

A Survey on Online Campus Job Recruitment System

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Abstract - The software for the training and placement cell of a college is a need for the students and the institute management for proper placement and training of the students of the institute. It helps the students to provide their profiles to the training and placement cell of the institute, updating their respective profiles with their gradual approach towards the course end. The students also get to know about the companies coming for the on-campus/off-campus/pool/group pool categories of campus interviews.

This paper emphasizes the significance of an on-campus online job recruitment system and its function in assisting students in obtaining available employment. It emphasizes the issues with traditional employment practices, particularly for college students. It also allows for teachers and placement officers to view statistics of the placements. The work discussed in this paper is based on an e-recruitment system developed for the Dayananda Sagar College of Engineering campus, one of Bangalore's major engineering institutes. This system shows to be valuable for everybody, including firms, students, and the university, with features such as circular vitae ranking along with job recommendation based on various levels of talent, smart multi-criteria search, and graduate tracking.

Key Words: Campus recruitment, online recruitment, e-recruitment, placement portal, online job portal, job recruitment system

1. INTRODUCTION

Campus recruiting is a method of identifying, engaging, and employing young people for internships and full-time positions. Leading firms use college placements as a strategy to hire high-volume quality employees from universities. Under the present campus placement models, there are primarily two types of campus placements that may be categorized. They are:

- On-Campus Placement: In On-Campus Placement Drives, recruiters are invited to conduct interviews on the college campus to assess their potential as future employees.
- Off-Campus Placement: It is a sort of placement that takes place outside of the college campus, as the name

implies. The college does not have a role in off-campus placement. This implies that you are not bound by the college's rules and regulations and must seek work on your own.

However, as global competition intensifies and sectors grow more skill-intensive, finding talented individuals becomes more important than ever, and recruiting the appropriate candidates at the right time is more difficult. Traditional recruiting strategies are no longer sufficient or timely in attracting a sufficient pool of competent candidates. To attract them, several firms have turned to sophisticated recruiting tactics or a combination of recruitment methods. For example, combining newspaper advertisements with executive search, hiring agencies, and other methods for recruiting. With the growth of internet technology in the early 1990s, many people experienced the change of traditional recruiting methods to online recruitment. Online recruiting makes use of the internet's capacity to connect people with employment. The following are some of the benefits of internet recruitment:

- By employing automation and artificial intelligence to screen applications, online recruiting saves time and money.
- Online recruitment automation may also be used to communicate with a big number of candidates at once.

The current digital and technical era has aided the recruitment process on college campuses, resulting in a dramatic shift in new worker engagement platforms. Processes such as data collection and compilation, record filing, and all data-related administrative work are all done electronically in the new model, reducing paperwork significantly. The use of actual campus space for interview processes is significantly reduced.

1.1 Motivation

The method currently in place for on-campus recruitment in several institutions does not use any dedicated platform or portal to conduct placements. The current placement is done by using a telegram, WhatsApp, or email group consisting of all the students for the communication of

announcements and conveying required details regarding the hiring process.

This method contains the following problems:

- **Inconsistent contact information:** When students are asked to register for a particular hiring drive, they often make typos or mistakes while entering their contact information like email id and/or mobile number which are often key information about the candidate.
- **Ineligible students:** Only an eligible student i.e., a candidate who clears the specified job requirements and one who is not already placed, should be allowed to register.
- **Unorganized and Spam messages:** Regular messages of numerous companies arriving for the hiring process, countless links for registration, and various excel files or shortlisted students for each round in a single chat, will lead to spamming and inefficiency in delivering the required information to the students.
- **Confidentiality Issues:** In the current method, releasing confidential information like contact information of registered candidates after shortlisting, to every student in the group, is a breach of privacy.
- **Absence of live tracking of placement statistics:** Currently, there are no live statistics of the number of candidates attending placements versus the number of people who get placed weekly.
- **Absence of help for placement:** For a fresher, there is no mentor to guide him/her regarding placements and how to prepare a good quality resume to score an interview with the desired company.
- **Absence of a Fixed Schedule:** Due to spamming of details in the group and various placements of different companies happening simultaneously, both the placement cell and the students find it difficult to track and maintain a fixed schedule or order of events in which the hiring takes place.
- **Redundant filling of forms:** The absence of a common platform leads to a candidate filling the same redundant standard data on multiple forms which is time-consuming. This can also lead to mistakes or typo's invaluable information.

This study aids in identifying and analyzing the need for an on-campus online job recruitment system and its acceptability. The implementation of an online recruitment portal by several colleges and universities in various fields is investigated in this study. The research examines the influence of the online recruitment system, as well as its attitude, utility, ease of use, intention to use, and hurdles.

2. LITERATURE SURVEY

Technology has advanced significantly in recent years. Previously, traditional methods such as radio, television, and newspaper advertisements were used to disseminate information about job openings [1]. People nowadays spend more time on the internet looking for work than they do reading the newspaper or listening to the radio daily. Many breakthroughs have been made in terms of internet speed, internet cost, and easy accessibility, which has resulted in a reduction in the cost of web surfing. At the same time, we cannot deny that traditional methods of hiring candidates exist. Even so, the same process of placing an ad in the newspaper, radio, or on television and interviewing candidates is still considered the best way to find the right candidate [2].

The main purpose of an online recruitment system is to communicate information about job openings to targeted candidates in a timely and organized manner to combat rising unemployment because, in some places where jobs were available, candidates were unaware of them due to a lack of proper communication channels [3]. As a result, it's critical to research the current situation in the area where the system is being built. A thorough investigation is required to determine the perceptions of both employers and job seekers, particularly students, regarding online recruitment and traditional hiring methods [4].

Thirupathi Chellapalli D.V., & Srinivas Kumar [5], have studied the awareness and adoption of e-recruitment system specifically in Kolkata, by non-probability purposive sampling of data collected by distributing questionnaires. The study on how students having different education qualifications approach e-recruitment is seen by their answers in Table 1.

Table-1. Educational Qualification.

Educational Qualification	No of Respondents
SSC	0
Intermediate	0
Bachelor's Degree	45
Master's Degree	61
Others(Ph.D., M.Phil.)	10

This table shows that 61 respondents using e-portals are postgraduates, 45 of the people are graduates and the rest are M.Phil./Ph.D. scholars [5].

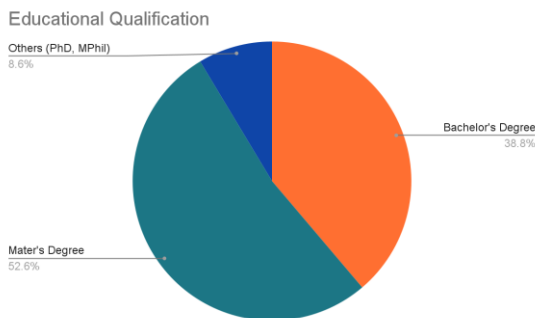


Fig-1. Visualization of the above-mentioned study [5].

Knowing why you're creating a job portal is crucial because, in the past, many job portals were created without first analyzing the environmental situation that existed at the time, and as a result, they were forced to merge to provide better service [6]. The use of an online job recruitment system is not appropriate in all circumstances. There are also some issues with using an e-recruitment system [7]. It may be more expensive and inefficient in some cases. As a result, all factors both breadth and depth about the topic must be considered when developing such a system. If done correctly, it can save a significant amount of time that would otherwise be spent on paperwork or advertising/communicating, and the times saved can be used to train and improve the skills of the hired candidate [8].

The traditional method of applying for a job, which includes looking in newspapers, phone books, and asking friends, family, and coworkers, appears to be ineffective. Furthermore, in its manual form, the task of posting a job vacancy and contacting the best candidates is insufficient [9][10].

Florea, N. V., & Badea, M. (2013) [11], the author references that the use of the internet helps in advancing performance, faster decision making, and saving cost. The internet helps in displaying vacancies on time. The internet also helps in finding the precise employee for the job from the pool of information obtainable in the database. They also highlighted that internet recruiting had evolved into a new medium that would eventually supplant other traditional forms of recruitment since it provided lower recruitment costs, time-saving capabilities, quick response features in checking application status, and online resume development.[12].

A new paradigm for online recruitment is observed even in companies of all sizes. Companies interested in using

their websites for job advertisements and viewing potential applicants' posted resumes generally hire third-party e-recruiters for a fee that is lower than most traditional recruitment methods. Most companies offer applicants or job seekers free services to post their resumes online in their databases. The growth of 1 resume is unavoidable with this free posting. Millions of resumes are posted on well-known e-recruitment websites, transforming them into a true market that is unregulated and unconstrained by geography.

An online recruitment system allows organizations to use technology, particularly web-based systems, to raise awareness of job openings at a low cost, while also allowing job-seeking students to market themselves and demonstrate their skills. This system aids in the tracking of the recruitment process for both the applicant and the employer.

According to Galanaki [13], the online recruitment (e-recruitment) process begins with posting job openings on the company's website or the website of an online recruitment vendor and allowing applicants to submit resumes electronically via an e-form or email.

Mary Grace G. Ventura and Rex P [14] [15] researched at the University of the East by building a prototype of an E-recruitment system to determine the effectiveness of such systems in the recruitment process. Six groups of respondents evaluate the system to determine its effectiveness in terms of performance, reliability, security, and cost-effectiveness. They don't explain how they built their system, but they do show some results to back up their claim that such systems are effective. The goal is to make the work of posting job openings and collecting applications easier and more successful than before. Traditional ways of hiring job candidates are time-consuming, stressful, and unsuccessful [16].

Building an online job recruiting application for campuses without first studying the present circumstances and surroundings may not help address the problem. To determine the intentions of both job searchers and employers, as well as their experience with the current system, a thorough investigation is necessary [17]. This aids in determining the online recruitment system's success.

From a recruiter's perspective, companies spend a lot of money on internet recruitment, but they have inconsistent results [18]. The job recruiting system must become more intelligent to assist companies in finding the ideal applicant. After the system is built, a group of responders should evaluate its efficacy in terms of performance,

dependability, security, and cost-effectiveness [19]. The same features and ease need to be present in similar online recruitment systems for all college campuses. The system should be driven by artificial intelligence to recommend jobs, analyze profiles, and at the same to be easy to use and manage both by the students and placement officers of the institution.

To develop an application, we must first analyze its effectiveness. Aithal P. S. et al. [20] recently developed the ABCD Model of Analysis to analyze the effectiveness of any business model, strategy, concept, or system in giving value to its stakeholders and generating long-term profit through predicted revenue production. The ABCD analysis produces an organized list of business advantages, benefits, constraints, and downsides in a systematic matrix that is thoroughly cohesive. The entire framework is divided into several issues/areas of emphasis and various business deployment elements impacting the business/concept, all of which may be recognized and researched by selecting the relevant vital effective element under each issue. The approach for identifying and analyzing the effectiveness of any company model, business strategy, business concept/idea, and business system is straightforward using this analyzing technique [21]. Using the ABCD framework, we can help evaluate the metrics of the on-campus online job recruitment system and the following are listed below[22]-[28]:

A. Advantages

a. To students:

- The list of student profiles in on-campus placement portals is ensured, resulting in increased professional visibility.
- Students are spared of the chaos or congestion that would otherwise occur on college campuses during any large job fairs or events.

b. To institutions:

- Institutions can arrange for interviews on whatever date/day they like because they can update the portal with possible interview dates.
- The use of an online placement agreement allows for the college's placement office to have a structured way of interacting with the companies and recruiters.

B. Benefits

a. To students:

- For the contemporary age generation, it is conceivable to connect their practiced skills to apply online through online interviews.
- Students can track their progress in terms of employability acceptance by checking the online placement portal at regular intervals.

b. To institutions:

- The electronic recruitment procedure makes it simple to align college requirements at any point during the interview process.
- Institutions can track their students' performance and interview conduct through online interviews because they provide convenient access and a user-friendly experience.

C. Constraints

a. To students:

- Students tend to take the schedule lightly because they assume they may access it at any time and from any location.
- Due to the student's inability to access the internet, applications, and system, they may be unaware of the status of their job offer.

b. To institutions:

- Due to numerous institutional and academic constraints, the college may not be able to match the date of the interview with that of the recruiter.
- High power usage may be required to manage a server/website, which might put a strain on educational budgets.

D. Disadvantages

a. To students:

- Student absence, as well as a failure to access the interview modules online, might make the procedure unproductive, negatively impacting the student's future.
- Procrastination due to the use of web applications might cause a student to get distracted by his administration on-campus placement or company portals, causing him to miss out on job prospects.

b. To institutions:

- The academic calendar always clashes with the schedule of the recruiters.
- During the drive, any technical difficulties or application downtime in e-recruiting tools may cause students to become agitated, which could lead to inconvenience.

The present system stores records on excel sheets and organizing this data becomes quite challenging. As a result, sorting and searching issues develop. Another time-consuming process is updating records [29]. Because of the aforementioned issues, upgrading was extremely difficult and unclear. Duplication of files and information can also result in data redundancy. Because the data were not organized in a hierarchical manner, finding suitable pupils was the most difficult task [30].

The current trend in the modern environment is the young generation's elegance in cell phones and mobile applications. An example of an existing app is Mobile centered learning system (ICCCA), which is a web-based tool that operates on the Windows operating system for the placement department of the institution to put the college's students' information in a database that businesses may use [31]. Their recruitment procedure is made easier with a secure login. The system has all of the necessary information. respecting the information of the students [32].

2.1 Related Work

On campuses where the majority of the candidates are non-income earners, a cost-effective system is required to reduce the financial burden that may be placed on the student.

Fig. 2, depicts the most basic and important features of an e-recruitment system as concluded by Vijay Yadav et al. [33] in his survey conducted in Nepal. Once students are logged in, the system will assist them in creating a profile, which can then be used to access resources. They can generate a CV that they can download as a PDF. Companies can advertise job openings on their own profiles. According to that, the system will recommend jobs that have been posted by companies to the students who are a good match for their abilities. A secure login is provided in order to increase the users' authenticity.

In the system proposed by Vijay Yadav [33], users must identify themselves as either an employer or a student during the registration process. The department does not need to create a separate account because the system already has one. Only students with a campus email account will be able to create an account. Similarly, businesses can register for an account and use it to post job openings. The three actors in their system are

students, businesses, and administrators. Interactions between these three actors bring the hiring process to a close.

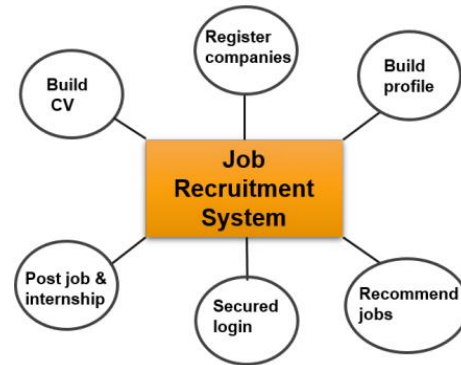


Fig-2. Important features of a Job Recruitment System as concluded by Vijay Yadav et al. [5].

In this paper, we propose a unique system of our own, a web application as a means for campus recruitment in institutions to efficiently manage student training, student information, and the hiring process of each student. This application will allow the placement officers to collect information from various recruiting companies participating in the placements and update it immediately on the portal. The students will be able to apply for jobs posted on the portal. The workload of the placement officer will be decreased by reducing the manual work and paperwork at the placement office. On the other hand, it will also simplify the process of applying for jobs for the students. Introducing such a system with Artificial Intelligence features to propel job recommendations to analyze student CVs and propose improvements is key to all Institutions. Using this technology effectively on all college campuses for placements regularly is just a matter of time and practice.

3. CONCLUSIONS

The purpose of this research is to investigate and evaluate the necessity for an online campus recruitment system from the perspective of students and the training and placement department. The goal of this study was to analyze the needs, find the appropriate features and functionalities of a well-rounded campus recruitment system. Campus Recruitment assists firms in obtaining qualified personnel and has proven to be a crucial component of the hiring strategy. It can be utilized in Educational Institutions to keep track of and maintain candidate applications. In terms of cost and efficiency, online-recruitment portals have shown to be extremely

beneficial. Constant development in examining technological difficulties related to campus recruitment portals is strongly advised in addition to the discussion.

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