

Advanced Labour Finding Web and Android Application

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Abstract - The main part of this project is to develop an automated system which build a communication path and strengthen the customer-worker relationship. This system also helps to reduce the time and effort in searching workers efficiently. Also, this system makes a worker to obtain suitable work of his/her category throughout the year and enhance his/her financial status.

Key Words: revelation principle, employment agency, information dissemination

1. INTRODUCTION

Now a day, peoples are finding it difficulties in finding the right workers to do their work done. Workers may not be available when they are required or may not be efficient in their work. Also, many workers will not get works daily and they may feel difficulty to satisfy their daily needs. This causes a serious problem to the person whose work is to be done (Referred as 'customers' from here onwards) and workers. To avoid these problems, we have proposed a system, where anybody can book any workers based on their location or area. System will allow workers to register themselves with the application at any time. Registered worker information is processed and presented to customer. Customer can then can select any labours (worker) for which an intimation E-mail will be sent to the admin of the system with required information. Admin, in turn communicate with the concerned worker and worker may be appointed to work at customer's place. Once the work is completed, the worker approaches the admin of the system and provides work information. Based on this, Admin will send the bill information to the concerned customer to pay. This system will allow the admin to generate various reports to keep track of both customer and worker information. Also, admin has provisions to manage overall workers statistics such as availability of worker, grant leave etc.

2. LITERATURE SURVEY

There is a vast literature that is relevant to this problem from several different streams of research. We do not attempt to survey these here but rather cite the papers that help us illustrate the key elements of our work. Several researchers have explored the influence of electronic intermediaries on labor supply chain. Autor discussed the wired labor market and suggested that the Internet made the application process easy and lowered the cost of collecting "low bandwidth," easily verifiable information about applicants. The Internet was not equally effective in lowering

the cost of obtaining "high bandwidth" information about candidates: attributes such as quality, motivation, and fit. Autor posited that new entities will emerge that will lower the cost of collecting data about "high bandwidth" attributes. The majority of academic papers considering the effects of a wired labor market take the perspective of a job seeker. For example, Kuhn and Skuterud examine empirically the types of job seekers who incorporated the Internet into their job-search strategies and investigated whether searching for work online helped these workers find new jobs faster. Similarly, in Fountain uses data on job searches by the unemployed to assess whether searching online increases the short-term probability of finding a job. Yakubovich and Lup in analyze data from an Internet-based recruiting process to examine the influence of the quality of a referring employee on the firm's decision to hire a candidate. Taking the employer perspective, in an exploratory study Lee studies the content of recruiting websites of Fortune 100 corporations and develops an evolution model of the corporate recruiting system. Hadass in examines how the introduction of Internet technology affected employment duration of hired applicants, using that as a proxy for employee quality. The theoretical model in includes two effects of technology: reduced application costs for job seekers, which reduces match quality; and improvements to a firm's screening technology, which increases matched quality. The net impact depends on the relative magnitudes of these two effects. Similar to Hadass, we created a mathematical model to examine the impact of Internet technology on a firm's recruiting process. Our model gives a more detailed representation of the process and accounts not only for the difference in the quality of the applicants but also for the effect of increasing arrival of applications and of delay in the processing of applications. We use a queuing model to examine how the delay in processing affects a hiring process. Gautier in [9] uses a queuing model in a labor economics application. The modeling is different from ours, and its purpose is to explain unemployment by selection delays of employers. In our model, we not only consider the delay caused by the congestion of larger numbers of applicants but also how these delays affect the quality, cost, and timing outcomes of the hiring process. Hiring of employees involves searching for employees, and candidate search for employment, so literature on search for information is relevant. Early economic papers in search theory discussed the advantages of the sequential search algorithm in looking for a job over a fixed sample search. Stigler's model suggested that in deciding how many price samples to obtain in looking for the lowest price, buyers trade off the marginal cost of search and the marginal benefit

additional samples. Since the expected value of the minimum of a random sample of n observations decreases at a decreasing rate, search costs that are convex in the number of samples lead to an optimal fixed sample size for risk-neutral buyers. With the sequential search approach, the firm sets a minimum acceptable competence level and searches through applicants sequentially until it identifies the first applicant who is at or above the minimum acceptable level. Sequential search models have been studied extensively as various versions of the classic optimal stopping problem, known as the “Secretary Problem” [5, 7, 8, 18]. In several recent studies, researchers conducted experiments to examine the choices of human decision makers presented with a “Secretary Problem”. Beyond the search literature, literature on matching, two-sided markets, technology intermediation, contracting, and procurement are all relevant. The Internet was not equally effective in lowering the cost of obtaining “high bandwidth” information about candidates. Much work in labor economics relies on search theory to develop equilibrium models capable of explaining, for instance, simultaneous existence of unemployed workers and unfilled vacancies. What determines aggregate unemployment and vacancies? How can homogeneous workers earn different wages? What are the tradeoffs firms face from different wages? The importance of this research and its recommendations for government policies was recognized in the award of the 2010 Nobel Prize in Economics to three economists specializing in search theory and labor economics: Diamond, Mortenson, and Pissarides provides a recent survey of related economic literature.

3. APPLICATION

1. This application allows a worker to improve his financial state since he will get work throughout a month.
2. This application makes customer to find the workers easily and hence makes their work done.
3. This application makes many workers will not get works daily and they may feel difficulty to satisfy their daily needs. This causes a serious problem to the person whose work is to be done and workers.
4. This application makes a worker to obtain suitable work of his/her category throughout the year and enhance his/her financial status.

4. SYSTEM ARCHITECTURE

In this fig1 shows customer and worker coming from android part. In that all details get about customer and worker through internet. Admin will coming from web part. All details of customer and worker will stored in database. Customer can then can select any labours (worker) for which an intimation E-mail will be sent to the admin of the system with required information. We plan to investigate the benefits and limitations of electronic screening in our future models. The challenge for the recruiting firm is to find a way

to adapt its search to the new technological environment in a way that captures more of the benefits and less of the costs.

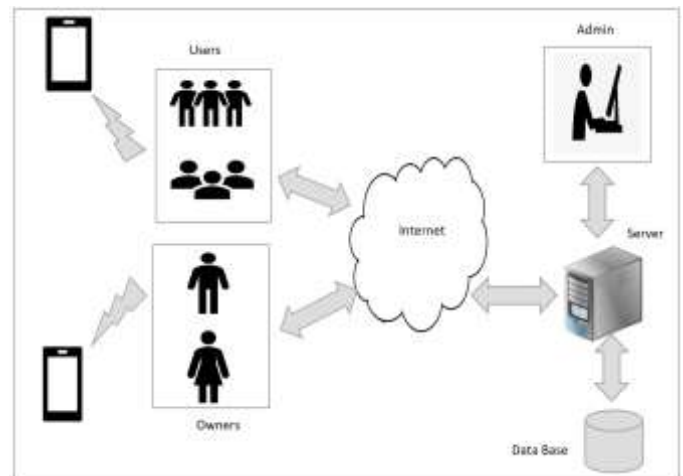


Fig.1 Architecture of system design

5. CONCLUSION

We investigate the impact of technology on the process or hiring employees. We develop mathematical models of the application arrival and screening process that capture the tradeoffs between cost, quality, and delay in the process. We use the models to illustrate the effect on outcomes when technology increases the total number of applicants, the rate at which the applicants apply, the rate at which they lose interest in the job, and the likelihood that an applicant is not suitable for the advertised position. With numerical experiments we show that adoption of such technology may not be optimal for a firm and that any positive effect from larger pool of applications can be negated by the deterioration in quality. The effect may be ameliorated if the technology is capable of lowering the cost of the screening process for the employer in addition to lowering the cost of an application for a job seeker. Comparing Cases 0 and 7 in Table 2, we see that the objective values are very close but the nature of search is very different. Compared to Case 0, in Case 7, the search is about half as long, twice as many applications are received, and twice as many candidates evaluated. Yet the resulting increase in quality is too small to overcome the extra costs incurred in the search. This illustrates how changes in technology can have a big impact on what happens in a search, while at the same time having little impact on the ultimate outcome. In our model, we assume that a decrease in the quality of applications causes a decrease in the quality of candidates considered in Stage 2. But recruiting firms also use IT systems for electronic screening of the applications and for administering skills tests. Thus firms could use application screening software to set higher minimum requirements, possibly avoiding deterioration of the quality of the candidate pool. However, anecdotal evidence indicates that determining which “low bandwidth” qualities correlate with better employees is not a trivial task, and much of the existing software is not yet up

to the task. To explain the difficulty faced by the developers, Weber cites human resources- technology consultant Elaine Orlor: "Cultural and behavioral fit is a stronger indicator of success and business performance [than keywords]." We plan to investigate the benefits and limitations of electronic screening in our future models. The challenge for the recruiting firm is to find a way to adapt its search to the new technological environment in a way that captures more of the benefits and less of the costs. Based upon our analysis, we see that it is easy for the benefits of faster application arrivals to be canceled out by the higher dropout rate (or lower commitment). The benefit of more total applications is canceled out by the reduction in quality in the applicant pool. Our suggestion is that the firm narrowcast its advertising of a position to specialized websites, so that more effort is required of an applicant to find it. This will lead to self-selection of applicants who are more interested and better fit the position. At the same time, the firm will still have a broader pool of applicants than using geographically limited advertising methods.

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