

AUTOMATED PESTICIDES INFORMATION MANAGEMENT SYSTEM

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ABSTRACT

Agriculture is backbone of Indian economy and it is primary sector of country. Growers (Farmers) require advance or experts knowledge to take decision during soil preparation, seed selection, fertilizer management, pesticide management, water scheduling, weed management etc, so that to get high yield. Day by day the population of India is increasing and to full fill the need of food modernization of agricultural sectors are important. As a population is increasing the production of food is also to be increase, so as to increase the productions of food farmers are using Pesticides to get the yield early. Pesticides are distributed equally on the farm and reduce the quantity of waste, which results in prevention of losses and wastage of input applied to farm. It will reduce the cost of production. The Pesticides system for farmers is a web-based system, which gives information relating to the clients and dealers of the company with respect to its pesticides product launches, pesticides information, pesticides requests. The farmers can easily login to the website and easily retrieve the details of the pesticides, the amount of quantity of pesticides to be used, the mixture proportion; it will also give the information to which disease which pesticides should be used.

I.INTRODUCTION

Some of the burning issues of the country are poverty, starvation and hunger. In India about 73% of population is directly or indirectly depends upon the farming. Hence it is said that India is an agricultural based country. But till now our farmers are doing farming in same traditional ways. Nowadays many farmers are using

multicrop harvesting method where they can grow a multiple crops within a year. For example if they grow Brinjal in first four months later they can grow Green chilly for another four months and at last they can grow Corn in remaining four months. By this multicrop method the nutrients in the field replenishes and the need for the food is balanced. For this multicrop cultivation many of the farmers use Pesticides so as to get the yield early. If they opt the organic farming it takes one crop for one year, it leads to waste of time so as production is less. There is need of development in this sector. In this paper the application has to be developed which would minimize the flaws of the existing system that is the farmers are manipulated by the dealers by giving expired products and over dosages as many farmers are illiterate and they are easily manipulated. The scope of this project is to enable the user of an organization to view the issues through the LAN/Internet. Based on the category of the user i.e. employee or administrator, the various parts of the system are made attractive so they can navigate within themselves in the user friendly environment. Pesticides system for farmers system provide proper channel for the client, dealer and the company management to communicate among themselves. This software product has been designed to provide specific services to the end user i.e. farmers and they are not manipulated because this system provides authorized dealers. The scope of the system includes two areas of the company that are Marketing department, and accounting department. The main intention of this system is to automate the services of the company that will reach the clients and dealers easily besides being advantageous to the company itself. The major

advantage of the system is to cost effective implementation and unnecessary delay in processing of clients request and provides one stop shop for farmers and gives detailed information on the pesticides which are being used.

II. LITERATURE REVIEW

In [1], the development of New Expert System Tool (NEST) and its application Pesticides management system. The NEST system is rule based and uses the client server architecture. The client side consists of the Graphical User Interface (GUI), the knowledge representation model, the interface engine and the knowledge base maintenance module. The server side handles the storage and maintenance of knowledge base data at lower level using the capabilities of a Database Management System (DBMS). The DBMS performs the ordinary DB operation such as insert, delete and update.

In [2], National Pesticide Information Centre (NPIC) provides a science based information about a wide variety of Pesticides related topics including: Pesticides product information, information on the recognition, contents, how to use, precaution. The system provides a simple interface for maintenance of Dealers, Customer information it can be used by Pesticides organization to maintain the records of Pesticides, Dealers information easily and have the details of Stock i.e. how much quantity and composition of chemicals etc. It also facilitates us explore all the activities happening in the organization, different reports and queries can be generated on vast options related to dealers, stock details, dealer pending and approved request, manager approved requests.

In [3], the web based systems are most appropriate in the situations where large numbers of users are spread over geographically far off places or different agro-climatic regions in case of agriculture applications (Jensen et. al., 2000; Bajwa and Kogan, 2010).

In [4], popular applications are web based learning or education, consultation for diseases, telemedicine, geography and world studies as well as crop management and protection.

III. EXISTING SYSTEM

As day by day the death rate of farmers is increasing due to the problems like pre or post monsoon, using of expired or over dosage of Pesticides to overcome the usage of Pesticides, there is no proper system for manage things in organization. Proper security features and authentication is not available in the existing system. Hence the system is time consuming and inefficient for maintaining large amount of information and also its retrieval. This also results in improper administration. Drawback of this system is the activities are performed manually that consumes a lot of time and leads to lot of manual power that is pen and paper work. Proper security features are not available and insufficient space for maintaining large amount of information. The dealers may change rate per unit of Pesticides and leads to manipulate the farmers. All the information like expiry date, price, directions to use, contents, precautions, diagnosing and identifying the pests and diseases and its control is not easily conveyed to the customer easily and quickly.

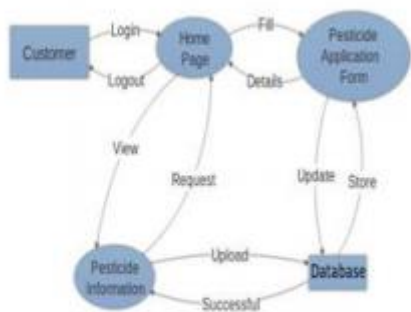
IV. PROPOSED SYSTEM

The problem with the existing system is that there is no proper security and authentication is not available and communication between the customer and dealer is not user friendly. To overcome the drawbacks of the present system and to meet all the specified requirements of the organization. The system has been developed to be used in diagnosing and identifying pests and diseases with the ability to suggest the relevant recommendations and measures of control. The diagnostic process includes pest identification on the basis of the affected crops, feeding habitat of pest, insects, weeds morphology and life stage, and damaged or infected part of the crop and

diagnosis of some physiological disorders. Selected images are used to describe symptoms, as it is difficult and sometimes confusing to describe symptoms in words. Some recommendations measures are also included in the system. The system provides different logins for the dealers, customers and the admin. It also provides different signups for dealers and customers and provides new pesticide application forms where the details like pesticide name, registration id, expiry date, rate per unit and required date. So from this application the end users get all the details of their crop in a single system.

V. DESIGN

CUSTOMER



Customer views the home page and then he fills the pesticides application form. The application id is generated with which he can check the request status. Once the request is approved by the dealer and admin the customer can get the required information

ADMIN



In this level admin can view the home page and can upload the stock details. pesticides information can be updated by the admin which can be viewed by the customers and dealers. All these information will be stored in the database.

DEALER



Dealer after login to the page can change the password and the new password will be updated. The dealer receives the request from the customer, he can approve or disapprove the request. The approved request will be forwarded to admin. All these details will be stored in the database

VI. SYSTEM DEVELOPMENT

The entire system has been divided into three main modules: Admin, Dealer and Customer.

Admin:

At first the admin signup i.e. he login with his login id and password and views the details of dealers, customer, pesticides request, pesticides and stocks. In stock details the admin has only

right to modify the details of stocks that includes insert, update and delete options. The insert option include, if any new product has been introduce in the market then the admin will insert the details of the product which include pesticides name, pesticides id, pesticides reg_no, expiry and manufacture date, price, quantity and other details. Whenever the rate of the product changes due to some conditions like seasonal effect then the admin can update the details of that product by giving its pesticides id and changing the respective areas. If the product has been expired or out of stock then the admin can delete that product details. Admin can view the pesticide request which include pending request, manager approved request, dealer approved request and show the entire requests. Pending request consists of pesticides id and different dealers from which they can provide the particular product and pending status i.e. expired, less quantity, approved, disapproved.

Dealer:

The new dealer is provided with his login id and password through which he/she can sign up. He can view the details of customers, dealers, new pesticides application form, pesticides information and he is provided with change of password option. The dealer can approve pesticides request and forward the request to the admin then the admin approves it. The dealer provides new dealer sign up.

Customer:

The customer is also provided with login id and password through which he/she can sign up. He can view the details of dealers, customer and pesticides and new sign up are provided which include details like name, occupation, door no, street, taluk, district, city, pin code, password and conform password. The customer can also change the password by clicking on change password button.

VII. CONCLUSION

The pesticide system for farmers will help the end users to know all the details of the customers, dealers, pesticide information and etc. The system provides high security and authentication to the system so it provides high performance with less response time. The system shall be operational for 24 hours a day, 7 days a week. The system is available for end user at any part of time but they should have the LAN/Internet connection. One stop shop for the farmers.

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