A Study on the Shift towards Digitalization of Daily Wager Employability

Avyaya Mishra
Undergraduate Student
School of Mechanical Engineering
Vellore Institute of Technology, Vellore
Vellore, India
avyaya99@gmail.com

Aastha Chaudhary
Undergraduate Student
School of Computer Science Engineering
Vellore Institute of Technology, Vellore
Vellore, India
aasthachoudhary5050@gmail.com

Arjun Kirde
Undergraduate Student
School of Computer Science Engineering
Vellore Institute of Technology, Vellore
Vellore, India
arjunkirde7@gmail.com

Raviteja Buddala
Assistant Professor (Senior)
School of Mechanical Engineering
Vellore Institute of Technology, Vellore
Vellore, India
raviteja317@gmail.com

Abstract: The ERP System is implemented to make it easy to find jobs for the daily wage workers and hence to reduce their tension about finding a job. This system manages and maintain the record of all the jobs in the daily wage working class or may be on a contract basis in the fields of construction, hospitals, gardeners etc. It will also provide a common platform for the job providers as they can post the openings on this online system. Digitalization of this process will help the user to find a perfect job for them in their preferred location and also for the users who are willing to heir individuals. This online based system totally focuses on user convenience. This system will also help the workers to not stand in a line and directly search for the job.

Keywords- Daily Wage Workers, Contract, Digitalization, Convenience, ERP , Jobs , Locations.

I. INTRODUCTION

Daily wage means the compensation received by an Employee as Wages for services performed during a Business Day. The Employee who works on the basis of thisdaily wage is known as A Daily Wage Worker. Large number of people in India (both men and woman) work as daily wage labours. They have to struggle daily for a job so that they can get food for themselves and their family. In different cities there are many famous labour chowks where people wait for the contractor to provide them a job. And hence many return to their home without earning a rupee forthat particular business day as they didn't have a job. This can create a lot of distress among the people who works on daily wage basis. Also, many contractors who are searching labours for either daily wage basis or contract basis are not able to find good labours. This situation creates a communication gap between contractor and labour. This communication gap needs to be shortened in order to create more jobs and hence keeping both the parties satisfied and happy.

II. LITERATURE REVIEW

Abrar Ullah et al [1] shows that how World of Information Technology (IT) is improving with the widespread innovation and Enterprise Resource Planning (ERP) systems are one of them. At the user level, the debate regarding contribution of ERP systems to performance still exists, because users utilize these systems and assess the actual benefits and its impact on them.

Anthony Larsson and Robin Teigland [2] have discussed that while implementing minimum wages on online labor platforms might alleviate some of these problems by increasing pay rates at the bottom, doing so might also exacerbate these problems by reducing the supply of clients (by making the platforms less attractive) while increasing the supply of workers (by making the work more attractive). Thus, any intervention to increase a platform's pay rates would require increases in the quality of the services provided in order not to reduce demand and exacerbate the weak position of labor. However, in the long run the elimination of low-productivity jobs which are unable to sustain a living wage is not necessarily bad thing.

Sangeet Paul Choudary [3] shows that how Digital labour platforms connect workers with consumers of this work and provide the infrastructure and the governance conditions for the exchange of work and its compensation.

Mariya Aleksynska et al [4] Focusing on working conditions of digital workers, the paper shows that while the majority of these workers are satisfied with their online work, a sizeable proportion faces risk of being in disguised or dependent employment relationship, works informally, and has a poor social protection. The earnings through the platforms are generally comparable to the earnings in the local labour market.

Mansouri, Behrooz et al [5] This research paper have discussed that how Over the last few years, an increasing number of user's and enterprises on the internet has generated a global marketplace for both employers and job seekers. Despite the fact that online job search is now more preferable than traditional methods - leading to better matches between the job seekers and the employer's intents - there is still little insight into how online job searches are different from general web searches.

M. Mansourvar et al [6] have shown that how Job seeking usually involves different ways to look for jobs such as through personal contacts, direct telephone calls to employers, job agency office, scanning online job listings, etc. Before the Internet, became widely uses as a method of seeking jobs, jobseekers spent a lots of time using various methods to look for job openings. Today, jobseekers use online methods which are very convenient and save a lot of time.

E. Galanki, "The decision to recruit online: a descriptive study," [7] shows the different old ways of Recruitment.

A study by Kuhn and Mansour [8] showed that, the unemployed persons who used the internet to find a job, were re-employed about 25% faster than comparable workers who do not search for a job online.

Another research by Prakash [9] shown that for those employees who found their jobs online, the exit rates are lowered by at least 28%. The availability of online job searches, has also lead to a bunch of records concerning the job seeking behaviors ready to be studied.

Erin M. Kelley et al [10] centres that employment platforms raise job seekers' expectations in ways that may not be rational; and these expectations effects can only be overcome when job-seekers have sufficient information about the types of jobs that the portal has to offer.

Niels Beereport, Bart Lambregts, "Competition in online job marketplaces: Towards a global labour market for outsourcing services?" [11] shows that another group likely to benefit is the hitherto underutilised pool of educated and skilled people who live outside the main urban areas that so far have played host to the outsourcing services industry.

Mark Graham et al [12] concludes that in geographically circumscribed labour markets, local workers of a certain skill set had few viable employers and high costs of migration prevented them from seeking better offers elsewhere. Digital work now enables them to sell their labour to whoever is willing to pay the most for it, regardless of the buyer's location—this could imply that there is opportunity for higher wages.[

Niels Beereport, Bart Lambregts, "Competition in online job marketplaces: Towards a global labour market for outsourcing services?" [13] discusses that some studies have indeed shown that experienced contractors, especially those in long-term relationships with their clients, can manage to secure relatively decent hourly rates.

Mark Graham et al [14] shows that how Women, can at least in theory have the opportunity to earn some income while still expected to perform their domestic responsibilities. At the same time, however, such opportunities could end up perpetuating the existing gendered divisions of labour. Prejudice can be overcome by the provision of verifiable information on workers' skills; platforms allow digital workers to access geographically distant markets where there might be less discrimination, and to access their local market under a veil of anonymity.

III. SOLUTION OF PROBLEM

A common ERP system can be prepared for workers and work providers. Via this common platform, they can easily communicate with each other, Worker also just has to enter his preferred location or city of working and then apply the settings. Hence, all the job openings in that particular city will be displayed. Then the worker can sort the job type as he wants. The worker has to register himself before applyingfor a job in order to verify himself and thus creating better transparency in our system between the two parties.

The job provider can give a request for openings in the "work provider" section on the top right hand corner of the online page. He then has to enter the required details and information so that we can cross verify that all the information mentioned are authentic and hence no fraudent is involved.

A) Points considered for website development

- The commitment was to build an online website which can be as user friendly as possible. This was because we are targeting a very weak section of the society where many people may not be familiar with internet and its different usages.
- A search engine similar to Google was created in the website for searching jobs.
- Details of social media account was also given in order to increase the interest of people for this website.

B) Methodology for website creation

- The first step was to name the website in order to GO LIVE.
- The next step was to take care of the designing part which is important in order to keep the users interested in the webpage. Hence, different templates were used.
- The next step was to take care of the simpleness of the website, in order to make it more user friendly.
- The search was induced with a unified search engine for better search results.

C) Pseudocode:

Fig1 Shows the code for The Cover Page. Fig 2 shows the pseudocode for the Registration page. For CSS code of Cover Page refer Fig3. Fig 4 shows the pseudocode for login section and CSS code for registration section is in Fig5.

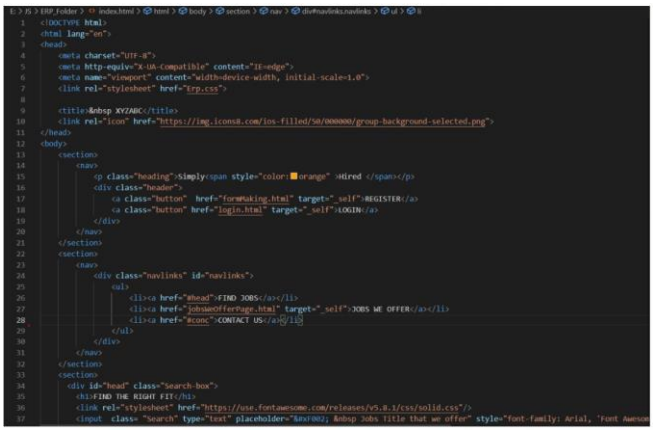

Fig 1- HTML code for cover page.

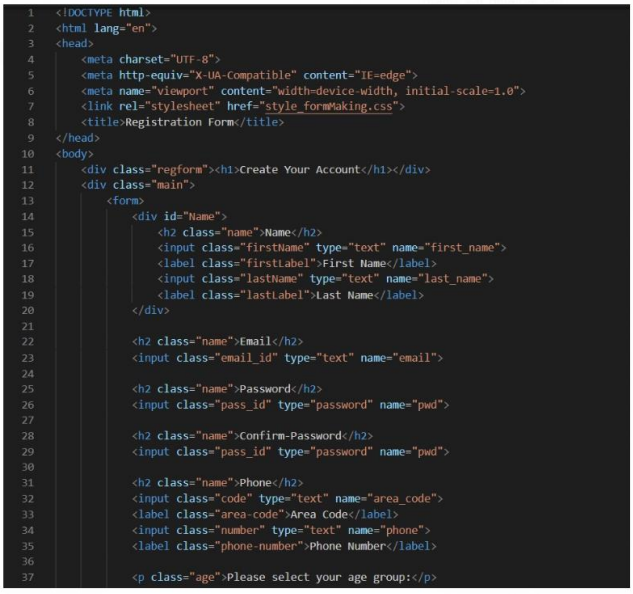

Fig 2- HTML code for registration page.

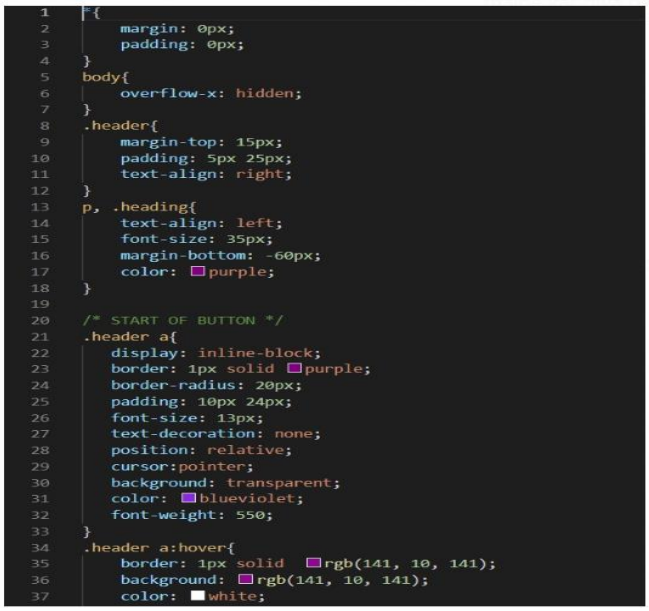

Fig3- CSS code for cover page

Fig 4- Pseudocode for login section.

Fig 5 – CSS code for registration section.

IV. ERP PACKAGE WEBPAGE

Homepage is shown in Fig1., for seeing the recently posted listings webpage refer Fig2. Featured Jobs have been shown in Fig3. The registration form or the sign in page have been shown in Fig4. The log-in section for the employment providers have been shown in Fig5.For all the contact details or related queries refer Fig6.

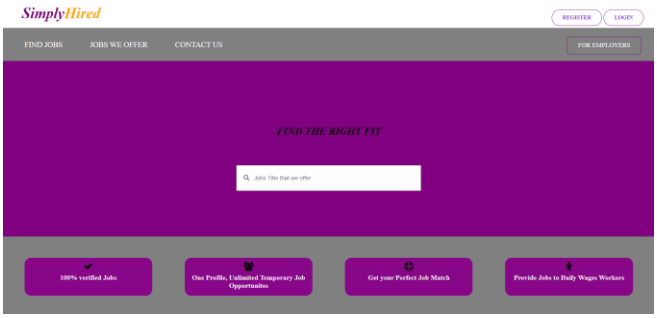

Fig1- Homepage.

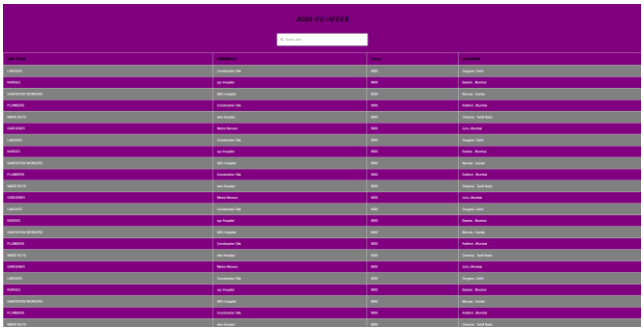

Fig2- Most recently posted openings

Fig3- Featured Jobs

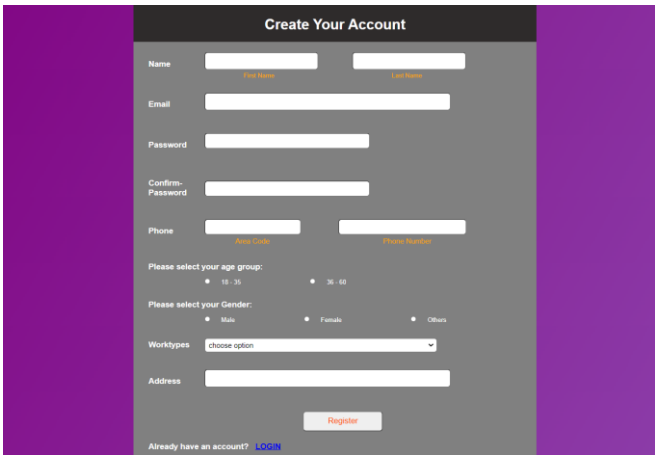

Fig4- Registration Form

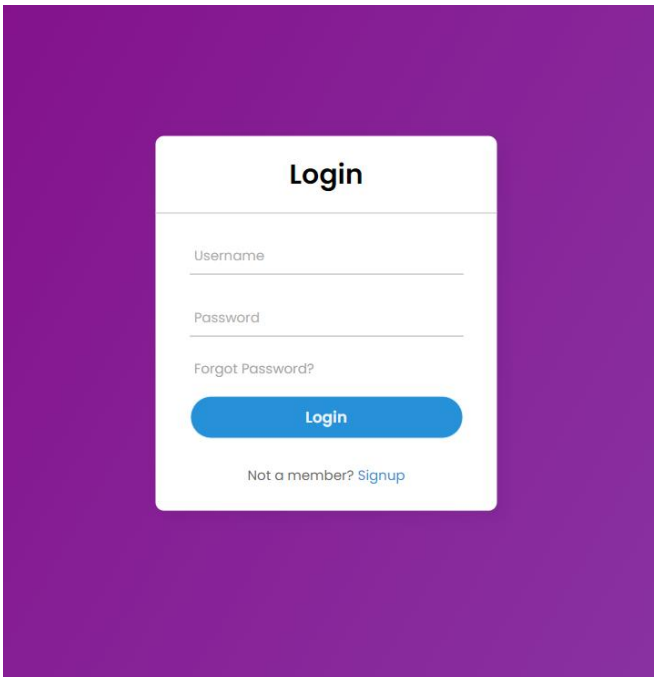

Fig5- Sign-in Section

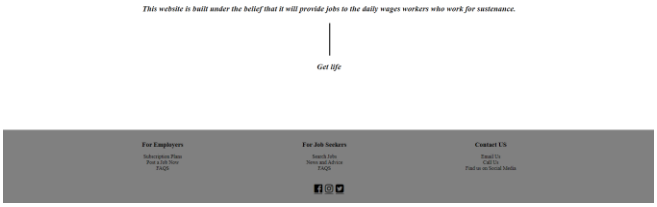

Fig6 –Contact details

V. RESULTS AND DISCUSSION

The website contains a lot of positive features.

Link: https://aastha-520609.github.io/ERP_Website/

It exhibits ease of use which helps the users to get what information they want quickly and without any complexity. The website also has a search engine from where the user input the keywords of the information he is searching for to access it quickly.

It also provides simpler navigation between different sections of the website for its users. It also has a separate login page for employees and wage workers. The site has not been made very complex keeping in mind the fact that this website will be mostly used by wage workers. Also, the contact details have been provided in case of any clarification or queries.

The daily wage workers are struggling to get a job, especially in recent pandemic situation. This site was designed to help them in this tough time as they can easily search for suitable jobs in their nearby locations.

REFERENCES

1. Abrar Ullah, et al. "Enterprise Resource Planning(ERP) and User Performance (UP)." International Journal of Apllied Decision Sciences. 2018.

2. Anthony Larsson and Robin Teigland. “The Digital Transformation of Labor Automation, the Gig Economy and Welfare Edited.” Routledge-2021.

3. Sangeet Paul Choudary. “The architecture of digital labour platforms: Policy recommendations on platform design for worker well-being.” ILO-2018

4. Mariya Aleksynska, Anastasia Bastrakova, Natalia Nikolaevna Kharchenko. ”Working Conditions on Digital Labour Platforms: Evidence from a Leading Labour Supply Colony.” IZA Dp. No.-12245.

5. Mansouri, Behrooz & Zahedi, Mohammad & Campos, Ricardo & Farhoodi, Mojgan. (2018). Online Job Search: Study of Users' Search Behavior using Search Engine Query Logs. 1185-1188. 10.1145/3209978.3210125.

6. M. Mansourvar and N. Y. Mohd, “Web portal as a knowledge management system in the universities,” World Academy of Science, Engineering and Technology, vol. 70, pp. 968-974, 2010.

7. E. Galanki, “The decision to recruit online: a descriptive study,” Career Development International, vol. 7, pp. 243-251, 2002.

8. Priesack, Kai. "Essays on employment and wages in the German labor market." DoctoralThesis, Humboldt-Universität zu Berlin, 2018.

9. Prakash, A. (2015). Three essays on labor market outcomes. The University of Ar izona. 10150/560807.

10. How do Online Job Portals affect Employment and Job Search? Evidence from India∗ Erin M. Kelley, Christopher Ksoll and Jeremy Magruder December 17, 2020.

11. Niels Beereport, Bart Lambregts, “Competition in online job marketplaces: Towards a global labour market for outsourcing services?” *Global Networks*, 2015, 15(2), 236-255.

12. Mark Graham, Isis Hjorth, Vili Lehdonvirta, “Digital labour and development: impacts of global digital labour platforms and the gig economy on worker livelihoods,” *Transfer: European Review of Labour and Research*, 2017, 23(2), 135-162.

13. Niels Beereport, Bart Lambregts, “Competition in online job marketplaces: Towards a global labour market for outsourcing services?” *Global Networks*, 2015, 15(2), 236-255.

14. Mark Graham, Isis Hjorth, Vili Lehdonvirta, “Digital labour and development: impacts of global digital labour platforms and the gig economy on worker livelihoods,” *Transfer: European Review of Labour and Research*, 2017, 23(2), 135-162.