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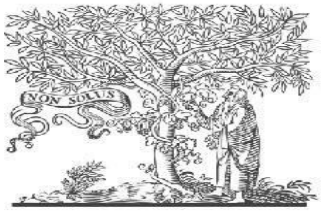

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Survey on - Agriculture Based E-commerce Website

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ABSTRACT

The electronic marketplace has reached a very efficient state for transactions in the ecommerce industry. We should design and implement a system that both parties can trust for both the seller and the buyer. Our project is an online marketplace for consumer-to-consumer sales, especially targeting emerging market users, with the aim of providing consumers with a safe, reliable and efficient way to buy and sell goods.

Agriculture application provides its users with information about nearby available products like plants, seeds, pesticides, agricultural machinery. Sometimes these products are received in larger quantities due to the demands of farmers and are wasted. Waste can be eliminated with this app. So the farmer can sell his goods on this website. Another farmer who is willing to buy them will respond to the seller and buy them. This way there will be no waste of goods and profit in agriculture. The main features of this application include information retrieval and marketing facility from anywhere in the form of getting statistical information about fertilizers, pesticides, seeds and plants. Agriculture is the strength of the Indian economy and 70% of India's total population is primarily dependent on agriculture for their employment. Agriculture is still an underdeveloped sector in terms of technology inculcation. With increasing technology and internet services, information regarding various government agricultural schemes is now available on the internet in the form of websites and mobile applications. But due to digital illiteracy in rural areas, farmers are not aware of various agricultural information and schemes. This mobile application will provide Indian farmers with various government schemes for which they are eligible.

This service will be available in local languages, English, Marathi and may be further added as per requirement.The schemes will be made available to the farmers in the form of text, audio and video. This easy-to-use website takes care of all marketing of agricultural products. In this web application, farmers can upload their agricultural products through operators. The operator assumes adding and removing goods. This web application will in turn be viewed by buyers who will purchase the goods provided by the Farmers Market.

KEYWORDS: Ecommerce website, farming, agriculture, Front-end, Back-end, seeds, fertilizers, pesticides, machinery, Online Shopping.

Introduction

Agriculture is the practice of growing plants and livestock to provide facilities for human beings. Agriculture was a key development in the rise of the sedentary human lifestyle. Cultivation of vegetables and food grains began years ago with the aim of providing food for the urban population. Agriculture is the main need of people to live in society. Agriculture is the main source of livelihood, it provides people with a source of income. Most of the population in rural areas depend on agriculture as their main source of income.

Agriculture contributes significantly to a country's GDP, which is the country's gross domestic product. Over time, a number of revolutions take place to improve agriculture around the world or in a country. If we talk about

agriculture, India has witnessed a number of revolutions, i.e. green revolution, yellow revolution, blue revolution, agriculture.

Excess purchase of agricultural produce leads to wastage, sometimes leads to loss to farmers. Which is a very common problem that we encounter in our surroundings. Our application will help farmers to solve this problem by selling their surplus products to other people who have reservation of the same product. The app will have an interface for both sellers and buyers where a single person can sell their products at the same time they can buy products if they want. A website that allows people to buy and sell physical goods, services, and digital products over the Internet, rather than in a brick-and-mortar store. Through an e-commerce website, a business can process orders, receive payments, manage shipping and logistics, and provide customer service.

E-commerce websites allow people to buy and sell physical goods, services, and digital products over the Internet, rather than in a brick-and-mortar store. Through an e-commerce website, a business can process orders, receive payments, manage shipping and logistics, and provide customer service.

Farmers will be able to sell their products across the country from their homes by simply uploading their products to the website through operators. Farmers will be guided by agents in every way. The e-commerce website will help farmers develop successful agrimarketing strategies that would improve the quality of life of farmers. In addition, thanks to the Marketing Center, farmers will see their sales proceeds and related information in their accounts. Farmers will be able to sell their produce through e-commerce only with an authorized agency. Through the evaluation of business activity, the Central Market Committee will have authority over the Agents. The SMS center will offer the necessary information about the market in rural areas where the Internet is unavailable. Farmers will also have access to government programs.

II. LITERATURE REVIEW

1. Manish Mahant, Abhishek Shukla, Sunil Dixit, Dileshwer Patel, (2012),

The application of Information and Communication Technology (ICT) in agriculture is increasingly important. EAgriculture involves the conceptualization, design, development, evaluation and application of innovative ways to use information and communication technologies (ICT) in rural domain, with a primary focus on agriculture. Information and Communication Technology (ICT) can play a significant role in maintaining properties of information as it consists of three main technologies. These technologies are applied for processing, exchanging and managing data, information and knowledge.

2. Ugwuishiwu C.H., Udanor C.N., Ugwuishiwu B.O., (2012),

This paper proposes an Agro-Information System that enables a farmer to have relevant information about a crop, such as the varieties and other requirements like soil type, temperature, type and quantity of fertilizer, time of planting, time of maturity, planting distance, diseases, pest, pest and Disease control measures, rainfall, sunshine, etc. of that crop. The level of application of this information determines the volume and efficiency of the crop yield. AIS software is designed and implemented which helps the farmer achieve the afore-mentioned objectives.

3. HavliCek, J. Vanek, V. Lohr, E. Cervenkova, (2010),

The rapid advancement in Information and Communications Technologies (ICTs) has given rise to new applications that were impossible just few years ago. Agriculture is an important sector with the majority of the rural population in developing countries depending on it. The sector faces major challenges of enhancing production in a situation of dwindling natural resources necessary for production. ICT plays an important role in challenging and uplifting the livelihoods of the rural populace using an agro computer-based information system. This paper proposes an AgroInformation

System that enables a farmer to have relevant information about a crop, such as the varieties and other requirements like soil type, temperature, type and quantity of fertilizer, time of planting, time of maturity, planting distance, diseases, pest, pest and Disease control measures, rainfall, sunshine, etc. of that crop. The level of application of this information determines the volume and efficiency of the crop yield. AIS software is designed and implemented which helps the farmer achieve the afore-mentioned objectives.

4. Sanjeev S Sannakki, Vijay S Rajpurohit, V B Nargund, Arun Kumar R, Prema S Yallur, (2011),

Present paper introduces an innovative approach to automatically grade the disease on plant leaves. The system effectively inculcates Information and Communication Technology (ICT) in agriculture and hence contributes to Precision Agriculture.

Presently, plant pathologists mainly rely on naked eye prediction and a disease scoring scale to grade the disease. This manual grading is not only time consuming but also not feasible. Hence the paper proposes an image processing based approach to automatically grade the disease spread on plant leaves by employing Fuzzy Logic. The results are proved to be accurate and satisfactory in contrast with manual.grading.1
4036

5. Robert Szilagyi, (2012),

The new ICT technologies are not only fast developed but, in addition, are giving birth to newer systems and tools. The Internet network have become essential communication tools in business processes recently. Using the Internet by means of mobile appliances increases the possibilities. The agriculture has some speciality in information technology. The ICT adoption in the agriculture and main drivers has been examined. For the successful application the key lessons have to understand. To get a draft overview of Hungarian position there is part about it. In this part there are data about household communication devices the individuals ICT usage by age. The region differences in information technologies can be seen also. The final part of the paper there are some technology and application examples. The new devices like tablets and new services like Cloud Computing have great potential in agriculture. Cloud Computing provides better resource management and effective cost control. However, the business assessment of these technologies must not be done only on the basis of the technology and taken out of its environment randomly since the whole area is very complex.

6. Omotesho, K. F., Ogunlade, I. O., Muhammad Lawal, (2012),

The study examined the factors associated with the level of access of Agricultural Extension officers in Kwara State to Information and Communication Technology (ICT). It also identified the constraints to the usage of ICT for the purpose of sourcing agricultural information. Data for the study were collected from the Subject Matter Specialists (SMSs) and ExtensionAgents(EAs) of the Kwara State Agricultural Development Project (KWADP) through the use ofa structured questionnaire. The numbers of years on the job and the age of the respondents had negative but significant relationship with access.Apart from the general constraints to the use of ICT such as, high cost of personal computer, inadequate electricity supply and poor internet access, poor training and technological knowhow were also identified as specific constraints faced by the EAs. The study therefore recommended the need for easier access by all agricultural extension officers to ICT. Besides,training workshops should be organized for Extension officers in the area of ICT and computer appreciation.

7. Koen C. Mertens, Jürgen Vangeyte, Stephanie Van Weyenberg, Christiane Von Haselberg, Martin Holpp, Renate L. Doerfler, Iver Thysen, (2012),

Ample research is conducted on ICT, automation and robotics in agriculture and related environmental issues. ICT and Robotics innovations are rapidly emerging and have the ability to revolutionize future farming through their

major impacts on productivity and profitability. Unfortunately human and financial resources and efforts are fragmented and limited. This led to the creation of the ICT-AGRI ERA- NET that provides a central structured framework. Its main objective is to strengthen and coordinate European research regarding ICT and robotics in agriculture. Besides the creation of the Meta Knowledge Base (MKB), a common European research agenda will be developed and common research calls are launched. The Meta Knowledge Base (http://dbictagri.eu) is attempting to map all14036 relevant research and development within the selected research area. To organize the postings, a three- dimensional tasktechnology oriented framework was designed. The results indicated that the three axes: task, technology and scope seemed insufficient to describe the whole research area. Therefore, an improved framework was developed. By extending the task-technology oriented framework with a process-control–information system, a useful framework was designed.

8. SHANMUGAPRIYA M, DR.TAMILARASI A, (2013),

Mobile Devices are pervasive in nature and supports ubiquitous learning environment. In this article the designing and developing a mobile courseware for ICT students using problem-based learning approach is discussed. The courseware is designed to evaluate the feasibility of adopting the problem- based learning pedagogies in a mobile learning environment for ICT students. A case study is built for Java Programming and the courseware is implemented on the M-learning framework designed. The machine learning framework is developed using service-oriented architecture. The design and delivery of learning objects for the mobile learning is being depicted in the PBL environment.

9. Fladys Kibera, (2013),

Acknowledging people who will directly or indirectly benefit from a project is significant for its success. Projects whether small or large must place more weight on participation of stakeholders to build awareness, set realistic expectations, raise support, minimize resistance and ensure successful implementation and user adoption. J the change and a completely new way of operations of software systems like Customer Relationship Management (CRM), has been an uphill task because of factors like failure to involve the stakeholders and improper change management. The study categorized stakeholders into three; managers, administrators and technical staff. It adopted quantitative and qualitative research approach. We found out that managers are the key decision makers who facilitate the procurement of systems; administrators are the end users while the technical team provides support and maintenance of the systems. We propose that right from problem identification, to system specification all the way to installation of software (implementation) stakeholders must be brought on board.

10. Monica. N. Agu, (2013),

Agriculture is the mainstay of most third world economies and occupies a pivotal position in the development of these countries. Despite the importance of agriculture, improvements in this sector have been uneven and, on the whole, disappointing. In any farming system, it is important to recognize the various roles of women. Many women experience a life that is a complex web of multi roles and multi-tasks which requires the average woman to conduct different things in a bid to fulfill her family needs. Women in rural communities are extensively involved in arduous farm operations and14037 agricultural activities, from planting to harvesting and other post harvesting operations. So the Nigerian women are in an important position to contribute to food supply. This sector faces major challenges for enhancing production in a situation of dwindling natural resources necessary for production. ICT plays an important role in addressing these challenges. The paper analyses the problems facing women in the agricultural sector-and suggests ways to solve these problems. Further more the paper surveys the information needs of rural women and how ICT can be used to meet their information needs.

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III. REVIEW FINDINGS

1. Informing farmers so no one gets lost. Avoiding damage to products by selling them immediately. The website should be able to use the application from any web browser.
2. New users to the site should be able to register themselves. The user must be able to adjust the amount of items in (or) remove items from the cart. The application must be able to be used by a large number of users.
3. An administrator should be able to manage ecommerce applications using web browsers. Administrators should be able to view all user transactions.

IV.PROPOSED WORK WITH METHODOLOGY

Our proposed system is to develop an application through which the entire above flow can be automated so that farmers can sell or buy surplus produce. Users will learn information about nearby available products like plants, seeds, pesticides, purchase of agricultural machinery. . In addition, there are people who may require the same amount of products. The main features of this application include information retrieval and marketing facility from anywhere in the form of getting statistical information about fertilizers, pesticides, seeds and plants.

This easy to use website takes care of all marketing of agricultural products. In this web application, farmers can upload their agricultural products through operators. The operator assumes the addition and removal of goods. This web application will in turn be viewed by buyers who will purchase the goods provided by the Farmers Market.
A farmer can sell his goods on this site. Another farmer who is willing to buy them will respond to the seller and buy them. This way there will be no waste of goods and profit in agriculture. The main features of this application include information retrieval and marketing facility from anywhere in the form of getting statistical information about fertilizers, pesticides, seeds and plants.

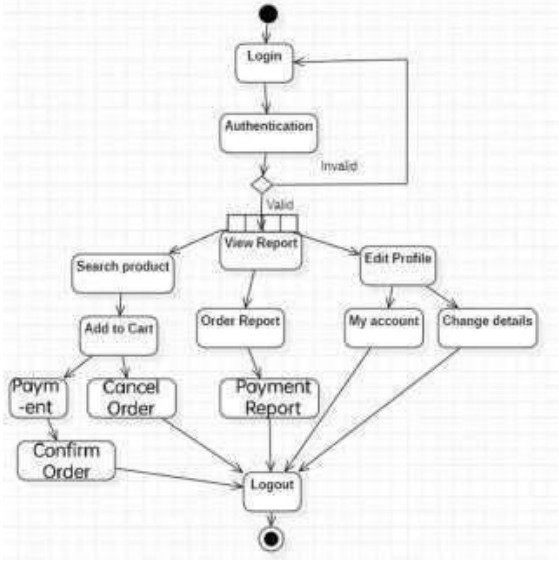

Fig. Architecture of Agriculture Based E-commerce Website

We can highlight the vital aspects necessary for good ecommerce mobile app development services for farmers after seeing some of the most popular online organic marketplaces for farmers, buyers and customers.

Farmers have to go to the nearest market to give their produce to a particular agent where the agent sells the product to another agent or dealer. After a certain period of time, the agent gives the collected money from the sold products to a respected farmer, but each agent tries to cut his commission from the amount earned. The whole process is not transparent because the farmer has no way to know about the trade and the exact amount for which their product has been sold and the farmers have no way to know the prices of the products in the different markets where they can sell their products. to achieve high profits. This motivated us to design and develop a system that is useful for farmers and end users.

The website creates a platform for farmers to ensure higher profitability through communication with end users. The website will act as a unique and secure way of doing agro-marketing. E-

farming will serve as a way for farmers to sell their produce across the country with just some basic knowledge of how to use the web.

V. COMPARISON WITH EXISTING SYSTEM

1. Agri App is an Android based mobile application. It provides complete information on crop production, crop protection, smart farming with agriculture and related services. Apart from being an information portal, Agri App is also an online marketplace for farmers, Agri inputs, retailers and fulfillment services on a common digital platform.
2. Tractor junction app is to spread all this information to all parts of India. To achieve this, we have ensured that you can access Tractor Junction in Hindi, English, Tamil, Telugu and Marathi. Our mission is to bring joy and pleasure to buying and owning a tractor. To achieve this, we aim to enable Indian farmers to make informed decisions about buying and owning tractors with comprehensive and unbiased tractor information through expert reviews, owner reviews, detailed specifications and comparisons. We understand that a tractor is one of the essential assets in a farmer's life.
3. With the help of our application, we can reduce the waste of the product and sell it to the desired person. It connects local people to buy, sell or trade used goods and services and allows people to post an offer through their mobile phone or on the web.
4. Customers can now create and interact with simple reports on various key business metrics. The map integration function within the application allows you to present the location of the address.

VI. CONCLUSION AND FUTURE WORK

This study provides a clear idea of how to sell or buy unused products in agriculture. In this application, we mainly focus on two points, one is to sell agricultural products, and the other is to buy products to sell to the user of the product, it provides the necessary information about the product, such as price, quantity, item name, etc., and put the product on the website if you the user wants to buy the product, searches for the product and buys it.

A functional application useful for both the farmer and the buyer is to be implemented. System automatically allocates the order to the farmers. Crop details are said to be present in the customer panel. The transportation aspect is handled by the system as it uses the shortest path algorithm on the customer panel to guide the individual to the nearest farmer.

VII. REFERENCES

[1] P. S. Anwesha Borthakur, “AGRICULTURAL RESEARCH IN INDIA: AN EXPLORATORY STUDY”, International Journal of Social Science & Interdisciplinary Research, vol. 1, No. 9, pp. 59-74.

[2] N. H. V. E. H. Panneerselvam Peramaiyan, "Indian Farmers' Experiences and Perceptions of Organic Farming", Renewable Agriculture and Food Systems, pp. 1-14.

[3] M. N. Parveen Kumar, “Agriculture in India: A SWOT analysis”, Indian Journal of Applied Research, Vol. 3, No. 7, p.4-6.

[4] A. T. Gopi Krishna Suvanam, “Imbalances Created Due to Structured Products in Indian Equity Markets”, p. 1-.3.

[5] [5] S. Yadav, “STOCK MARKET VOLATILITY – A STUDY OF THE INDIAN STOCK MARKET”, | IC value 80.2, Vol. 4, No. 6, pp. 629-632.

[6] D. Bhowmik, "STOCK MARKET VOLATILITY: AN ASSESSMENT", International Journal of Scientific and Research Publications, Vol. 3, No. 10, pp. 3-13.

[7] D. R. G. A. Ms. Nidhi Rajendra Bisen, "A STUDY ON THE EXISTING LITERATURE OF COMMODITY MARKET", International Journal of Management Studies, vol. 3, No. 1, pp. 106-111.

[8] P. Klemperer, "Auction Theory", Surveys, Vol. 13, No. 3, pp. 227-286.