. Professor D.Y.Patil College Of Engineering And Technology, Kolhapur, Maharashtra, India

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**ABSTRACT** - Business in any sector is taking a high jump by using various technologies and digital platforms. Agriculture technologies have shown potential to improve agriculture management. This awareness has attracted researchers to develop technologies for farmers to ease their daily routine and also to help farmer to get their good's values. Smartphone is one of the gad gets that can be useful in agricultural goods trading because of its useful functions, portability and affordable. It helps users to find locations, access information and upload images. Smart phone functions can be combined to build versatile mobile farmer-customer business applications. These helps to deliver information about crops and management needs. This paper develops an Android application for smart farming in online trading business of goods known as Vyapari Kisan. Vyapari Kisan is a mobile application developed to help farmers in their paddy field management and it's sell. The application is developed using Android Studio a software that is used to create mobile applications. This application contains information about the products which farmer wants to sell, it's price per sack, images, government schemes, customers who want to buy goods, their information etc. All information is described in the user understandable language. Final results of this project is the mobile application which will be useful to manage all online data storing, displaying and maintain proper business relation between farmer and customer.

**Keywords:** Database, e-commerce, android

## 1. INTRODUCTION

Farming is widely practiced profession in India. India largely depends on the agriculture sector we are practicing agriculture still it remained under-developed for a long-time. The agriculture sector is one of the major contributors to the Gross Domestic Products (GDP) and national income of the country. Moreover, agriculture forms 70% of our total exports. Present time most of the farmers face difficulties to sell their products at right price, they did not get the price for their product they deserve. Farmers also have right to value their own product. If we see the market in there are Businessmen who acts as the mediator between the farmer and the customers. They take the products from the farmers at very low price and sell in the market at their own price. There is very rare

chance that farmer is directly selling his product to the consumer. The thought of farmers should be changed and each and every farmer in India should consider himself as the business man because the farming is as good as business as other business in India. To increase this profession we are here with an application which will help the farmers to grow and build their confidence that they can also become a successful Businessman.

## 2. RELATED WORK

India is an agricultural country. One third of our National income comes from agriculture. Development of agriculture has much to do with the economic welfare of our country. The overwhelming majority of Indian farmers, which incorporates small scale producers, are often unable to access the knowledge and technological resources that would increase the yield and cause better prices for their crops and products. Today the world has transformed from knowledge savvy to techno knowledge savvy. The reality of digital India will have a positive impact on the lives of several people in urban as well as in rural areas. As per one of the conferences in Dec. 2011, Information and Communication Technology (ICT) in agriculture is an emerging field focusing on the enhancement of agricultural and rural development in India the increasing penetration of mobile networks and handsets in India presents an opportunity to make a digital tool reach a large audience. There are several products available for agriculture and farming within the United States' market but there's no such product available within the Indian market. But, most of them don't work due to language issues. This revolution in information technology has made access to relevant information easy and cost-effective. Information like schemes, weather news, use of fertilizers, ways to use machineries, etc. also plays an important role in agriculture field of India [1].

Today, all nations of the world wish to be totally digitized that will legitimize the nation in an improved way. The internet nowadays is of little use to people that aren't ready to make use of electronic access to digital data to enhance their lives.

So the prime focus for us is to improve the usability of knowledge shared by different digital media. Hence

minimization of digital divide in rural areas will take place. It will help to style and implement better service tools. The main aim for our project is to develop a mobile phone based solution that helps in farm's management, leads to agricultural product selling at best price and helps farmer to sell product at their own price market[3].

With the rising population in India coupled with sluggish growth of total cultivable land and followed by swift migration of agricultural workforce to urban areas, the agricultural sector in India is facing a number of other key challenges which constrains Indian farmers from implementing farm mechanization. First, average farm size per farmer in India is less than two hectares, which is far lower than that of developed regions. Large equipment is difficult to operate in such holding and is often considered unsuitable. Furthermore, mechanizing small group of farms is against economies of scale. The second challenge is that the farm equipment is capital intensive and thereby introduces high ownership risk. As a result, it turns out to be an unaffordable investment for financially constrained farmers. The third challenge is the poor quality of after sales service due to the absence of adequate maintenance facilities in remote regions in India. The fourth and the biggest challenge is the unwillingness of banks to finance farm equipments to marginalized farmers [4].

The government's massive subsidies have supported Indian farmers and the sustainable agricultural farming model has been presented for years. However, Indian farmers, in general, remain poor with an inadequate understanding of sustainable farming for their productivity and quality of life enhancement [5]. Compared to advanced nations, the productivity of Indian farmers is still very low and their income growth potential is limited. Interesting research is about how to guide how small-scale Indian farmers achieve their goals for sustainable farming [6]. Indian farmers wrestle with basic objectives—productivity and quality. Small farmers are not able to fulfill sustainability goals that require the proper basis of productivity, quality, and value chain network capabilities.

### 3. OBJECTIVE AND PROPOSED WORK

#### 3.1 Objectives

- To establish direct connection between the farmer and the consumer to buy and sell the product.
- To sell the products of the farmers digitally.
- To connect the farmers and customers directly on a single platform.

- To give farmers clean UI.
- Farmers should be able to get to know about the new schemes launched by the Government
- To remove the broker who works as mediators between farmer and the customer.
- To make farming a business and satisfy farmers and customers.

#### 3.2 Proposed Work

The fundamental of proposed module is to develop a Farmer-Customer Business Mobile Application where the farmers will be able to create their account and upload the details of the goods they produce, whereas the customers will be able to get all the details that has been uploaded by the farmer on their fragmentation page. This will help farmers to sell their goods in digital mode and the customers to get information about the goods, its price digitally and in online mode. Customers can directly order any product through this platform and can be delivered in less time. This will ease the work of both farmer and customer.

### 4. DESIGN AND IMPLEMENTATION

#### 4.1 Architectural Model

This application module consists of various fragments like login, registration, category choosing, storing the data into database. Let us discuss about all these fragments in details

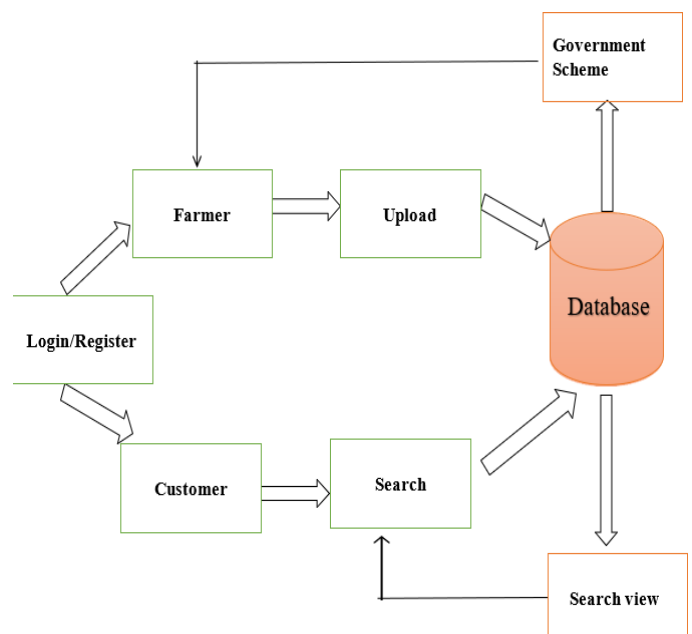


Fig -1 : Architectural Module

## 4.2 Elements of Architectural Model

### Registration:

Firstly, if the user is new to application they will have to create their account as per their category (farmer or customer) on the application by filling up all the necessary data with valid credentials. Then they will be redirected to the login page.

### Login:

After registration as the user will be redirected to their login page they should enter the login credentials. After that they will enter into their home page.

### Home Page:

Users will get into their respective home page where they can get information and perform various actions.

### Database:

The database used for developing this application is SQLite. It stores all the data right from registration data to all the activities carried out by users.

## 5. RESULT ANALYSYS

We have the result of farmer's view as well as customer as shown in screenshots attached below -



Fig-2:login/Register



Fig-3:Farmer/Customer



Fig-4: Booking



Fig-5 : Registration page

## 6. CONCLUSIONS

Vyapari Kisan application is able to execute the objective proposed by us. It is able to establish direct communication between the farmer and customer without any broker who handles the trading of buying goods from farmer at low price and selling it to customer at high rate. In this application farmers will be able to give the price to their goods which they deserve and the customers will be able to buy at a reasonable rate. This will keep maintenance in pricing the goods. It satisfies the needs of farmer as well as customers. This application will help farmers learn digital marketing, trading and to take farming at a good business level.

## 7. REFERENCES

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