KISAN : An Improved Interface for Indian Farmer.

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ABSTRACT

Agriculture is a way of life, a tradition, which, for centuries, has shaped the thought, the outlook, the culture and economic life of the people of India. The advent of modern technologies at the beginning of the last century has brought in development of various technologies, which has substantially increased the yields of various crops.

It is an agricultural portal which gives solutions to the farmers and students of agricultural studies in India. Kisan's aims to disseminate useful information about improved technology to the farming community and service providers in the rural areas. The major focus of Agriculture sector presently in the in this portal, is pertaining to Agricultural Credit, Policies & Schemes, Agricultural Bank loans, Market Information, Agricultural Best Practices, On & Off Farm Enterprises and various Products & Services.

Today, India ranks second worldwide in farm output. Agriculture and allied sectors like forestry, logging and fishing accounted for 16.6% of the GDP in 2007, employed 60% of the total workforce and despite a steady decline of its share in the GDP, is still the largest economic sector and plays a significant role in the overall socioeconomic development of India.

India is the largest producer in the world of milk, cashew nuts, coconuts, tea, ginger, turmeric and black pepper. It also has the world's largest cattle population (281 million). It is the second largest producer of wheat, rice, sugar, groundnut and inland fish. It is the third largest producers of tobacco. India accounts for 10% of the world fruit production with first rank in the production of banana and sapota.

It is readily accepted that increased information flow has a positive effect on the agricultural sector and individual firms. However, collecting and disseminating information is often difficult and costly. Information Technology (IT) offers the ability to increase the amount of information provided to all participants in the agricultural sector and to decrease the cost of disseminating the information. An understanding of the factors associated with IT adoption and use in agriculture will enable the development of strategies to promote IT adoption and increase the effectiveness and efficiency of information used in agriculture.

Keyword: - Interface, Web Service, Key Client-Server Architecture, Graphical Interface, Multi Lingual Interface.

1. INTRODUCTION TO PROJECT

It is an agricultural portal which gives solutions to the farmers and students of agricultural studies in India. Kisan's aims to disseminate useful information about improved technology to the farming community and service providers in the rural areas. The major focus of Agriculture sector presently in the in this portal, is pertaining to

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1.1 PURPOSE OF THE PROJECT

Kisan playing an important and vital role in agricultural production and marketing. This system allows farmers to save time on order and delivery and getting feedback. In the existing competition, there is a need to rapidly attract new customers as well as retain existing customers.

1.2 PROBLEM IN EXISTING SYSTEM

Slow agricultural growth is a concern for policymakers as some two-thirds of India's people depend on rural employment for a living. Current agricultural practices are neither economically nor environmentally sustainable and India's yields for many agricultural commodities are low.

A major drawback of India's agriculture, watershed development ,irrigation strategy, seed management, improving yield bank and insurances are provided loans to farmers has been the neglect of relatively wetter catchment areas and the rural people living therein.

1.3 SOLUTION OF THESE PROBLES

The development of this new system contains the following activities, which try to automate the entire process keeping in the view of database integration approach. User Friendliness is provided in the application with various controls provided by system Rich User Interface.

2. PROPOSED SYSTEM

Kisan is playing an important and vital role in agricultural production and marketing. This system allows farmers to save time on order and delivery and getting feedback. Farmers (Agricultural Students) crop database must be managed. The database includes the kinds of crops, the size of cultivated area, time of harvest and yield. Farmers or the extension personnel transmit those data via the Internet to database server. Further, information provides the farmer with an important instrument for decision making and taking action.

Crops information service system should be created by the administrator. This system analyzes the crop data to create some statistical tables. Farmers can access these statistical data by browsing the homepage and make their production plan. Production equipment's inquiry service system should be created. This system gathers information from the companies of seeds and crop production equipment to build the production equipment's inquiry service system.

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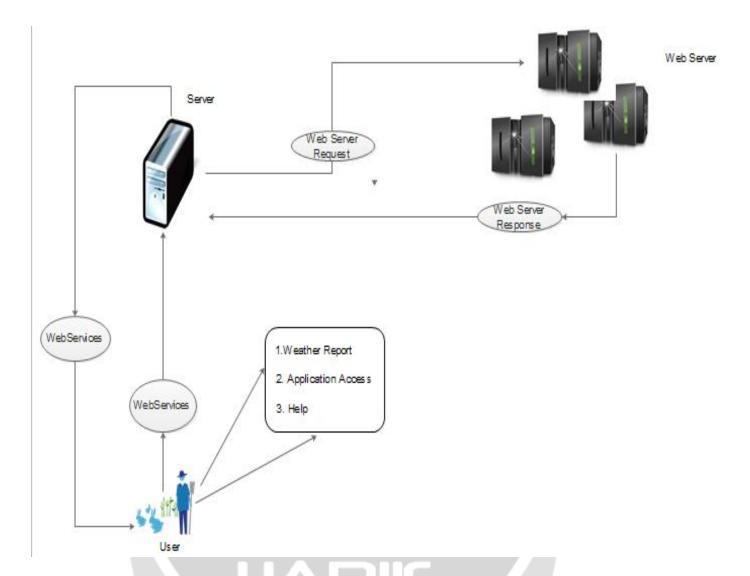


Fig -1: Architecture of System.

2.1 Advantages

- Haphazard development: It is observed that some initiatives have already been made to provide IT based services to rural community. However, duplication of efforts are witnessed as most of the services revolve around limited subjects
- User friendliness: The success of this strategy depends on the ease with which rural population can use the content. This will require intuitive graphics based presentation
- Local languages: Regional language fonts and mechanisms for synchronization of the content provides a challenge that needs to be met with careful planning.
- Restrictions: Information content based on remote sensing and geographical information.
- Band width: Even in areas where telephone and other communication services exist, the available bandwidth is a major constraint. Since internet based rural services require substantial use of graphics, low bandwidth is one of the major limitations in providing effective e-services to farmers.

2.2 Hardware Requirements:

- PIV 2.8 GHz Processor and Above.
- RAM 512MB and Above.
- HDD 40 GB Hard Disk Space and Above

2.3 Software Requirements:

- WINDOWS OS (XP / 2000 / 200 Server / 2003 Server).
- Visual Studio .Net 2012 Enterprise Edition.
- Internet Information Server 5.0 (IIS).
- Visual Studio .Net Framework (Minimal for Deployment) version 3.5.
- SQL Server 2012 Enterprise Edition.

3. CONCLUSIONS

The availability and accessibility of information are the crucial points in taking the optimal decision at right time. Indian farmers belong to such type of people who are not much sound in both technical as well as in English. So, they are unable to access required information on the farming life cycle, seed selection, pesticides, market price etc. from the internet. Our preliminary studies reveal that farmers require information at the right stage of the farming life cycle to take the right decisions. A large number of people from the Indian farmer community are unable to read/write even their own mother tongue. So, it is obvious that text based interface, instead of supporting farmers own language, and are not able to provide the required information. Our proposed methodology of our developed interface for the Indian farmer community to access the agricultural information from the global internet repository and store them into local repository. Krishi-Bharati interface user searches their agriculture related query through icons and gets the intended information in both textual and spoken form.

4. REFERENCES

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