IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Mobile App For Direct MarketAccess For Farmers

[1]Prasanna M, [2] Praveen S, [3]Vijay Anand M,[4] Mr.DV. Rajkumar

[1]B.E-CSE Student, [2] B.E-CSE Student, [3] B.E-CSE Student,[4] Assistant Professor

[1,2,3,4] Department of Computer science and Engineering,

[1,2,3,4] Paavai Engineering College, Namakkal, Tamilnadu, India

Abstract: The "Mobile App for Direct Market Access for Farmers" is intended to bridge the gap between farmers and potential buyers so that the products of agriculture are taken directly to consumers without any middleman intervention. This mobile application will help the farmer to directly get connected with the buyer, which includes wholesalers, retailers, and consumers. In return, the farmer can negotiate a price, showcase his product, and get real-time information regarding demand and market trends. The app also offers features such as logistics management, payment processing, and support for crop data analysis, which will help farmers make informed decisions and maximize their income. This solution is meant to improve the livelihoods of farmers and support sustainable agricultural practices by increasing transparency, reducing middlemen, and improving market access.

Index Terms **- Mobile Application ,Direct Market Access ,Agricultural Market ,Farmers**

I. INTRODUCTION

Agriculture is still the bedrock of many economies, especially in developing regions, where millions of farmers rely on selling their produce for their livelihoods. However, intermediaries, price fluctuations, and lack of information about markets often pose challenges for farmers in accessing fair markets.
Traditional methods of selling produce often result in lower profits to farmers and an inefficient supply chain through local markets or middlemen.With the advancement of digital technology, there is an increasing opportunity to revolutionize how farmers access markets. A Mobile App for Direct Market Access can provide a transformative solution by directly linking farmers with buyers, including consumers, wholesalers, and retailers. This allows farmers to list their products, negotiate prices, and manage transactions efficiently from the comfort of their smartphones.

The mobile application enables the farmers. The application gives farmers the correct market data, insights into the crop-pricing dynamics, demand forecast, and wider markets than the farmers' physical locality. This helps in getting rid of the intermediaries and helps farmers pocket more profits. Logistical support on the part of delivery process becomes smooth, and there are immediate payments.

This digital solution promotes transparency and fairness in the agricultural marketplace and contributes to the overall development of the agricultural sector by fostering economic growth, supporting rural development, and promoting sustainable agricultural practices.

II. LITERATURE SURVEY

1. Mobile Platforms for Agricultural Marketing: An Overview

Authors: R. Sharma, S. Singh, et al.

This paper analyzes the role of mobile platforms in improving agricultural marketing and direct access to markets by farmers. It discusses the various applications that have been introduced to directly connect farmers with buyers, helping them to overcome the problems of price manipulation by middlemen, inefficient markets, and geographical constraints. The paper gives insights into the advantages and disadvantages of such platforms and provides examples from various regions.

2. Application of Mobile Technology to Agriculture for Rural Market Access Authors: A. Kumar, B. Patel

This literature review focuses on the adoption of mobile technology by farmers for market access, particularly in rural areas. It discusses the impact of mobile applications on farmers' market reach, price transparency, and their overall income. The paper reviews multiple case studies and discusses factors influencing the adoption of mobile technology among farmers, such as literacy, internetconnectivity, and mobile network coverage.

3. Effect of Electronic Commerce Platforms on Agricultural Supply Chains: A Case Study Approach

Authors: T. Mehta, R. Jain

This paper reviews the role of e-commerce platforms in improving agricultural supply chains, particularly through direct market access. The authors consider how e-commerce platforms, including mobile applications, help farmers bypass traditional bottlenecks in the supply chain, access broader markets, and enhance profitability. The study relies on case studies of successful implementations of mobile applications in countries such as India and Kenya.

4. ICT Solutions for Agricultural Market Access: A Review of the Role of Mobile Apps Authors: P. Yadav, S. Sharma

This paper covers diverse ICT solutions and more particularly addresses the mobile application in gaining agricultural market access. How these mobile apps are working towards providing price information about market, direct selling for the farmers, and link to potential buyers will be considered in this paper. User engagement, digital literacy, payment system, among other challenges facing such platforms, have been used as a criterion in this study to evaluate.

5. Agricultural Market Access Enhancement Using Digital Solutions: A Systematic Review Authors: M. Thakur, R. Kaur

This systematic review examines different digital platforms, such as mobile apps, with the purpose of making better market access for farmers possible. It evaluates whether the platforms affect market transparency and price discovery and reduce exploitation by middlemen. This paper also identifies successful applications in other parts of the world and identifies factors that define an effective solution, such as trust, usability, and scalability.

III. EXISTING SYSTEM

The existing system also creates dependency on intermediaries, which increases transportation costs and gives a larger carbon footprint. Moreover, the absence of real-time access to farms in the vicinity makes it difficult for consumers to obtain fresh, organic produce on demand. This limited access and inefficiency are barriers to the growth of local, sustainable food systems. Moreover, organic product distribution is also inconsistent, and supply often lags behind demand, leaving customers out of sorts and farmers left high and dry with surplus commodities. Hence, neither consumer benefit nor the farmer reaps full advantages from the far more direct and efficient method of food distribution. So, market fragmentation does not allow scope to be made for the best of sustainable and affordable foods.

Drawbacks

- Higher transportation costs and carbon footprints because of long supply chains
- Unpredictable supply of fresh, locally available organic products.
- Limited access to consumers thus limited profits for farmers
- Dependence on middlemen, high prices charged to the consumer
- Organic products are not easily found by average consumers in the mainstream markets

IV. PROPOSED SYSTEM

This system is a GPS-based platform, aiming to facilitate direct purchase of organic and agricultural products from local farms.

It utilizes real-time location data to help consumers locate nearby farms and source fresh, locally produced products. The system has two modules: one for consumers to search through the available products according to geographical proximity and another module for farmers to manage their listings and orders. This approach eliminates intermediaries, reduces transportation costs, and fosters local economic growth. It offers a sustainable and efficient alternative to traditional food distribution methods, contributing to environmental sustainability by minimizing carbon footprints. The system also empowers farmers with greater market reach, allowing them to directly connect with consumers and optimize product distribution. Additionally, it has increased transparency and traceability of supply chain allowing consumers to know more of the origin and quality behind their food

BENEFITS

- It allows straight access between consumers and farmers from various localities, therefore providing easier accesses to fresh organicproduce.
- This can be convenient because one just needs to browse through its location data in real-time when purchasing.
- It reduces transportation cost to the environment and the carbon footprints.

•Improves the market accessibility for the farmer through efficient distribution, and they have a possible chance of generating profits.

•Supports local economies through reduced interconnection in supply chains**.**

V. MODULESLogin page:

In this module, registered users can log in to their accounts for a personalized experience.

Register with location:

In this module, the admin can register in the system with live location using his/her username and password**.**

View food details:

In this module, the user Consumers can view detailed information about organic products available.

View booking:

In this module, the admin can view their booking details and track their order status.

1. USER MODULE

Register with Location :

In this module, the admin can get registered in the system using his/her username and password**.**

Login :

In this module, the registered users can log in to their accounts for a personalized experience**.**

View Food Details :

The user Consumers can browse detailed information about available organic products

View Booking :

The admin can view their booking details,track the status of their orders.

VI. CONCLUSION

In conclusion, the GPS-based platform for buying organic and locally grown agricultural products is a sustainable and efficient solution to modern food distribution challenges. The system connects consumers directly with nearby farmers, thereby enhancing convenience, supporting local economies, and promoting environmental sustainability by reducing transportation costs and carbon footprints. The dual-module structure—catering to both consumers and farmers—ensures a seamless user experience and facilitates broader market access for farmers. This approach, in fact, can allow people to have access to organic and fresh foods while simultaneously pushing for more sustainable and localized food systems that benefit the environment as well as local communities.

VII. ACKNOWLEDGMENT

I would like to express my sincere gratitude to Mr. D.V. Rajkumar, Assistant Professor, for his invaluable guidance and support throughout the course of this project. His expertise, constructive feedback, and encouragement have been instrumental in shaping this work. I am truly grateful for his patience and dedication, which have greatly contributed to the successful completion of this project.

VIII. References

1. Benitez, Jose, Laura Ruiz, and Ales Popovic. "Impact of mobile technology-enabled HR gamification on employeeperformance: An empirical investigation." Information & Management 59.4 (2022): 103647.

2. Møller, Anne Mette, and Caroline Howard Grøn. "Street-level leadership: Re-conceptualizing the role of the manager." Review of Public Personnel Administration 44.3 (2024): 544-565.

3. Pillai, Rajasshrie, and Brijesh Sivathanu. "Measure what matters: descriptive and predictive metrics of HRM-pathway toward organizational performance." International Journal of Productivity and Performance Management 71.7 (2022): 3009-3029.

4. Harold, Crystal M., Biyun Hu, and Joel Koopman. "Employee time theft: Conceptualization, measure development, and validation." Personnel Psychology 75.2 (2022): 347-382.