

E-Commerce: Portal for Selling the Agricultural Products Using Mobile Application

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ABSTRACT: E-commerce portal has the major impact on agriculture product distribution for the customers. The proposed work helps the farmer and customer to connect each other for buying and selling the agriculture product through the mobile application. The aim is to avoiding mediators and brokers cost, the project reduces the gap and makes direct relationship between the customers or retailer with farmers. The whole process will be completely transparent and creates efficient user interaction on list the various agriculture products which benefit to decrease the price for bulk orders. The Farmer personal data provides the tracking of agriculture products and prediction of the agriculture product. The Flutter software application that helps to implement the user interface and Firebase software application coding that helps to develop a better mobile application platform for the proposed system. The keyword search is useful for the farmers and customers. The users of mobile application no need to travel for the market place to buy the agriculture product which in turn reduces the cost and time factor.

I. INTRODUCTION 1.1 E-COMMERCE IN AGRICULTURE

The Internet has enabled greater visibility into the global supply chain, as buyers and sellers are much closer and more easily connected. Today, most customer journeys in the purchase of products in these segments begin online through search engines, social media recommendations, online reviews or digital advertisements. The agricultural sector is one of the few remaining sectors where ecommerce is yet to have a significant impact. There are several reasons for this: the agriculture supply chain is often controlled by well-entrenched intermediaries, the logistical challenge of handling perishable products is complex and most consumers still prefer to buy groceries in-person rather than online, given the inconsistent physical appearance of fresh produce, especially fruit and vegetables.

However, this is changing rapidly as ecommerce solutions that aim to overcome barriers around customer preferences and logistics drive online grocery across the world. In developed markets, online bulk orders of fresh produce are already common among businesses such as hotels and restaurants. In the consumer market, online grocery orders are also starting to gain traction.

1.2 E-COMMERCE FOR AGRICULTURE BUSINESS

Production is really optimistic but still the condition of marketing is not as satisfactory. There are so many defects in the present marketing system. To overcome these defects new techniques and trends should be adopted. One of which is ecommerce or e-Agribusiness.

1.3 SOME SPECIAL FEATURES OF E-AGRIBUSINESS

- Organized and centralized trading
- Widely dispersed buyers and sellers with remote access.
- Farmers based on product description
- High trading volume.
- Use of reliable grades and standards.

1.4 PROPOSED SYSTEM

The Software Application to provide an integrated solution for the Farmers to access various types of information through the database and make changes to it wherever necessary .Farmer has the access to on/off their product visibility in Application. Consumer has the access to saw farmers phone number and request the Farmer to change the price for specific bulk order.



1.5 DATA FLOW DIAGRAM

Agriculture E-commerce

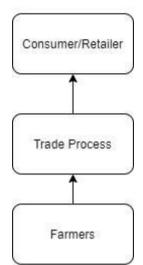


Fig1.1Value Chain Of Ecommerce Agriculture

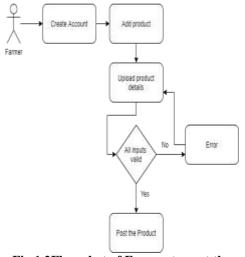


Fig 1.2Flow chat of Farmer to post the Agriculture product

1.6 EXPECTED OUTPUT

E-commerce in agriculture is a new business models for smallholders inclusion into the formal economy. Selling produce through online channels enables farmers to bypass intermediaries, leading to improved income for the farmers, reduced wastage and fresher produce for customers. The proposed project work describes the searching for agriculture product through the mobile application services. The customers can select the kind of product required from the product listed, customer can do purchase based the cost offered. Thus, the huge gap between the farmers and customers is reduced from the e-commerce mobile application services provided which in turn saves the cost and time

1.7 METHODOLOGY

The proposed work e-commerce mobile application is the better solution for the farmers to sell their yield agricultural products for the offered cost. The e-commerce mobile application providesbetters shopping experience for the farmers and customers. The farmer and customers can views the detail of agriculture products from their location. The Flutter and Firebase software application are used for the development of proposed work. Flutter is Google's portable UI (User Interface) toolkit for crafting beautiful, natively compiled applications for mobile, web, and desktop from a single codebase. Flutter works with existing code, is used by developers and organizations around the world, and is free and source.Firebase is Google's open mobile application development platform that helps you build, improve and grow your app.

1.8 MODULES DISCUSSION

- 1.8.1 Consumer
- Register and login
- View Product
- Product details
- My order
- 1.8.2 Farmer
- Register and login
- Upload Product details

1.8.3 Register Login Module:-

- In login module the consumer and farmer can login to the application if they already created their account and signed in.
- 1.8.4 View Product:
- User enters this system view the product via direct and search option.
- 1.8.5 My Order:
- User can see their own order details.
- **1.8.6 Product details:**
- Farmer can upload their product details like Name, Description, Image, Quantity.

II. CONCLUSION

The e-commerce portal will transform agriculture business has user friendly which is still indeterminate and the supply chains become more efficient. The proposed work satisfies the services provided in mobile application such as chat view and graphical view to access the details of agriculture product information's. The e-commerce



portal reduces product and transport cost and saves time durations. The ecommerce portal is used to ensure the farmer has earned profitability for their agriculture product from the current rate of market.

REFERENCES

- [1]. M. Balakrishnan, B. Ganesh Kumar, Ch. Srinivasa Rao and S.K. Soam(2018), "Status and Scope of E-Commerce in Agribusiness in India", National Academy of Agricultural Research Management, vol.5, no.1, pp.400-413.
- [2]. TumpaBanerjee ,Monalisa Mishra , Narayan C

Debnath,PrasenjitChoudhury(2019),"Imple menting E-Commerce Model for Agricultural Produce: A Research Roadmap" Periodicals of Engineering and Natural Sciences vol. 7, no. 1, pp.302-310.

- [3]. E. Fernando, S. Assegaff and A. H. H. Rohayani(2016), "Trends Information Technology in E-Agriculture: A Systematic Literature Review," Third International Conference on Information Technology, Computer, and Electrical Engineering, Semarang, pp. 351-355.
- [4]. RanuGupta andPawan Kumar Sharma (2018),"Scope of E-Commerce in Agri-Business in India: An Overview "International Journal of Advanced Research and Management, Scientific Special Issue I, pp.99-104.
- [5]. MeghaNayak, Pinky Wankhede, Neha Khapekar, KomalDhote(2019), "E-Commerce Site for Agriculture Products"International Research Journal of Engineering and Technology vol: 06 no.04, pp. 347-349.
- [6]. Surjeet Singh Dhaka (2016), "Scope of Online Shopping of Agri Inputs" International Journal of Advance Research incomputer Science and Management Studies, vol. 4, no.6, pp.111-115.
- [7]. YiwuZenga, Fu Jiab, Li Wanc, and HongdongGuoD(2017),"E-Commerce In Agri-Food Sector: A Systematic Literature Review"International Food and Agribusiness Management Review vol .20, no.4, pp.439-460.
- [8]. Debasis Dash and AshabikashMohapatra(2017),"E-Commerce and Agribusiness" international Research Journal of Commerce and Law,vol.04, no.8, pp. 1-4.
- [9]. Mr. Subhadeep Mukherjee and Mr. HuidromMichael(2016) "Modern Trends,

Challenges and opportunity of E-Commerce In India –An Overview"SSRN Electronic Journal.

- [10]. M. Bhende, M. S. Avatade, S. Patil, P. Mishra, P. Prasad and S. Shewalkar(2018), "Digital Market: E-Commerce Application for Farmers," Fourth International Conference on Computing Communication Control and Automation, pp. 1-7.
- [11]. P. Tekın And R. Erol(2017), "A New Hybrid Model for Dynamic Pricing Strategies of PerishableProducts," 2017 Seventh International Conference on Innovative Computing Technology, pp. 85-89.
- [12]. Anusha.B , Sangeetha.H.S , Riyanka.R , Sushmitha.N , Chitra.R(2017)" Dynamic Price Optimization for the Future of E-Commerce" International Journal of Advanced Research in Computer and Communication Engineering,vol. 6, no.4, pp.876-883.
- [13]. JayashriSonawane, Shivani Gore, LaxmiDuggineni, Prof. SharmilaShinde (2016),"A Survey on Recommendation System Used in E-Commerce"International Journal of Advanced Research in Computer and Communication Engineering, vol.5, no.11, pp.142-144,
- [14]. AdarshBorkar, MadhuraAnsingkar, MonaliKhobragade, Pooja Nashikkar, ArtiRaut(2015)," Smart Shopping- An Android Based Shopping Application" International Journal of Advanced Research in Computer Engineering & Technology, vol 4, no. 3,pp.874-876.
- [15]. UrveshRathod, Prof. ArunaPavate, VaibhavPatil(2018), "Recommendation System Using Product Rank Algorithm for E-Commerce", IOSR Journal of Engineering , vol.5, pp.56-61.
- [16]. Mr. Prabhu C Basarkod And Dr. Basavaraj C S(2015) "Agricultural Marketing Practices in India"Ge-International Journal of Management Research ,vol.3, no.11, pp.21-35.
- [17]. TumpaBanerjee(2018) "Enrichment of Indian Farmers' Economic Status: Trading of Agricultural Produces Through Ecommerce"International Journal of Latest Trends in Engineering and Technology,vol.11, no.1, pp.069-073.
- [18]. Darryl Jeethesh Dsouza, H.G.Joshi(2014),"Development of Agricultural E-Commerce Framework for India, A Strategic Approach"Journal of



Engineering Research and Applications ,vol. 4, no.11, pp.135-138.

- [19]. Renu Saini (2016)"Future and Scope of E-Commerce in India" International Journal of Engineering and Techniques –vol. 2,no.6, pp.42-44.
- [20]. Saban Kumar K.C., Arun Kumar Timalsina(2016), "Challenges for Adopting E-Commerce in Agriculture in NepaleseContext — a Case Study of Kathmandu Valley"Proceedings of IOE Graduate Conference, vol.4, pp. 305–312.