

Development of e-Marketplaces to Connect Food Processors with Farmers to Bridge the Gap

Akshata Deshmane¹, Diptee Damgude², Komal Devalekar³, K.R. Pathak^{4}*

^{1,2,3}Student, ⁴Assistant Professor

*Department of Computer Science,
Rajgad Dnyanpeeth's Technical Campus, Dhangwadi, Maharashtra, India.*

**Corresponding Author*

E-Mail Id: krpathak121213@gmail.com

ABSTRACT

Technological influence was a great support for judgment-making in various fields, especially in agriculture. Agriculture production has been on the rise over recent years due to a lack of knowledge of agriculture and ecological shifts. The main goal of this system is to accomplish farmers in e-Agriculture of their wakefulness, usage, and observation. The study used a technique of numerical study design to collect data from farmers for their e-commerce awareness. The data gathered indicate there is less understanding that there is a need for help for e-agriculture. E-Agriculture is a chance to promote the advertising of farm products. Agriculture efficiency requires fast-priced latest technologies which are only possible in intensive agriculture systems. Participation in things to do in e-commerce needs that any customer and retailer have internet access and that they can efficiently use the necessary hardware and software program for the producer, user, negative individual. The objective of product traceability is to impose specific requirements for all stakeholders in the creation and income process and then remove faulty goods from the markets to restrict hazardous consumer influences and thus prevent consumers from providing safe products. This device can improve the self-confidence of customers in products and establish a credible relationship between buyers and producers, and the disposal of waste / extra meals in separate functions of the rest of the food is distributed to the poor NGOs.

Keywords: *e-Agriculture, NGOs, product traceability, technology*

INTRODUCTION

A globally diagnosed QC system for agricultural goods has emerged as a common system for the traceability of agricultural products to enhance the safety of agricultural products. Product traceability seeks to give clear responsibilities to all events in the production and sales process, and to quickly eliminate defective products from the markets in order to reduce harmful influences on stopped customers and, in addition, to stop the panic of customers causing deadweight losses on safety products. This device can therefore enhance the self-confidence of end customers in products and establish a relationship of trust between customers and producers. However, with a system of

product traceability, precise documents and their management processes can reduce the risks associated with manufacturing techniques and products to consumers. Common techniques for creating traceable product records, current facts systems, and accessible information and conversation applied sciences used with the aid of a product traceability system. The agricultural area of India is currently facing a difficult period. India is moving towards an agricultural emergency due to lack of funding for irrigation and agricultural infrastructure, lack of attention, inadequate land management, lack of real expenditure on crops for farmers and lack of land reform in India, etc. Food production and productivity in India are increasing while food

consumption is on the increase. Likewise, the situation has deteriorated due to the use of food grains due to the need for biofuels. Because India no longer has ports and logistical structures for large-scale food imports, the response to imports of meals grains would be difficult.[7,8]

EXISTING SYSTEM

The agricultural zone is of vital importance to the region. The current process is a form of transformation to a market economy, with major adjustments to the financial, legal, structural and competitive sectors and a set-up, as is the case with all the various sectors of the economy.

India is an agricultural country and one third of the population is directly or indirectly dependent on the agricultural area. Agriculture remains an important stray in the Indian economy when you find the time to be immemorial. The contribution of Indian agriculture to the country-wide gross domestic product (GDP) is around 25%. Since food is the crowning concern of humankind, a great deal of emphasis has been placed on the commercialization of agricultural production. For this reason, the widespread production and even distribution of food has late turned out to be an over-priority of international concern.[9]

Agricultural advertising and marketing are usually the production and selling of agricultural products. Previously, when the village economic system used to be more or less self-sufficient, there was no question of advertising agricultural products, since the farmer offered his products to the customer on a cash or barter basis.

Today's agricultural ads must bear a series of exchanges or transfers from one character to another before it hits the customer.

PROPOSED SYSTEM

Nowadays everyone is moving to technology to enhance their business profit, so we are trying to combine farmers with

technology in an efficient manner. There is some application available for farmers, but there is no such application which helps to optimize vegetable supply for the end-user. The system provides a platform between farmer and market which introduces farmers with current market scenarios for improving agricultural development application was created to perform a systems analysis to optimize a farmer's profit supported the decisions that area unit faced throughout the problem. The tool was created in the android application so it will be used for all end-users. We used the KNN algorithm to implement the predicted result. This system is a program that contains info of the nearest farmer supply vegetable for different users/hotels. The structure of the supply chain has moved closer to the growing uncertainty and complexity of a number of customers and to the global achievement of agri-food supply chains. Implementation of Development of e-marketplaces to connect food processors with farmers to bridge the value gap systems improves the ability to implement safety and time complexity for the system. The resulting visibility of relevant information enables agrifood businesses to better manage risks and allows for the quick response.

LITERATURE REVIEW

Peter Namisiko *et al.* [1], 2013 have proposed a find out about which is performed at the majority of farmers in Kenya who are not capable to sell their produce at market fees due to lack of enough statistics available. In addition, agricultural production is being decreased due to the lack of knowledge and resistance developed by agricultural universities. To order for such farmers to produce and promote their products at sustainable market-based prices, they have access to accurate communication technologies (ICT) resources. The explanation for this is that the development of agriculture is based on how quick and relevant data is delivered to end-users. Think about being targeted in Trans Nzoia County, seeing that it is the coronary heart of Kenya.

Marcel Fafchamps *et al.* [2], 2012 Proposed as: This paper forecasts the advantages of Indian farmers when the market and weather data are sent to their cell phones. And this was achieved with a randomized trial in a hundred villages in Maharashtra. This service has been sent to a company supplier called Reuters Market Light (RML). The farmer in question blends RML data with the endless choices that have been made in agriculture, and we find that the solution has influenced spatial arbitrage and crop grading. But the magnitude of the findings is small.

NizarGrira, Michel Crucianu *et al.*, [3] 2010 Cited as follows: the records [3] that are important to the necessary high quality continue to have a viable increase in efficiency in all spheres of operation of an Indian farmer, therefore the increasing situation of deregulated agriculture, has given rise to a need and an urgent need to ensure that it is an integral part of the selection process. Subsequently, the exploration of IT as a strategic tool for the good of rural India has assumed significance.

Sylvester O. Ogotua [4] *et al.* The size of

the land and its resources has been projected to be an important obstacle to the identification of any export potential. To continue to be competitive and to have a strong fee understanding, it is highly encouraged that farmers come together through online alliances. Two of them. At present, efforts have been made to support the farmer with the help of a telephone service, but this company is not a 24x7-hour operation. Occasionally, farmers are not in a position to enter with professionals because of verbal communication failures.[5,6]

SYSTEM DESIGN

The product traceability aims to give clear responsibilities to all parties in the production and sales process, and then quickly remove defective products from markets to reduce harmful influences on the end customers and also prevent customers to supply safe products. Thus, this system can improve the end customers' confidence in products and establish a trust relationship between consumers and producers. And disposal wastage/extra of food in different functions the rest of the food is distributed to the poor, NGOs.

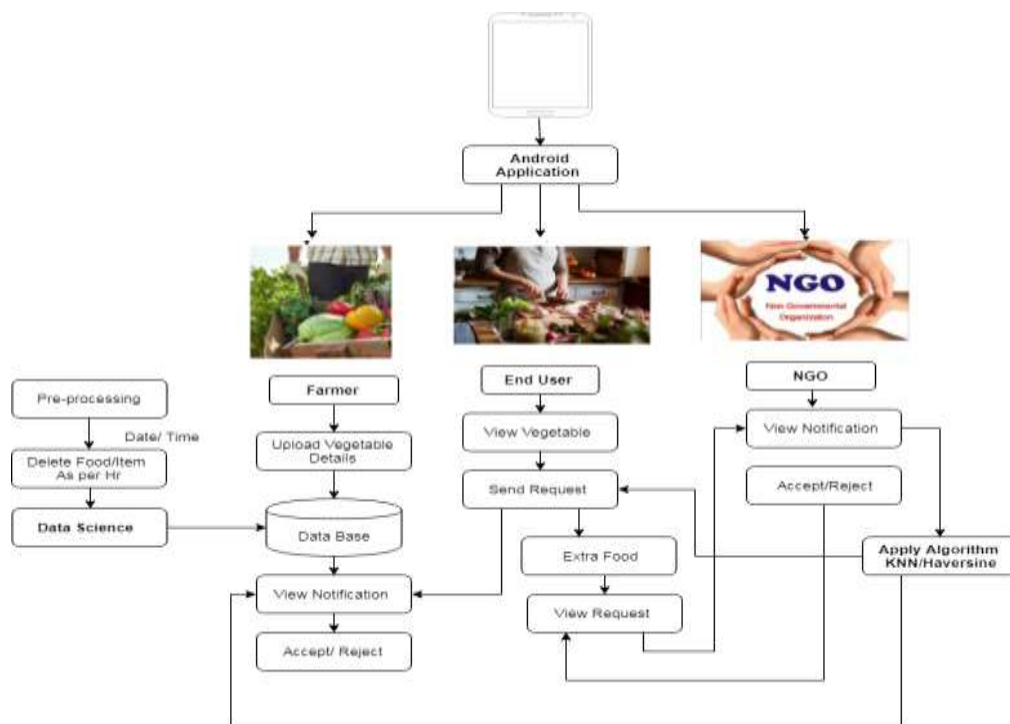


Fig.1: Proposed System Architecture.

ALGORITHM

k-NN

For pattern recognition, the k-Nearest Neighbours algorithm (or k-NN for short) is a non-parametric technique used for classification and regression. In both instances, the entry consists of the closest examples of education in the function space. The performance depends on whether or not k-NN is used for classification or regression purposes:

- In the K-NN classification, the output is the membership of the category. The object is classified by a majority vote of its neighbours, the object being assigned to the most frequent classification among its nearest neighbours (k is a wonderful integer, usually small). When k= 1, the object is automatically assigned to the rank of the nearest neighbour.
- The performance of the k-NN regression is the property value for the object. This price is the measure of the values of its nearest neighbours.

K-NN is a form of instance-based learning, or lazy learning, the position of the function is only approximated domestically, and all computation is deferred to classification.

Algorithm Steps

- Educational examples are vectors in a multidimensional function space, each with a class mark.
- The coaching section of the algorithm consists solely of storing the characteristic vectors and category labels of the education samples.
- In the classification process, k is a constant specified by the user;
- It is an unmarked vector (ask or take a look at the point) that is defined by assigning the label that is best known among the correct coaching samples closest to that question point.

MATHEMATICAL MODEL

$S = \{ U, B, \}$

Input:LT, P

1]Set of user(farmer, social worker)

$U = \{U1, U2, U3, U4 \dots \dots Un\}$

2]LT = is the farmer to add their product food/ vegetable /fruits.

3]set of buyer to buy the food and.

$B=\{B1,B2,B3,B4,.. \dots \dots Bn\}$

4]set of ego the unwanted/extra food that is collected.

$E = \{E 1, E 2, E 3, E 4, \dots \dots E n \}$

- Process
- UT = consumer request for food.

$UT=(UT1, UT2, UT3 \dots \dots UTn)$

UF=user will order the different food (farmer list).

$UF=(UF1, UF2, UF3 \dots \dots UF_n)$

K=user put greater food

$K=(K1, K2, K3 \dots \dots Kn)$

EN= NGO.

$EN=(EN1, EN2, EN3 \dots \dots EN_n)$

Supply for food.

Output:

$P = \{Pt, Pf, Pk, PEN\}$

$Pp = \{PS\}$

CONCLUSION

There is an outstanding possibility for e-agricultural applications in the nations; e-agricultural applications, such as precision agriculture and e-commerce in agriculture, will function in the environment where there is a precision ICT infrastructure. Precision farming requires specific low-cost technologies that are only available in intensive farming systems. Participation in e-commerce requires that every customer and dealer has access to the internet and that they can easily use two of the hardware and software required for the farmer, the customers (hotels).

ACKNOWLEDGEMENT

I would select to give thanks to the researchers likewise publishers for creating their assets available. I'm

conjointly grateful to guide, reviewer for their precious suggestions and also thank the university authorities for imparting the required infrastructure and support.

REFERENCES

1. Namisiko P., Aballo M. *Current Status of e-Agriculture and Global Trends: A Survey Conducted in Trans Nzoia County, Kenya*. International Journal of Science and Research Vol. 2, No. 7, 2013.
2. Fafchamps M., Minten B. *Impact of SMS-Based Agricultural Information on Indian Farmers*. Oxford Journals. Vol. 26, No. 3, 383–414p, 2012.
3. Dwivedy N. *Challenges confronted with the aid of the Agriculture Sector in Developing Countries with Special Reference to India*. International Journal of Rural Studies. Vol. 18, No. 2, 2011.
4. Ayramo S., Karkkainen T. *Introduction to partitioning primarily based clustering methods with a sturdy example*. University of Jyvaskyla Department of Mathematical Information Technology. ISBN 951392467X, ISSN 14564378, 2006.
5. Vaidya J., Clifton C. *Privacy-Preserving Means Clustering over Vertically Partitioned Data*. Department of Computer Sciences. CM 1581137370/ 03/0008, 2003.
6. Jagannathan G., Pillaipakkamnatt K., Wright R.N. *A New Privacy-Preserving Distributed k-Clustering Algorithm*. International Conference on Data Mining (SDM). 2006.
7. Kumar V. *Smart information mining: information mining powered by artificial intelligence*. Journal of Computer Science and Information Technology. ISSN 0973-4872, Vol. 3, No.1, 44-47p, 2006.
8. Mucherino A., Rub G. *Recent Developments in Data Mining and Agriculture*.
9. Rub G. *Data Mining of Agricultural Yield Data: A Comparison of Regression Models*.