Advancement of E-Marketplaces to Attach Consumers with Farmers to Remove the Broker Chain

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ABSTRACT

The time period digital market approach a platform this is committed to integrating farmer, service provider/Markets, authorities, and end-user and thereby bridge the distance among them. It also let all people be updated with the changing market scenario. Indian farmers confronted many demanding situations and certainly one of them is getting a very good income for the efforts and funding that that they had installed. There exist extraordinary motives like season obstacle, crop existence due to which farmers get a very restricted amount of time to observe the market situations. The look at of flourishing crops and merchandise within the modern-day market below the agriculture zone may be very vital to attain an excellent fee. Because it isn't always feasible to attain all traders physically for farmers as it consumes a great deal time and effort in which our farmers have a constrained amount of time. Additionally traditionally, methodologies carried out via farmers created restricted get admission to clients (traders) allowing fewer alternatives to promote the crop manufacturing within the marketplace. So by way of introducing a brand new advertising method wherein farmers can promote his crop or product at every layer of advertising chain (traders, markets, or without delay to quit-person) at the side of more than one alternatives grow to be vital. as a consequence the platform and modern techniques will help to sell the crops at exclusive layers of advertising and marketing chain offering a couple of alternatives (market, service provider or end- user) wherein one may be capable of discover and do an evaluation of the contemporary marketplace situation with the assist of KNN algorithm as nearest neighbor look for higher decision making and Haversine algorithm for range, longitude check the usage of a GPS to promote or purchase the plants.

Keywords: e-Agriculture, NGOs, product traceability, Technology, etc.

INTRODUCTION

Electronic commerce has become increasingly popular as an alternative to traditional commerce as the costs of electronic communications fall and as the ability to convey complex information through networks expands. The popularity of the Internet, which has the potential to evolve into an interconnected marketplace for a wide variety of goods and services, has led many to regard electronic commerce as synonymous with Internet retailing. However, electronic commerce involves more than Internet retailing, which is only one type of electronic trading. An electronic commerce system implemented for trading agricultural products at a wholesale level. Numerous rural products are appropriated through an industry esteem chain, which joins makers and purchasers through wholesalers (processors) and retailers. Wholesaling is a fundamental linkage in the advertising procedure of horticultural items Wholesalers perform an important role in the value chain. Farming discount markets

have for some time been working as middle people that overcome any barrier among makers and customers. Since many agricultural commodities are highly perishable and consumers purchase them in relatively small quantities at one time, retailers have to keep a rich assortment of commodities on their shelves at all times. Retailers prefer to purchase all the commodities which they want at a market where a wide variety of commodities are assembled. This trend forces retailers to handle broader lines of commodities more efficiently. All of these factors have encouraged agricultural market participants to implement efficient intermediary institutions to aggregate both demand and supply to more efficiently coordinate transactions.

PROPOSED SYSTEM

The system is providing platforms such as an android app and website app at government level wherein farmers can sell his crop products at a different layer of marketing chain (market, merchant, or end-user) with multiple options. This platform will help farmers to find out the nearest markets, its current stock details, and its demand for a particular product within less time & with less effort. This analysis will thereby help to determine which market will be more profitable for his crop/product.

To design and develop a system/application which make a such community in that we totally eliminate all brokers and income directly goes to farmer and product at end user. And finally we use wastage food through NGO directly distribute in poor people.

The proposed system discussed utilization of e- market place systems particular that area. It reveals that e-marketplaces utilize mobile phone services, prizes, information portals and websites to provide service. Apart from providing market prices to users, ability to post bids and offers, e-marketplaces systems consist of a matchmaking feature to match user's bids and offers for commodities. Finally, we utilize all wastage of food with the help of NGO portals.

LITERATURE REVIEW

Abishek A.G. et al [1], 2016 have proposed The Vision of this venture is to guarantee a reasonable cost to the cultivating network by contriving new methods and by utilizing the online market. An application, that fills in as a stage for the development of agrarian items from the ranches legitimately to the purchasers or retailers. This portable and web application gives benefit to the two ranchers and customers or retailers to purchase and sell the necessary homestead items without the association of a broker at its privilege productive cost. The farming specialists will examine the item that comes into this stage, support it, and give appraisals dependent on quality. This makes all the accessible homestead items effectively open. Subsequently it gives opportunity of valuing and opportunity of access. Through this we can guarantee ranchers settle on selling choices most profitably

Mrs. Manisha Bhende et.al. [2], 2012 have proposed as The term advanced market implies a stage that is devoted to coordinating Merchant/Markets, government, and end-client and in this manner overcome any issues between them. It additionally lets everybody be refreshed with the changing business sector situation. Indian ranchers confronted numerous difficulties and one of them is to get a decent benefit for the endeavors and speculation that they had placed in. There exist various reasons like season restriction, crop life because of which ranchers get a constrained measure of time to examine the economic situations. The investigation of prospering

harvests and items in the present market under the agribusiness segment is important to acquire a decent cost.

Rusydi Umar et.al., [3] 2010 have cited as follows: Division of Agriculture Food Crops and Horticulture has an undertaking to build up a movement to expand the creation of farming and cultivation, and furthermore build up the matter of food harvests and agriculture. One of its accomplices to carry out the responsibility is Aspemako. Aspemako is a relationship between the matter of prepared food. In this paper we take a case in Gunung Kidul District. Right now in the promoting part, Aspemako places its items in a tent before the Department, so the market is extremely little and the business gets drowsy. In that manner Aspemako needs another way to grow the market to build its business.

Tomoyoshi Matsuda and Theodore H. Clark [4] et.al have projected the following this paper addresses the practical structure of horticultural electronic commercial centers, along with related evaluating instruments. The investigation of exchange costs proposes that electronic business with delegates gives more proficient exchanging conditions than electronic commercial center without middle people. This shows existing mediator establishments will stay significant for agrarian exchanges much after the reception of electronic market frameworks. Contrasted with different enterprises or markets, agrarian markets are portrayed as serious markets, and evaluating is a key factor for effective asset allotments. Estimating systems being utilized by agrarian markets are differentiated. with those of the Internet-based retail electronic trade. This paper recommends that the present estimating in Internet-based trade isn't effective for farming electronic commercial centers and that the advancement of an elective valuing component is required to guarantee proficient and exact evaluating for rural electronic business.

SYSTEM DESIGN
Our proposed system will have following modules:
Farmer
End-User
System
Admin
NGO's

Farmer
1. A farmer can check the quantity of the available crop.
2. He can take the images of their crop and set the prices for those crops as they expect.
3. He can successfully upload the cultivation record on the web and connect to the end-user directly via this application.

Web
1. Farmer can post their crops and set the prices for the crops as they expect.
2. After the notification is given to the customer then as per their need they can be bidding about the crop prices.
3. How the farmer is providing a product to the end- user and based on their quality end-user or customers can rating.

System
1. A farmer can post their cultivation record on the portal.
2. After posting the notifications are goes to the end- user.
3. Some crops are not daily available because they can available only at a particular season so according to that the notifications are passed.
4. The daily available crops are easily available for end-user.

End-User
1. Farmer can upload their cultivation record on the portal.

2. After posting their record there is bidding and rating will take place.
3. As per the need by hotels, buyers, and functions they can buy the crops in large quantities from the farmers.

NGO's
1. The end-users such as buyers, hotels,

and functions can buy required crops from farmers.
2. In hotels and functions some amount of food is remaining and this food is commonly throwing.
3. The better utilization of such food is done by social workers through the NGO"s and distribute to poor people.
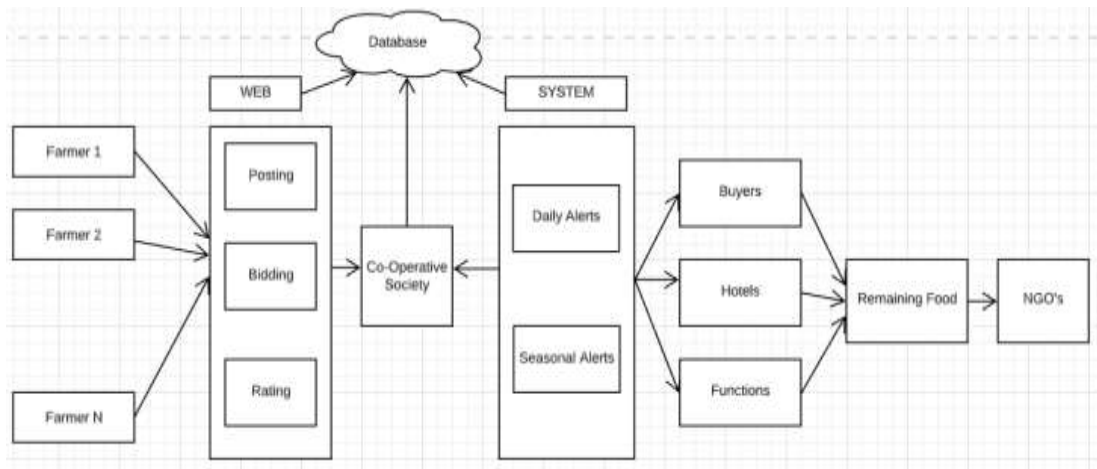

Fig.1:-Proposed System Architecture

ALGORITHM K-NN
Step 1: Load the training as well as test data.
Step 2: Choose the value of K i.e. the nearest data points. any integer.
Step 3: For each point in the test data do the following
− Calculate the distance between test data and each row of training data with the help of any of the method
− Now, based on the distance value, sort them in ascending order.
− Next, it will choose the top K rows from the sorted array.
− Now, it will assign a class to the test point based on most frequent class of these rows.
Step 4: End

RESULTS
Proposed System Consist of following modules
• Farmer
• Restaurant/User
• Admin

• NGO

Farmer Module
• Farmer can Upload product on portal
• Farmer can check the quantity of available product.
• He can successfully upload the product on the web and connect to end-user directly via this application.
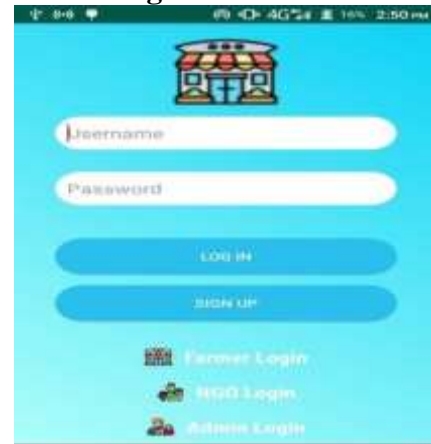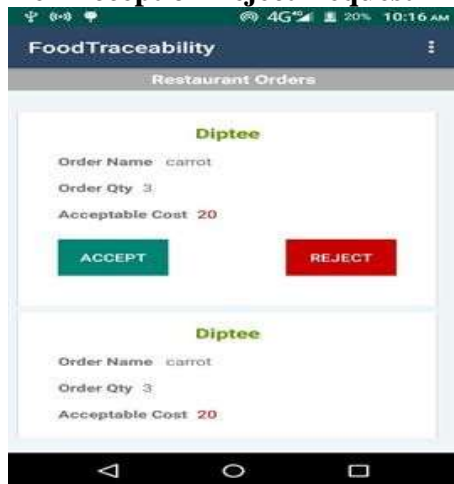
Farmer Registration

Farmer Login

## Farmer Add details of product

Farmer Accept or Reject Request

Restaurant Module

Fresh and quality products are easily available to end-user such as hotels or restaurants, buyers and functions or parties.

Restaurant Registration

Restaurant Login

User Make Request

Admin Module

1. Admin can add current market rate of vegetables.
2. Admin can see the list of farmers and users.

Admin Login
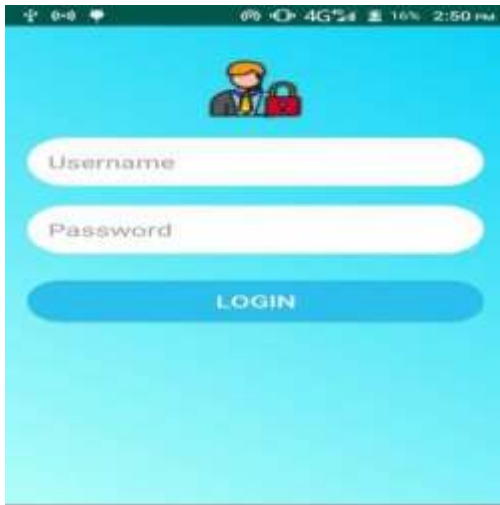
Admin Add current Market Rate
NGO Module

NGO Login

NGO's List

CONCLUSION

With the help of this system, farmer can optimize his crop profit. This mobile application is helpful for farmer and customer. Since agriculture is still called as backbone of nation, it is our responsibility to keep it as the same for a lot more generations.

ACKNOWLEDGEMENT

I would prefer to give thanks to the researchers for creating their resources available and also thanks the college authorities for providing the required infrastructure and support.

REFERENCES

1. Abishek, A. G., Bharathwaj, M., & Bhagyalakshmi, L. (2016, July). Agriculture marketing using web and mobile based technologies. In *2016 IEEE Technological Innovations in ICT for Agriculture and Rural Development (TIAR)* (41-44). IEEE.
2. Bhende, M., Avatade, M. S., Patil, S., Mishra, P., Prasad, P., & Shewalkar, S. (2018, August). Digital Market: E-Commerce Application For Farmers. In *2018 Fourth International Conference on Computing Communication Control and Automation (ICCUBEA)* (1-7). IEEE.

3. Umar, R., Fahana, J., & Triyono, A. (2018, October). Development of E-Marketplace in Department of Agriculture Food Crops and Horticulture as a Means to Expand The Market of Processed Food. In *2018 12th International Conference on Telecommunication Systems, Services, and Applications (TSSA)* (pp. 1-4). IEEE.

4. Matsuda, T., Clark, T. H., & Lee, H. G. (1997, January). Electronic commerce for agricultural transactions: role of intermediaries and accurate pricing. In *Proceedings of the Thirtieth Hawaii International Conference on System Sciences* ,4,13-20. IEEE.

5. Wei, L., Chen, H., & Zhang, J. (2008, December). A Framework for Designing E-Commerce Platform of New Agricultural Products for Services. In *2008 International Symposium on Knowledge Acquisition and Modeling* (345-349). IEEE.

6. Patil, S. (2019, April) Android Application for Farmers. *International Research Journal of Engineering and Technology (IRJET),* 6(4).

7. Rub, G. (2009, July). Data mining of agricultural yield data: A comparison of regression models. In *Industrial Conference on Data Mining* (24-37). Springer, Berlin, Heidelberg.