

i-Kisaan

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ABSTRACT

We here propose web portal for our farmer to help them in increasing their profit margin. So basically, the aim of the webpage is to provide the basic information about the crop prize by the wholesaler. Also, the best crop selection according to the area, soil, climate of the region. It has a loan wavier facility which will provide them the proper loan information for farmers in their area. In this there will be a separate login for the wholesalers so that they can also gain a profit and the farmers can login and enter their product name (e.g., onion) and they will be with the information of the wholesaler of their product and also the price of the product, so that they Can make some profit out of it.

Keywords

FARMER, wholesaler, banking, pest control, market price, wholesale

1. INTRODUCTION

Thei-KISAAN is a web portal for help to our farmers friends. Basically, the aim of this portal to provide the information and other utility-based support to our farmer friends. In India, the dependency of workforce is 75% off arming. As we say "Jai Jawan, jai Kashan". We have huge sentiments for our land. So why not we create something that is easily available for farmers friends at ease and at one place.

The portal is equipped with all integration of secure working individual official government site, as seen and observed many of site with integration of different sites don't work properly people need to face lots of problem. They move here-there to make the accessible and to perform task. On our portal people don't need to go anywhere else. From government specific field portal to our facilities. The whole process will be done insecure way. So, say no to any type of hurdle anymore.

2. LITERATURESURVEY

- 1) Enabling the Smart Agriculture Revolution-The Future of Farming through the IoT Perspective, Tech.Rep., 2016.

In this there is a lot of IoT feature which can help the farmers in increasing their productivity with a smaller number of labors and gain huge profits out of it

- 2) D. G. Chandra and D. B. Malaya, "Role of e-agriculture in rural development in Indian context,

Emerging Trends in Networks and Computer Communications (ETNCC)2011

- 3) International Conference on, pp. 320-323, 2011.

So here are some of the new emerging trends which are not very well followed in India & if we start following the trans the farmers will be more beneficial

- 4) S.M.M. Rashid and M.R. Islam, "Problems faced by farmers in application of e-agriculture in Bangladesh", Journal of Agricultural Economics and Rural Development, vol.3, no.1, pp.79-84, 2016. We found the idea based on available technology for farmer from this reference too.

- 5) Department of Agriculture, Cooperation and Farmers Welfare [Http://agricoop.nic.in/](http://agricoop.nic.in/)

More details found this site and idea generated from this reference too.

- 6) Agricultural and Processed Food Export Development Authority

[Http://www.apeda.in](http://www.apeda.in)

The production and availability of processed food and details found on this reference and well detailed ones.

- 7) Natural way of farming: the theory and practice of green philosophy by Masanobo Fukuoka

The way of natural farming and techniques details found in this reference and is good in reason.

- 8) Handbook of agriculture: facts and figures for farmer students and all interested in farming by ICAR

Facts and figures in agriculture is found here in this reference which is also helped us to figure out the fact and figures-based result for farmers.

- 9) Important Government Schemes & Programs in Agriculture (krishijagan.com)

Details regarding the on-going government based agricultural schemes used and studied from this reference.

- 10) Advantages and Challenging in E-Agriculture | Oriental Journal of Computer Science and Technology (computerscijournal.org)

Challenges and problems in field of agriculture studied from this reference and found the challenges regarding internet and digital based problems.

- 11) J K. Ravi Shankar, Pochaiyah Maraty. "Concerns of India's Farmers", Outlook on Agriculture, 2009 <https://www.researchgate.net/publication/233677002>

The tabular data received and studied from this reference and various ideas on paper received from this reference.

So, we learned the major problems in India which the farmers in India faced due to new technologies related to farming. The website idea was developed after many team discussions sessions as, it would be interesting technology product which is convenient, easy to use and efficient. As the concept was based on technology, it was imperative to get the perception of customers for which the idea was designed. The website idea is based on new farming technologies.

Soil health card scheme. Some of the ongoing schemes listed here: -

- a. Pradhan Mantri fasal bima yojana (PMFBY)
- b. Neem coated urea(NCU).
- c. Pradhan Mantri Krishi shinchai yojana(PMKSY)
- d. Paraphragmata Krishi Vikas yojana(PKVY)
- e. National Agriculture Market(e-NAM)
- f. Micro irrigation fund(MIF)
- g. Agriculture contingency plan
- h. Rainfed area development programme (RADP)
- i. National watershed development project for rainfed areas (NWDPR)
- j. National mission for sustainable agriculture(NMSA)
- k. National scheme on welfare of fisherman.
- l. Gramin bhandar anyojana.

Table1. Indebtedness of farmers’ households (by state and for all India)

SNo	Indicators	Maharashtra	AndhraPradesh	Kerala	Punjab	AllIndia
1.	Percentage of farmers’ households in debted	54.8	82.0	64.4	65.4	48.6
2.	Percentage of indebted farmers’ households with Cultivation as main income	62.6	54.4	14.4	52.7	56.9

Source: National Sample Survey Organization,2005b.

Table2. Distribution of indebted farmers’ households according to landholding

SNo	Indicators	Maharashtra	AndhraPradesh	Kerala	Punjab	AllIndia
1.	<1ha	36.0	55.7	87.7	53.3	61.0
2.	1–2ha	26.2	21.8	9.1	15.8	18.9
3.	>2ha	37.9	22.4	3.2	31.0	20.1

Source: National Sample Survey Organization, 2005b.

3. NEED

This report explores and demonstrates how the automation is used in evaluation of a business opportunity from a generated technology idea proposed for commercialization purposes. The idea generation was steered using the automation technology in controlling the team towards recognizing a technological idea for this project. These methods were utilized by the team to implement a great technology concept which will be aimed towards all the farmers and whole salers. The automation technology helped the team in

developing many ideas to narrow it down to website idea based on a feedback from a motivated group within the team. An exact idea came up from the idea’s generation list, as farmers do face the basic difficulties in accessing new edge technologies’, like, lack of knowledge to farmer to access the internet, Improper handling of device, Internet connectivity problem in deep outskirts., Mid-end device required to access it in proper way., Lack of ICT knowledge, Time to update the data on portal, Collaboration’s time delay.

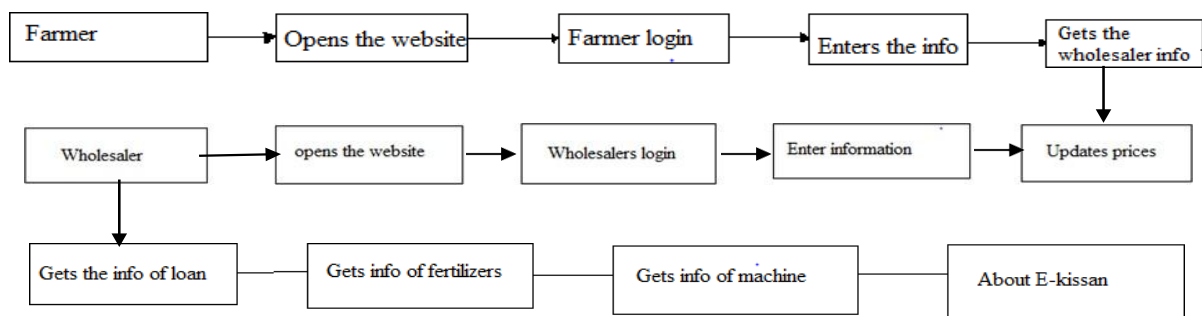


Fig 1: Website feature

4. PROPOSED METHODS

In our today's life, we are facing lots of confidentiality and security challenges, confidentiality and security became a threat to human life, to face this is our top priority so to overcome this, we have built a secure i-kisaan web portal.

4.1 Different logins

At first users in their fields need to make registration through registration portal and our team of experts will verify their role and accordingly experts or executive member will confirm identity and activate logins. We have built the two most secure environment logins the first is for farmers/customers and the second one is for wholesaler or for the people they want to know and buy/sell their products through our portal. The whole user activity data will be protected within their logins.

4.2 Integrations

We have supports of different major portals integrations from government organizations that makes our site more selective in terms of different another portal. Obviously, everyone wants easy and original certified integrations support at one place. To overcome and maintain ease, we have integrated all important portal in our site so the people can reaches their respective support without trust issues in secure environment.

4.3 Services

Coming to services availabilities, we have made possible to give you all important services at one place followed by essentials and non-essentials. From climatic conditions report to buy/sell machineries product. We have made research on market and the most important is user friendly environment is much needed for peoples. To overcome this, we have given support of certified buyer and seller of agricultural equipment.

4.4 Live chat

We have made research on our agricultural sectors we came to know that the problem of unsolved problem is becoming common nowadays, just because of huge number farmers and wholesalers, they don't prefer to read and research on their need. They are still following traditional methodology. And they need to get assisted by experts. To overcome this scenario, we have made integration of livechat support with experts n agriculture, market peoples, and to executive persons. And that too in their own mother tongue. They don't need to learn or to worry about language. Obviously, language barrier is no more tolerable.

4.5 Different languages

After the research and study, we came to know about language barrier and existing services are mainly in one or few languages. So, to overcome this situation, we decided to give support of all major languages without any limitations and even they can switch their languages in real-time without refreshing the whole page content wherever they are on page they can translate in their own way. Of course, languages have made the things impossible to many peoples to make understand others about their problems. to overcome language barrier, we have powered our portal from tech giant Google, their google translate service. We have tested it on different scenarios we came to conclusion that the integrations work really well and effective in nature.

4.6 User Interface

The UI plays more important role in user interactions. The simple and responsive UI makes the user to attract more. The whole UI activity is monitored under our testing periods and

found totally fluent in use and action found accurate. Coming to point for customer and seller, the simple and responsive UI makes the good impact and if they found it good in their way the user interaction will increase and satisfaction raises to work more to achieve perfections.

4.7 Activity

To verify the user role and their role publications, there will be the team of expert members. When the user will post the need article, they need to go through team verifications, our executive will analyze the entered data report by visiting their sites to ensure the genuineness of article. Then the article publication will be published and it will be published as news heading. The needy one will contact to the executive centers and again they will verify their need's use and they makethecontactavailabletotheneedy. Weareusingcentralizedcontrolpaneltomonitoractivity and reply to our customers in real time of response.

4.8 Climatic conditions

According to research and analysis, we have integrated the climatic conditions details page to portal. So, the people/farmer will be able to analyze the previous and current climatic conditions. And they will finalize the use on their land. Also, with the support of live integrations they will be able to chat and ask their doubts in real time from anywhere by signing in and check-in.

4.9 Security

On mark discussion, the security feature of our portal is utmost level of priority from login page to registration have been done in unique and secure way. The login page has error displaying features that display, we have entered wrong credential then it shows the error prompt. Also, to ensure the authorization has been done by real user in their respective field of login. We have created a special registration page, that will not create the instant login to anyone until verification is done of individual role on web portal, to verify and ensure the legacy and secure role, our verification team will verify by physical visiting and online verification process will be done, to register on portal, they need to submit the information on our registrations page along with their role. After successful verification process. The login will be activated on our portal, there is no shortcut for this of course. To maintain integrity and authenticity we have proposed this process of registrations.

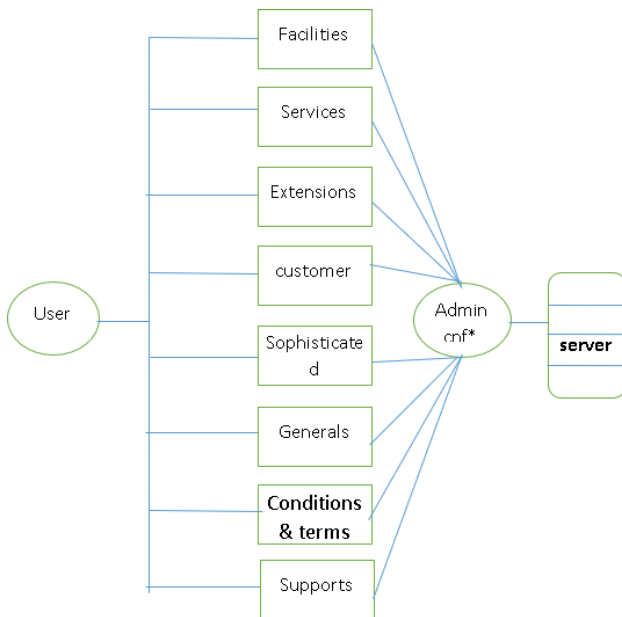


Fig 2: -Use case diagram

5. FUTURE ENHANCEMENT

So, in this website for future use, we can update as many things as much as we can, at most for some security purpose we can add a verification process & also due to it is available in multiple languages it can also be used at international level so we will further work on its database so that it would add a lot of areas into its database and serve a greater number of farmers in numerous areas. The main goal of this site or portal is to support the farmers at their own level, it prevents from mediators. Also, to give more reliable working place at single place once they visit on i-kisaan, they will see all covered schemes of government and can be redirected to the specific portal. They will have special logins on our portal to perform secure login and perform activity under secure environment. After, we made research on agriculture sector regarding digitalized function availability, the research came on this point that, the availability of functions is there but not in efficient manner or somewhere, it is available but, it found not working properly. So, after compiling the collected research data. Team suggested this unique idea of integrated centralized services platform or portal for everyone out there.



Fig 3: Actual view

6. REFERENCES

- [1] D. G. Chandra and D. B. Malaya, "Role of e-agriculture in rural development in Indian context, Emerging Trends in Networks and Computer Communications(ETNCC) 2011 International Conference on, pp. 320-323, 2011.
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