

Enhancement of Village Remuneration Using IoT

K NISHANTH RAO, SVS PRASAD, T.S.Arulananth
*Department of Electronics and Communication Engineering,
MLR Institute of Technology, Hyderabad, India*

Abstract

The project is to enhance the development of the village. The village economy can be improved by 3 major sectors like crops, tourism, handicrafts. As villagers are suffering from the middleman. The main focus of our project is to eliminate mediator between producer and consumer. Through this project, we can create awareness of tourism spots and popular handlooms of those villages.

Our team has seen a lot of news and accidents occurred across our society on farmers. We have ensured that there will be no third person (or) middleman who will be bargaining for less cost on agriculture food productions. This website can be more successfully used for them by not involving the third person in between. This is the reason our team has taken the idea of village remuneration.

Villagers are very active in the development of their society's cleanness, atmosphere, plantation, agriculture fields, lakes and river flowing through their village. The Village is a beauty so to capture it and focus it on tourism. We as a team take an idea to grow on tourism and add a minimum remuneration by this tourism for villagers like there will growth of ages foods, their culture will be known for tourists, hotels in villages get remuneration, lakes tourism, etc.,.

The last sector is handlooms in villages. As we all know some of the co-operations now selling village oldest handlooms that are taken from the villagers to showcase for future children incites. We as a team decided to add it to our website so that their name gets out as people in cities can know who are they and what is their occupation, what would be their style and culture of doing. Example that is produced in villages are mattresses, file covers, mats, carpets, bags & purses, curtain, cushion covers, table & bed linens, slippers, caps, jackets this is some of the production all over India with different culture of items.

We are creating a website where villagers can upload their tourism spots, handicrafts, crops by themselves with reasonable cost. Through this, we can also implement "DIGITAL INDIA" by increasing the usage of technology in villages.

I. INTRODUCTION:

As of now every day a huge amount of transactions is taken place on e-commerce [1] websites and there is a huge amount of good carriers. The e-commerce website like Amazon and Flipkart are the most examples for the clothing industry and big basket are for the vegetable online industry. The main drawback of this e-commerce website is they are buying goods at a low cost from the farmers and selling them with their own cost with their convince.

The village remuneration website is to develop rural areas. The main objectives of villages, Usage of technology will be increases. The number of crops produced by the farmer can be utilized by everyone without any damage. By tourism, Villages can expand their occupation on a large scale. Handicrafts can play the best role in the fashion industry. Brand will be acquired for villages globally.

Lots of projects have been seen in the recent decade on e-commerce. In this E-Commerce website, there is a huge loss for the farmer because the E-commerce website buys the quality food, handicraft item in large and gives an insufficient of money to the village people and extended their business scale in the vast area. As we all knew that companies like Amazon, flip kart are best dealers on the e-commerce website but they pay less to the farmers and adjust their own prices for their business as of now the large scale of business is going on in E-commerce sector. By this huge loss is for farmers to avoid this we have planed the website named e-commerce.

REQUIREMENTS FOR WORD PRESS WEBSITE:

1. WP Engine
2. Domain
3. Pay u money
4. Hosting Space
5. Business Email Address
6. logo Design
7. Quality Images
8. Google Analytics

II. ANALYSIS:

Our team has seen a lot of news and accidents occurred across our society on farmers. We have ensured that there will be no third person (or) middleman who will be bargaining for less cost on agriculture food productions. This website can be more successfully used for them by not involving the third person in between. This is the reason our team has taken the idea of village remuneration.

Villagers are very active in the development of their society's cleanness, atmosphere, plantation, agriculture fields, lakes and river flowing through their village. The Village is a beauty so to capture it and focus it on tourism. We as a team take an idea to grow on tourism and add a minimum remuneration by this tourism for villagers like there will growth of ages foods, their culture will be known for tourists, hotels in villages get remuneration, lakes tourism, etc....

The last sector is handlooms in villages. As we all know some of the co-operations now selling village oldest handlooms that are taken from the villagers to showcase for future children incites. We as a team decided to add it to our website so that there name gets out as people in cites can know who are they and what is their occupation, what would be there style and culture of doing. Example that is produced in villages are mattresses, file covers, mats, carpets, bags & purses, curtain, cushion covers, table & bed linens, slippers, caps, jackets this is some of the production all over India with different culture of items.

2.1 Working for Website:-

For these three sectors, we as a team decided to create a web that only used by villagers [4-5]. Website contains login & password for producers(villagers) and consumers(people). The website has different villages with there sorted names. From some villages, they only produce a certain food product. For example, Warangal district medaram village produces only food products but the devotional temple is famous our website will showcase the village details and what's new in that area. So we will ensure that the village is famous for tourism or food production or handlooms. In the website, all the villages get equal rights to their society's production.

2.2 Implementation:-

The web server is maintained by villagers by taking a group of villages and adding a main unit for the server. We as a team will prepare the sarpanch of there village how to use it [2-3]. Villagers are given training on how to use it on how to log in it and add their food items. We are creating awareness in villages. How to use it because as much as farmers or villagers are not specified at study. So, we will ensure to clarify their wrong thinking on money transactions. We will be taking the trail for some villages near to our college premises to get certain knowledge of how we will maintain it as a server. The delivery boys will be from their villages. They will be getting a login as villagers get. Payments for delivery boys are added with the items only. The login for delivery boys is to payments for their ride. Food will be delivered from the nearest village to your location. If your item is not produced nearby your village .they will ensure to send it in between 24 hrs. As much they ride for delivery they get there per kilometers payments.

2.3 Payments:-

The website is projected by IoT (internet of things). [6-8] The transaction is carried between producer and consumer in between the delivery boys gets there a payment for their ride in these transactions. If there is damage in the product a pop-up will be added to the website when the item is scanned the pop-up will return of their money back within 24hrs. The cost of food is decided by the head of the village and adds it to the website. Payments are done on the website by PAYUMONEY it's an online website whereby logging in to it we can direct access to the payment method on our website by credit or debit card process. payumoney changers around 2% as a tax for the payment. This website doesn't need proof like business account etc., just a pan card or aadhaar card for the proof. payumoney is added to our website and transaction can be done easily. payumoney is in India only. It is free of cost at the time of sign up. After signing we have to add an account and aadhaar card with a signature.[9-11]

2.4 Web Design:-

In website creation, there is 2 division they are URL and Hosting. [12-13] URL is for web search in a web section. By this URL we can search for any website when we access it. Hosting is a space where we create web code (or) design for a website. By combining URL and Hosting forms a website. For accessing a website we use the domain for easy and user-friendly access to a website like www.****.com.

Word Press is our CMS of choice for Web development. Word Press is web software you can use to create a highly functional website or blog.... Word press started as a blogging system, but has since evolved to be used as a full content management system and so much more through the thousands of plugins, widgets, and themes. Word Press is used on more than 32% of all websites. Word Press is a free, open-source, ultimate DIY solution for website building, can run any website, fast & secure.

III. DESIGN AND RESULTS:

The design of the website is done by using the Word press. The block diagram of our project is down below

The block diagram reveals about the project design with innovative ideas in it

The design structure is specification is in a format that helps customers and buyers knew easily. The project graphs are shown in figure Block Diagram:-

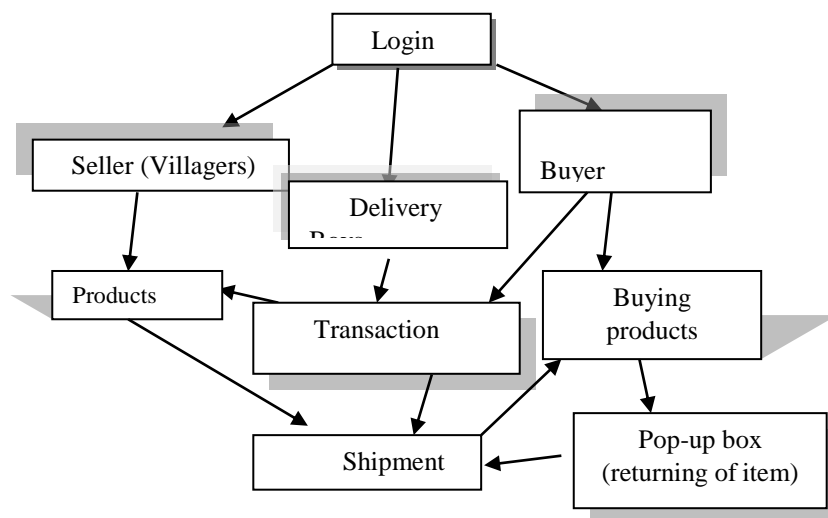


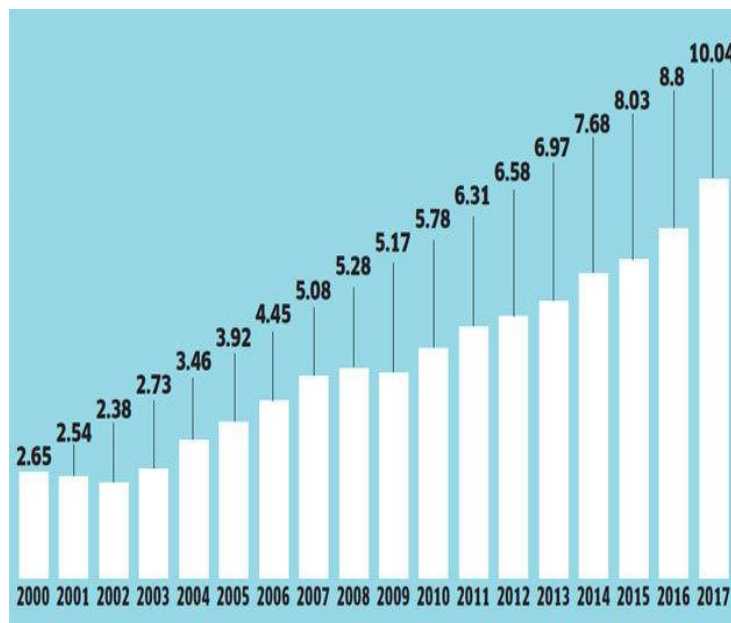
Fig 1: Block diagram for working of E-Commerce

E-commerce (electronic commerce)

The activity of electronically buying or selling products on online services or over the Internet. Electronic commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems. E-commerce is in turn driven by the technological advances of the semiconductor industry and is the largest sector of the electronics industry. [14]

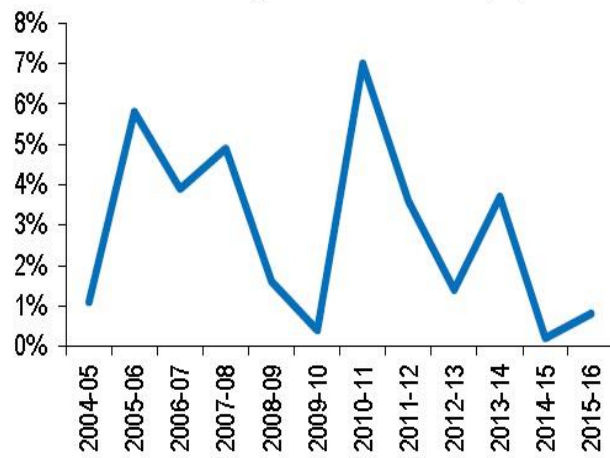
Modern electronic commerce typically uses the World Wide Web for at least one part of the transaction's life cycle although it may also use other technologies such as e-mail. Typical e-commerce transactions include the purchase of online books (such as Amazon) and music purchases (music download in the form of digital distribution such as iTunes Store), and to a less extent, customized/personalized online liquor stores inventory services. There are three areas of e-commerce: online retailing, electronic markets, and online auctions. E-commerce is supported by electronic business.

Growth of tourism in India from 2000-17 in the graph:-

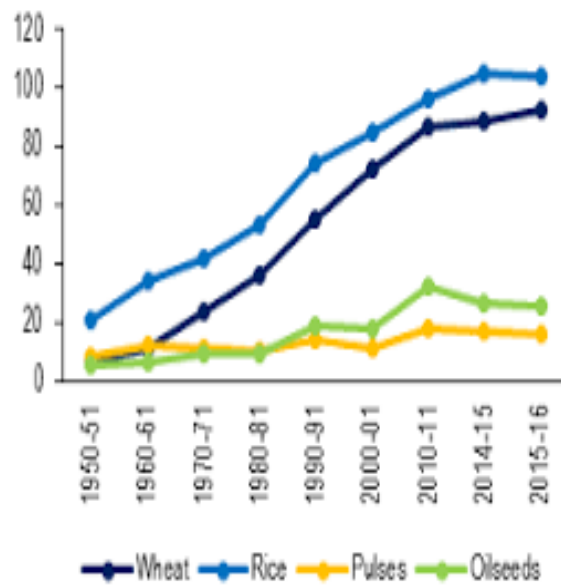


Graph of agriculture production from 2004-16:-

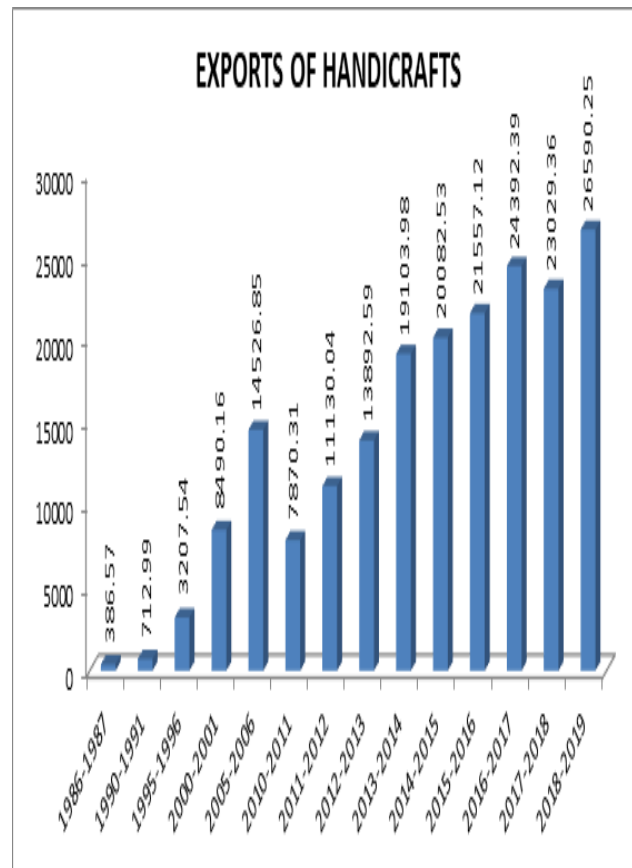
Growth in agriculture sector (%)



Sources: Agricultural Statistics at a Glance 2015, Ministry of Agriculture; PRS.



Exports of handicrafts in India from 1986-2019:-



CONCLUSION:

We as a team conclude that this project will develop the villages by the growth of agriculture, development of tourism, brings up a new trend in fashion by handloom production. Mainly third person involvement will not be seen in this website activity. Acquiring job to technical persons for server modification. Through this, we can implement “DIGITAL INDIA ”by increasing the usage of technology in villages.

REFERENCES:

1. K. Haribabu., S. Snigdha, “IoT based Security System using Raspberry PI and Mail Server”, International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-11, September 2019.
2. S V S Prasad, K Nishanth Rao, V Arun, D Laxma Reddy,” Auto Metro Train to Shuttle between Stations using Arduino”, International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-9 Issue-2, December 2019.
3. R.Mahender Reddy, K Nishanth Rao, S V S Prasad,” Traffic Congestion Monitoring and Management by using IOT”, International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8, Issue- 9S2, July 2019.
4. V Arun, D.Laxma Reddy “Encryption standards for a security system in energy harvesting for IoT requirements” Proceedings of the International Conference on Intelligent Sustainable Systems (ICISS 2017), IEEE Xplore, ISBN:978-1-5386-1959-9, pp.1224-1227.
5. E.Amareshwar, SamreenJahan, “Raspberry pi based water quality monitoring and flood alerting system using IoT”, International Journal of Innovative Technology and Exploring Engineering, ISSN: 2278- 3075, Volume-8 Issue-4S2 March 2019, pp.237-240

6. An Automated Game-Theoretic Approach for Cooperative Road Traffic Management in Disaster, Samya Muhuri, Debasree Das, IEEE International Symposium on Nanoelectronic and Information Systems, 2017
7. A Review of IoT devices for Traffic Management System, N. B. Soni, Jaideep Saraswat, Proceedings of the International Conference on Intelligent Sustainable Systems (ICISS 2017).
8. Research on Collaborative Strategic Air Traffic Flow Management Based on BDI Agent, Wu Xiping, Yang Hongyu, Yang Bo, Yu Jing, 13th International Conference on Embedded Software and Systems, 2016.
9. A Novel Assistive On-ramp Merging Control System for Dense Traffic Management, Weihai Chen, Zheng Zhao, IEEE, 2017
5. Nu Transport Improved Intelligent System for Reliable Traffic Control Management by Adapting the Internet of Things, Ramkumar Eswaraprasad, Dinesh Raja, IEEE, 2017
10. L. Da Xu, W. He, and S. Li, "Internet of things in industries: A survey," IEEE Transactions on industrial informatics, vol. 10, no. 4, pp. 2233–2243, 2014.
11. Z. Ning, X. Hu, Z. Chen, M. Zhou, B. Hu, J. Cheng, and M. S.Obaidat, "A cooperative quality-aware service access system for social Internet of vehicles," IEEE Internet of Things Journal, Doi: 10.1109/JIOT.2017.2764259, 2017.
12. J. He, Y. Ni, L. Cai, J. Pan, and C. Chen, "Optimal dropbox deployment algorithm for data dissemination in vehicular networks," IEEE Transactions on Mobile Computing, vol. 17, no. 3, pp. 632–645, 2018.
13. C. Zhu, L. Shu, V. C. M. Leung, S. Guo, Y. Zhang, and L. T. Yang, "Secure multimedia big data in trust-assisted sensor cloud for smart city," IEEE Communications Magazine, vol. 55, no. 12, pp. 24–30, 2017.
14. W. Li, C. Zhu, V. C. M. Leung, L. T. Yang, and Y. Ma, "Performance comparison of cognitive radio sensor networks for industrial IoT with different deployment patterns," IEEE Systems Journal, vol. 11, no. 3, pp. 1456–1466, 2011