

Transparency failures in Online Recruitment Systems: Evidence from LinkedIn Job Postings

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Abstract: Online recruitment platforms have transformed the job search process by increasing accessibility and enabling candidates to apply to multiple positions rapidly. However, these platforms may also contribute to recruitment inefficiencies through incomplete job postings, limited transparency, and ambiguous hiring requirements. This study examines transparency failures in online recruitment systems through a mixed-method analysis of 1,258 LinkedIn job postings collected between 2019 and 2025, together with survey responses from 141 job seekers. The study evaluates several dimensions of recruitment transparency, including salary disclosure, experience requirements, recruitment timelines, recruiter contact information, and completeness of job descriptions. The findings reveal substantial gaps between candidate expectations and the information provided in job postings. While survey respondents rated salary transparency, realistic experience requirements, recruitment timelines, and information on work arrangements as highly important, these attributes were frequently absent in practice. Only 19.7% of job postings disclosed salary information, while only 1.2% specified a recruitment timeline. Furthermore, the study argues that incomplete or low-transparency job postings contribute to information asymmetry, candidate uncertainty, and inefficient job-search behaviour. Based on these findings, the paper proposes a structured job description framework to improve transparency and standardisation on online recruitment platforms.

Keywords - Digital Labour Markets, Information Asymmetry, Job Posting Transparency, Labour-Market Inefficiency, LinkedIn Job Postings, Online Recruitment Platforms, Platform-Mediated Labour Markets.

I. INTRODUCTION

One of the primary ways candidates interact with an organisation is by applying for a job. When evaluating job listings, candidates typically look for key attributes to determine whether a position aligns with their qualifications and career goals. These attributes often include experience requirements, salary range, visa sponsorship availability, job location, required skills, and expected responsibilities. Many job postings have limited information, however. In some cases, job descriptions are mostly promotional material describing the company and not the job and the skills required of candidates. The emergence of online recruitment platforms such as LinkedIn, Naukri, Indeed, and other job portals has significantly transformed the job search process. These platforms allow candidates to search for jobs and apply to various companies in a short period. These platforms have certainly made it easier to find jobs online, but they've also created some new challenges. The biggest issue is jobs that are posted that are of poor quality or false, such as duplicate listings, incomplete job descriptions, or jobs posted from an unverified companies or profiles.

Another limitation of many online job platforms is the restricted structure of job posting formats. In several cases, employers are not required to provide critical information that candidates need to make informed decisions about applying for a role. For example, on LinkedIn, they don't always have to specify experience, salary, visa sponsorship, etc. or specify what the exact requirements are. This means that many job ads lack details on what the job entails or what they are looking for from applicants. In extreme cases, some job postings contain minimal descriptions that span only a single line, providing little meaningful information about the position. The absence of standardised requirements for job descriptions contributes to several broader issues

within online recruitment ecosystems. These include incomplete (or missing) job descriptions, unclear experience requirements, and lack of transparency in the recruitment process. Such problems can increase uncertainty for job seekers and lead to inefficiencies in the job search process, where candidates spend significant time applying for roles without sufficient information about the positions.

Although online job platforms have become a major part in the contemporary recruitment, the systematic academic research on the structural quality and transparency of job postings is still limited. Empirical studies on the actual job listing data are fewer, but there are some industry reports and online discussions about fake jobs, ghost postings, and ineffective recruitment practices. To address this, this study provides a data-based analysis of LinkedIn job postings, based on exclusive data from LinkedIn. Using a dataset of 1,258 job postings, patterns were examined for the completeness of job descriptions, postings that were reposted, experience requirements, transparency of contact, and disclosure of recruitment timeline.

The goal of the study is to quantify these factors using a real-world dataset in order to empirically gain insights into the structural issues that exist in online job search systems. Although the hiring process typically involves several phases including job postings, application submission, candidate screening, and final hiring decisions this study focuses specifically on the job posting stage, which represents the first point of interaction between candidates and employers. Understanding the quality and completeness of job postings is essential for improving transparency and efficiency in the digital recruitment ecosystem.

II. LITERATURE REVIEW

Digital recruitment platforms have become increasingly important intermediaries in contemporary labour markets, shaping how information about employment opportunities is created, distributed, and accessed. Recruitment has become a very platform-mediated process, with employers, recruiters, and candidates engaged in a process of interaction via digital infrastructures, such as LinkedIn, Indeed, and Glassdoor. These platforms increase accessibility and decrease geographical barriers to recruitment but can also create structural inefficiencies due to information asymmetry, platform governance and information quality.

Information asymmetry refers to situations in which one party possesses substantially more or better information than another [1]. The concept of information asymmetry has long been recognised as a source of market inefficiency. Akerlof (1970), in his influential "Market for Lemons" framework, demonstrated how low-information environments can reduce market quality when one party possesses substantially more information than another [2]. Signalling theory explains how one party communicates information to another under conditions of uncertainty [3]. In the recruitment context, job postings serve as organisational signals that convey the job requirements, pay packages, professionalism of the organisation, and intentions of employers to hire people to potential job seekers. Job postings that are complete and clear could thus impact candidate perceptions of organisational legitimacy and role suitability. Vague or unclear job announcements can also diminish the effectiveness of the employer signalling and create more ambiguity and inefficiency in the recruitment process.

In online recruiting platforms, employers and recruiting platforms may have vast amounts of information regarding employment plans, salary packages, assessment standards, and recruitment processes, which can diminish efficient matchmaking in online labour markets. This imbalance might decrease labour market efficiency because the decision to apply to a job is made in an uncertain way. Incomplete or ambiguous job postings may increase search costs for job seekers and contribute to mismatches between candidates and vacancies. Parry and Tyson noted that online recruitment systems have changed the way companies recruit people, making the process quicker and far more widespread. Digital recruitment platforms offer greater accessibility and eliminate geographical barriers, but questions still exist regarding information quality, recruitment efficiency and candidate experience in an online hiring environments [4].

The growth of digital recruitment platforms has also changed candidate behaviour. Online job applications can now be submitted rapidly and at scale, encouraging high-volume application strategies among job seekers. Kuhn and Mansour [5] argue that internet-based job searching has fundamentally altered labour-market search behaviour, although the efficiency gains of online recruitment remain uncertain. Digital platforms not only have

the potential to expand access to jobs, but they can also lead to application inflation as candidates submit applications to numerous jobs without a clear understanding of hiring requirements and job suitability. A central issue in platform-mediated recruitment systems concerns platform governance. Digital platforms may have incentive mechanisms that incentivize engagement, scale, and activity from users [6]. In online recruitment systems, these dynamics can lead to high volumes of applications being received and a wide range of applicants being collected, without considering the quality or transparency of the job postings. Information-quality issues in digital labour markets may result from limited moderation of incomplete, duplicate, or misinformation about labour markets [4]. Moreover, a lack of standardised requirements for job posting means that employers can leave out potentially important information, like salary ranges, recruitment timelines, or realistic experience requirements, thus reducing the efficacy of organizational signalling and contributing to candidate uncertainty [3] [7].

One manifestation of low-information recruitment systems is the phenomenon of ghost jobs, vacancies that remain publicly listed despite little or no active hiring intent. [8], using an LLM-BERT approach on a Glassdoor dataset, estimated that approximately 21% of analysed job postings may correspond to ghost jobs. The persistence of such vacancies may increase uncertainty among candidates and distort perceptions of labour-market demand by creating an artificial impression of hiring activity. The consequences of prolonged and uncertain job-search processes may extend beyond labour-market inefficiencies. Research by Lim et al. [9] suggests that repeated unsuccessful job-search experiences can contribute to job-search fatigue, reducing motivation and adversely affecting reemployment outcomes.

Likewise, Yang et al. [10] found a positive relationship between unemployment and mental-health issues such as anxiety and depression. These can be compounded in digital recruitment spaces where it is uncertain and opaque, with candidates revisiting incomplete or inactive job postings. Another structural issue within online recruitment systems is the prevalence of duplicate or reposted job advertisements. Duplicate postings may arise because employers advertise the same role across multiple platforms or because recruitment platforms aggregate vacancies from external sources. Zhao, Chen, and Mason [11] proposed a framework for duplicate detection in online job postings and demonstrated that duplicate advertisements constitute a significant challenge in recruitment datasets. Similarly, Jijkoun [12] observed that duplicate postings may account for a substantial proportion of online vacancies in certain datasets.

Although existing research has examined topics such as duplicate job detection, ghost jobs, and online job-search behaviour, relatively limited work has focused on transparency failures and information quality in platform-mediated labour markets. In particular, there remains limited dataset-driven research examining how incomplete job postings, missing recruitment information, and low-transparency recruitment practices affect candidate behaviour and labour-market efficiency. This study adds to the literature by examining transparency-related characteristics of 1,258 job postings on LinkedIn that came between 2019 and 2025. The study is structured to investigate both the dataset-based candidates' perceptions and perceptions of job postings, thereby exploring the potential for platform-based recruitment systems to structurally reward low transparency job postings and create information asymmetry in digital labour markets.

III. TYPES OF JOB POSTINGS

- **Duplicate Jobs:** Two or more job listings with the same job description and location but different job IDs. Everything in these job listings is written exactly the same or copied and pasted, apart from the job ID.
- **Invalid Jobs:** These jobs originate from companies that do not exist. Another type of invalid job is one based on a location where the company in question does not actually exist.
- **Ghost Jobs:** These are jobs posted by legitimate companies solely for candidate data collection, but with no intention of hiring. The timing of the companies' hiring is unknown, leaving candidates' applications in a black hole.
- **Outdated Jobs:** Job listings not removed for more than a month are considered outdated. These jobs attract thousands of applications, but for weeks or months, the employer either fails to hire or shows no

interest in doing so.

- **Incomplete jobs:** In this study, incomplete jobs refer to job postings that contain incomplete or missing job descriptions, excessive company jargon, or missing essential details, such as qualifications, required skills, salary range, or benefits (as in Figure 1).

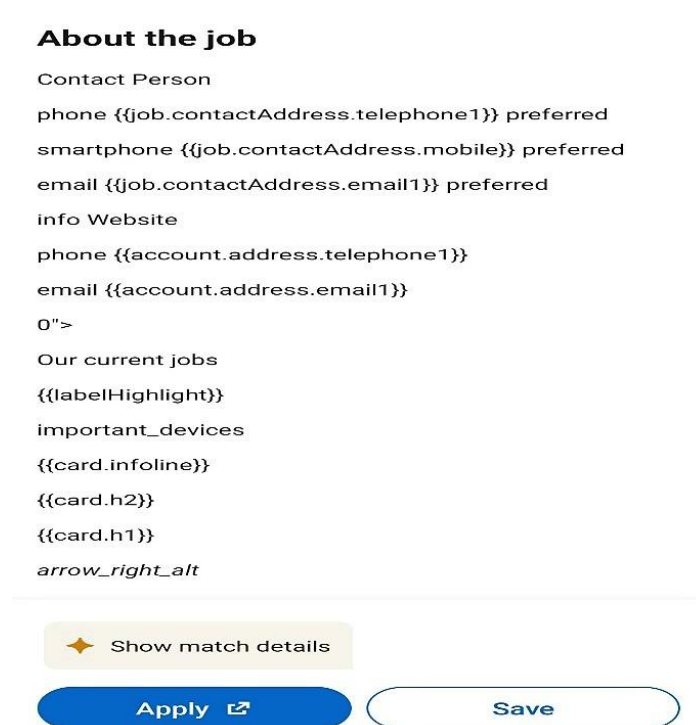


Figure 1. Incomplete Job Posting - As shown in the Figure, the Job Description is Completely Missing, and all that is Present is Meaningless Jargon

Deceptive Jobs: These are job postings where the job title suggests an entry-level role, while the job description specifies significantly higher experience requirements. Employers posting these jobs resort to tactics such as specifying experience requirements at the bottom (as in Figure 2) or in areas where candidates generally do not pay attention.

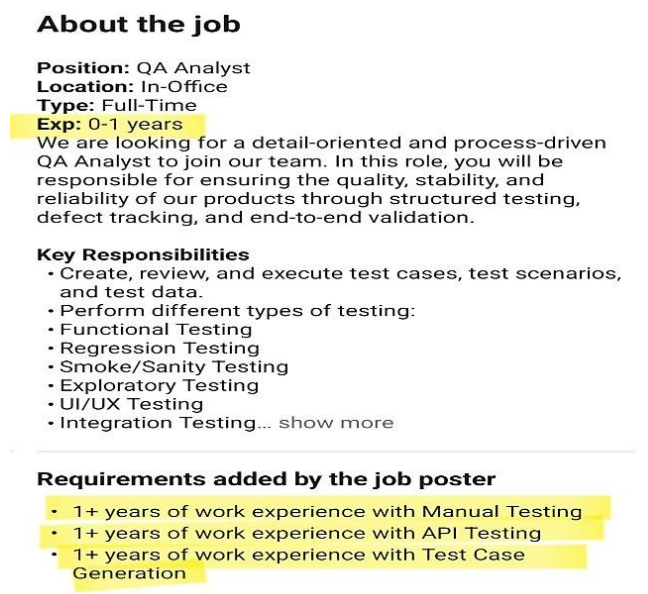


Figure 2. Deceptive Job posting – The Job Appears to be Asking for 0-1 years of Experience at the Top, but the Actual Experience Requirements can only be Found by Scrolling all the Way to the Bottom of the Page

IV. DATASET DESCRIPTION

The dataset has the following columns:

Table 1. Dataset Attributes and their Description

Column Name	Description
COMMITMENT	Full-time/Part-time/Intern
SENIORITY	<ul style="list-style-type: none"> • Entry-Level (Minimum 0 Years of Experience (YoE): such as 0-3 or 0-1 or 0-2) • Junior (internships or 1-2 YoE) • Associate (2-4 YoE) • Mid-Senior (5-10 YoE) • Senior (10+ YoE)
TITLE	Job title
EXPERIENCE_R_P	Experience Required (R) or Preferred (P) or Both
JOB_REQUIREMENTS_COMPLEXITY	It depends on the person's specifications. If the person specification and skill set requirements span several lengthy paragraphs, the label is " Too Sophisticated ". If it is basic and understandable, then the label is " Basic ". Similarly, the labels are allocated on a scale of " Basic " to " Too Sophisticated ". " NA " means that the job posting had no Job description
MIN_EXP	Minimum experience required for the role: (E.g. 2-5 Years of Experience (YoE) - > minimum experience required = 2 Years)
MAX_EXP	Maximum experience required for the role: (E.g. 1-5 YoE -> maximum experience required = 5 Years)
TIMELINE	Recruitment timeline (from start to finish: Dates when hiring rounds will be conducted; When shortlisted candidates will be announced; date of joining, etc)
SALARY_RANGE	Salary or Salary Range for the given job
BENEFITS	Significant benefits such as Private healthcare, pensions, maternity/paternity leave, etc
COUNTRY	The country where the job is based
CONTACT	Contact details (email/phone number/LinkedIn profile) for the person to reach out to for further clarification.
ACADEMIC_GRADE_REQ	Any Academic grade requirement, such as: "> 8.0/10 GPA" or "minimum 2.1 degree required" or ">70% aggregate required".
VERIFIED_PROFILE	LinkedIn verified profile or not (This is checked based on a tick mark that appears next to the job title or the company name in its company page)
YEAR_POSTED	Year in which the job was posted
REMARKS	Additional remarks about the job, such as: Incomplete JD/Reposted/Two different work experience requirements specified in the same JD/Degree requirements unspecified/Skills unspecified
COMPANY NAME	Name of the Company that posted the job
LinkedIn_Easy_Apply	<ol style="list-style-type: none"> 1. Was the job through LinkedIn Easy Apply? If not, then the label is "NA". If yes, then, <ul style="list-style-type: none"> • Application Viewed - "Viewed" • Resume downloaded - "Resume downloaded" • Contacted for the job - "Contacted"

V. DATA COLLECTION

The dataset used in this study has been made publicly available on Kaggle to support transparency and reproducibility of the analysis. Given the exploratory nature of the study and the limited availability of standardised datasets on recruitment transparency, descriptive statistical analysis was used to identify patterns and gaps in online recruitment systems. Job posting data were collected manually from LinkedIn between 2019 and 2025. The dataset consists of 1,258 job listings that the author applied to during this period. These job listings were accessed through the “Jobs → Applied” section of the author’s LinkedIn account.

For each job posting, several attributes were recorded (as listed in Table 1), including job title, company name, job description completeness, experience requirements, salary disclosure, recruiter verification status, repost status, and availability of contact information. Other factors including disclosure of recruitment time, benefits, and academic requirements were recorded when available. Each job posting was coded based on the presence or absence of predefined transparency attributes, including salary disclosure, recruiter contact information, work arrangement, and recruitment timelines. The collected data were organised into a structured dataset and analysed using the Pandas module in the Python Programming Language. The purpose of the analysis was to assess the transparency and completeness of job postings on online recruitment platforms, with a specific focus on LinkedIn.

VI. RESULTS

A. Application Outcomes and Employer Responsiveness

To understand candidate experiences with online recruitment platforms, the author submitted 697 job applications through LinkedIn’s Easy Apply feature. Of these applications, only 19 resulted in employer contact, while the remaining 678 applications received no response. This corresponds to a response rate of approximately **2.73%**, with **97.27%** of applications receiving no feedback, effectively resulting in candidate ghosting. Such a low response rate highlights a major inefficiency in online recruitment systems, where candidates invest significant time applying to roles but receive little or no communication from employers.

B. Verified Versus Unverified Recruiter Profiles

The dataset consists of **1,258 job listings**, categorised by whether the recruiter’s LinkedIn profile was verified.

Table 2. Verified vs Unverified Profiles

Category	Number of Jobs	Percentage
Verified Profiles	844	67.1%
Unverified Profiles	414	32.9%

While the majority of listings originated from verified profiles, a substantial portion (**nearly one-third**) were posted by **unverified accounts**, which may increase the risk of misleading or low-quality job postings.

C. Transparency of Job Requirements

One of the most significant findings relates to the lack of clarity **in job requirements**.

Out of **1,258 job postings analysed**:

Table 3. Job Requirements

Requirement Type	Number of Jobs	Percentage
Jobs specifying seniority/experience	256	20.4%
Jobs preferring experience	187	14.9%
Jobs specifying degree requirements	1,039	82.6%
Jobs missing degree requirements	219	17.4%

Only **20.4%** of job listings clearly specified seniority or work experience requirements, indicating that most listings offer limited guidance on the expected experience level.

D. Recruitment Process Transparency

Transparency regarding the hiring process was found to be extremely limited.

Table 4. Recruitment Timeline and Contact Details of Recruiter

Transparency Indicator	Number of Jobs	Percentage
Jobs specifying a recruitment timeline	15	1.2%
Jobs specifying contact details	480	38.2%
Jobs without contact details	778	61.8%

Only **15 job postings (1.2%)** described a clear recruitment timeline, including hiring stages or interview rounds. This suggests that most organisations provide little information regarding how the recruitment process will proceed, leaving candidates uncertain about the expected timeline or evaluation criteria. Additionally, only **480 listings** included contact information, and in several cases, contacting the recruiter required a **LinkedIn Premium subscription**, further limiting accessibility for job seekers.

E. Job Description Quality

The analysis also revealed significant variation in the quality and completeness of job descriptions.

Table 5. Depth of the Job Description

Job Description Category	Number of Jobs	Percentage
No job description	44	3.5%
Incomplete job description	103	8.2%
Extremely long job descriptions	93	7.4%

A total of **147 job listings (11.7%)** contained either no job description or incomplete information, lacking critical details such as qualifications, responsibilities, required skills, or compensation. Conversely, **93 job postings** contained extremely long descriptions, spanning several paragraphs, which may reduce readability and make it difficult for candidates to quickly assess job requirements.

F. Reposted Jobs

Duplicate or reposted job listings were also observed.

Table 6. Reposted Jobs

Job Posting Type	Number of Jobs	Percentage
Reposted jobs	287	22.8%

Nearly **one-quarter of the job listings (22.8%)** were reposted, suggesting either difficulty filling roles or repeated attempts to increase visibility.

G. Salary Transparency

Salary transparency in job postings was found to be limited.

Table 7. Salary Information

Indicator	Number of Jobs	Percentage
Jobs specifying a salary range	248	19.7%
Jobs without salary information	1010	80.3%

Only **248 job postings (19.7%)** disclosed a salary range, while the vast majority of listings (**80.3%**) provided no salary information. The absence of salary transparency can make it difficult for candidates to evaluate whether a role aligns with their financial expectations before applying.

VII. SURVEY RESULTS AND CANDIDATE PERCEPTIONS

A total of 141 responses were collected to assess candidate perceptions of job posting attributes. Each candidate was asked to give a rating on a scale of 1 to 5 for each of the following questions, with a rating of 5 meaning “most important” and a rating of 1 meaning “least important”:

- i. How important is specifying a **salary range** in a job description?
- ii. How important is specifying **realistic experience requirements** (E.g., an entry-level job requiring 0-1 years of experience is a realistic requirement, but an entry-level job requiring 2-5 years of experience is an unrealistic requirement) in a job description?
- iii. How important is a company specifying **whether it sponsors work visas** in a job description?
- iv. How important is specifying **working hours** (job timings and the working days) in a job description?
- v. How important is specifying the **contact information of the recruiter** (phone number/email address) in a job description?
- vi. How important is specifying **work arrangement** (On-site/Hybrid/Remote) in a job description?
- vii. How important is specifying **benefits** (paid leave, health insurance, pension, etc) in a job description?
- viii. How important is it that you have a **job description that is short and concise** instead of lengthy paragraphs?
- ix. How important is specifying a **recruitment timeline** (Specifying when each hiring round will take place, what each hiring round will test and by what date the hiring process will be complete) in a job description?
- x. How important is specifying **degree requirements** (E.g., BTech, BCom, MTech, MSc, etc) in a job description?

For each question, the following were measured:

1. **% of 4-5** - Percentage of respondents who gave a rating of 4 or 5 for a given question
2. **Mean rating** - the average of all ratings for a given question.

The results of the survey (in Table 8) indicate that job seekers place high importance on transparency-related factors, with all attributes receiving mean ratings of 3.69 or higher on a 5-point scale. Degree requirements (mean = 4.38), recruitment timeline (mean = 4.36), and work arrangement (mean = 4.34) were among the highest-rated factors. Recruiter Contact Information (mean = 4.13) and realistic experience requirements (mean = 4.14) were also rated highly, with over 74% of respondents rating them as highly important. However, a comparison with the dataset analysis reveals a significant gap between candidate expectations and job posting practices. While 84.4% of respondents rated the recruitment timeline as highly important, only 1.2% of job postings provided this information. Similarly, salary transparency was rated highly important by 75.9% of respondents, yet only 19.7% of job postings disclosed salary details. These findings highlight a mismatch between candidate expectations and the information available in online job postings.

Table 8. Importance of Job Posting Attributes (Survey Results, n=141)

Attribute	Mean Rating	% of Respondents (4-5)
Salary Range	4.13	75.9%
Realistic Experience Requirements	4.14	74.4%
Visa Sponsorship	3.69	61.7%
Working Hours	4.09	75.2%
Recruiter Contact Information	4.13	74.4%
Work Arrangement	4.34	82.2%
Benefits	3.91	64.5%
Concise Job Description	4.07	72.4%
Recruitment Timeline	4.36	84.4%
Degree Requirements	4.38	85.1%

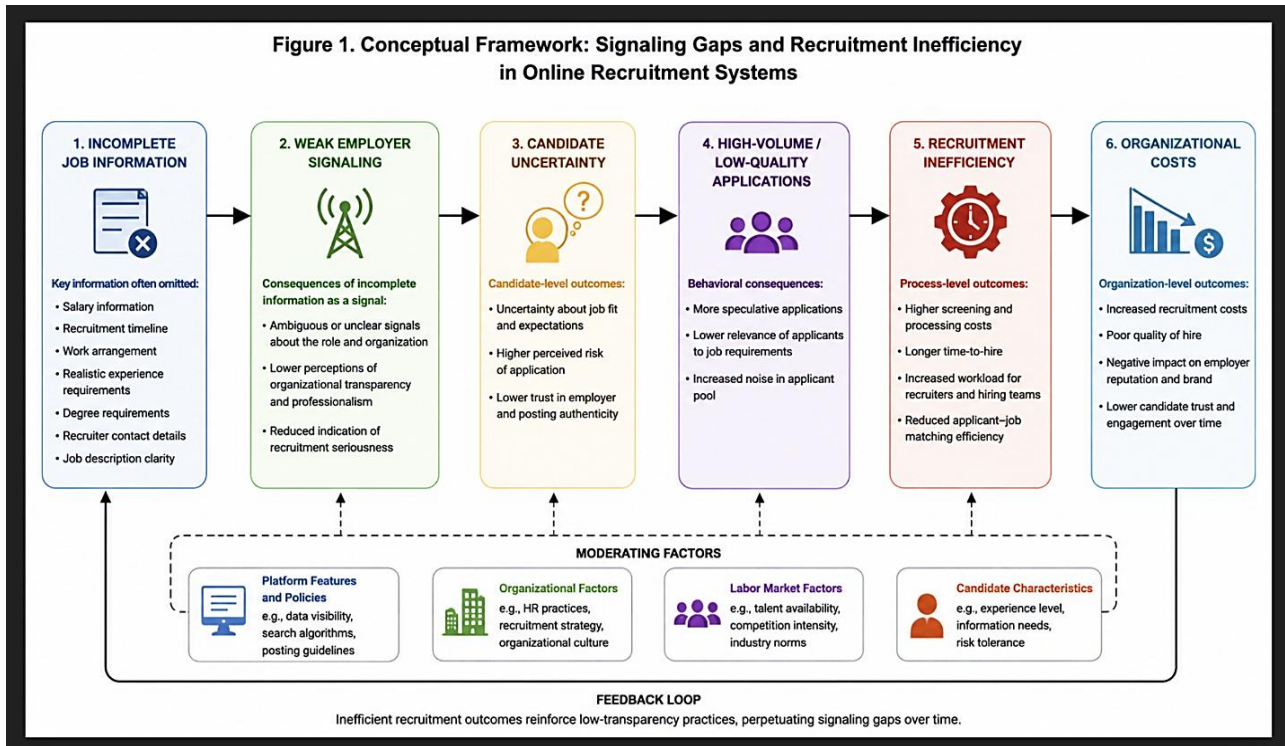


Figure 3. Conceptual Framework

Figure 3 illustrates the conceptual framework proposed in this study, explaining how incomplete job information in online recruitment systems may contribute to recruitment inefficiencies and organisational costs. The framework proposes that the absence or vague information in job ads, including salary terms, timeline, realistic job qualifications, and work arrangement information, can be weak employer signals and may lead candidates to lack certainty about whether the job is right for them and whether the organisation is legitimate. This in turn may result in candidates applying for a large number of jobs or to jobs that are purely speculative, which decreases the efficiency of matching candidates to available jobs, and increases the cost of processing applications for organisations. The framework also identifies the importance of platform policies, organising practices, labour market conditions and candidate characteristics as moderating factors that can affect the size of the signalling gaps and recruitment inefficiencies on online recruitment platforms.

VIII. DISCUSSION

The findings of this study highlight several structural issues in online job search systems, particularly regarding transparency and completeness of information. By combining dataset analysis with survey responses, the results provide both empirical evidence and user perspectives on the challenges job seekers face. One of the most significant findings is the gap between candidate expectations and the information provided in job postings. The results of the survey reveal that factors like salary transparency, recruitment timelines, and realistic experience requirements are highly important for job seekers. The data analysis, however, shows that these attributes are often lacking in job postings. This mismatch suggests that current job postings fail to meet job seekers' informational needs. A signalling theory approach would argue that an unclear or ambiguous job posting can serve as weak cues for a candidate's assessment of whether a job is suitable, the legitimacy of an organisation, and the intent of the job search process.

The findings can also be understood in the context of information asymmetry, which refers to the fact that during the recruitment process, employers have a lot more information regarding the job roles and the recruitment processes, as compared to the candidates. This imbalance can contribute to ineffective decision-making because candidates have to apply for jobs only having limited information to evaluate their applications based on. This means that job seekers can practice the high volume approach in a situation where there are no clear selection criteria. The findings can also be viewed in the light of the general labour-market mismatch

theory. According to [13] mismatches between the job seeker and an available vacancy may lead to inefficiencies in the labour market and lower rates of matching. When the process of recruitment and selection is not transparent, a poorly written job posting can lead to a mismatch as it may not provide information about the position for candidates to gauge their suitability for the position before applying.

Organisations can strategically control the recruitment communication and may reveal to job seekers salary ranges or recruitment time limits, to maintain flexibility in negotiations, to minimise bureaucracy, or to expand the talent pool [7]. However, these practices can also lead to a reduction in the effectiveness of employer signalling and raise candidates' doubts about the level of transparency and seriousness of the recruitment process. Weak employer signalling may also negatively affect organisational recruitment outcomes by increasing the number of low-quality applications, reducing applicant-role matching accuracy, and increasing recruitment processing costs. Over time, persistent low-transparency recruitment practices may also affect employers' reputations and candidates' trust in online recruitment platforms.

The survey results further indicate that a notable proportion of candidates apply for hundreds of jobs (40.4%), reflecting a highly competitive and uncertain job-search environment. This observation aligns with the dataset findings, which show that the employer response rate is extremely low. The combination of limited information and low response rates contributes to inefficiencies in the job search process, increasing both the effort required by candidates and the likelihood of mismatched applications. Another important finding relates to unrealistic experience requirements in job postings, particularly for entry-level roles. Given that a substantial proportion of respondents are early-career job seekers (33.3%), such requirements may act as a barrier to employment. This suggests that job postings may not accurately reflect the intended candidate profile, potentially discouraging suitable applicants from applying.

From a platform perspective, these issues may be influenced by the incentives of online recruitment systems. Platforms often prioritise the volume of job postings and applications, which may inadvertently allow incomplete or low-quality job descriptions to persist. Employers may also benefit from maintaining active job listings even when hiring is not immediate, as it allows them to build a pool of potential candidates. However, this practice can contribute to inefficiencies in the job search process, as candidates may apply to positions that are not actively recruiting. These structural factors highlight the need for stronger platform-level policies to improve transparency and ensure that job postings provide meaningful and accurate information.

IX. PROPOSED JOB DESCRIPTION FRAMEWORK

The proposed job description framework is designed to address the key transparency issues identified in the dataset analysis. By standardising the information provided in job postings, recruitment platforms can reduce ambiguity and improve the efficiency of the job search process. Each component of the framework targets a specific gap observed in current job listings, such as missing salary information, unclear experience requirements, or a lack of recruitment timelines. Implementing such a framework would not only benefit candidates but also help employers attract more suitable applicants by clearly communicating expectations.

1. **Company Verification:** The company should go through a strict verification process before it can be allowed to post jobs on a given platform. This verification process could involve checking whether the company is registered on the corporate affairs website of the country where it is based. For example, the Ministry of Corporate Affairs website lists all valid companies operating in India.
2. **Unique Job Identifier:** Each job posting should have a unique identifier (E.g., JOB ID 7323, JOB ID: R-241381, etc) and version history to prevent duplicate postings and improve traceability.
3. **Job Title:** A clear job title.
4. **Work Experience:** The required work experience, if any, should be clearly specified at the beginning of the job posting in a prominent and consistent format. Employers should explicitly state whether the role requires industry experience (experience gained through paid professional employment or commercial projects) or academic experience (experience gained through academic coursework, university projects, capstone projects, internships, or research activities). Contrasting experience requirements in the same job posting, such as specifying 0-1 years of experience at the top and 2-5 years of experience at the

- bottom, should be discouraged or regulated by recruitment platforms.
5. A standard experience framework, such as the following, should be enforced and applied consistently across all jobs on a given job search platform:
 - Entry-Level: 0-1 Years of Experience
 - Junior: 1-2 Years of Experience
 - Associate: 2-4 Years of Experience
 - Mid-Senior: 5-10 Years of Experience
 - Senior: > 10 Years of Experience
 6. **Employment Type:** Full-time/Part-time
 7. **Work Arrangement:** One of the following: On-site/Hybrid/Remote
 8. **Working Hours:** The office timings and working days in a week.
 9. **Job location:** The location where the job is based. Job postings specifying locations where the company has no operational presence should be monitored and moderated by recruitment platforms.
 10. **Required Skills:** The skills specified must match the job and experience level. Employers posting a job must be given sufficient training on what the job entails and the exact skills required. A wish list of requirements unrelated to the job itself must be avoided.
 11. **Required Qualifications:** If a Bachelor's degree, Master's degree, or any other qualification is required, it should be clearly stated, including the domain in which the qualification is required (Example: BTech in Computer Science or Information Technology or related fields). If a degree isn't required, that should be specified as well (E.g., 12th Pass is sufficient or No degree required).
 12. **Job Responsibilities:** A clear and concise description of the key responsibilities associated with the role. This should focus on day-to-day tasks and expectations rather than general information about the company or department. It must also include whether Relocation Assistance will be provided and whether any travelling is required for the role.
 13. **Length of Job Description:** This must be strictly regulated. Descriptions must be kept short and precise and avoid lengthy explanations that often span several pages.
 14. **Salary Range:** Specifying the salary range and making the job seeker aware of how far they can negotiate helps a job seeker quickly decide if the job is for them.
 15. **Application Deadline:** The last date to apply for the position should be clearly specified to avoid uncertainty and improve planning for candidates. In addition, job-search platforms should enforce automatic expiration or periodic review of job postings to ensure that outdated or inactive listings are removed in a timely manner.
 16. **Response Time:** The estimated time taken (E.g., 1 week, 2 weeks, etc) to respond to the candidates (typically via email) on whether they've been rejected or will proceed to Round 1 of the hiring process.
 17. **Recruitment Timeline:** This timeline must briefly explain each round in the hiring process, what it involves and when each of those rounds takes place, when the hiring process completes, and the expected joining date.
 18. **Contact Information:** A phone number or email address of the recruiter.
 19. **Benefits:** A list of valid benefits includes paid leave, health insurance, pension, etc.
 20. **Visa Sponsorship:** A simple Yes or No on whether the position sponsors a work visa would be sufficient. This should be specified right above the experience requirements. Job portals should also have a filter to show jobs that sponsor visas.
 21. **Tenure of the Job:** Temporary (if yes, then specify duration)/Permanent
 22. **Equal Opportunity Statement:** A brief statement indicating that the employer follows fair and inclusive hiring practices can improve transparency and trust.
 23. **Number of Applications Received for the Position (Optional):** An exact number of applications received for the position must be specified right below the job title.

X. LIMITATIONS

This study focuses exclusively on job postings collected from LinkedIn. The results are applicable to LinkedIn, the biggest online recruitment platform, but cannot be fully generalised to other job portals like Indeed, Naukri

or Glassdoor. Further studies could broaden the data set to account for multiple job platforms, allowing for comparisons of job posting transparency between different recruitment systems. Furthermore, the data file contains job announcements to which the author applied, which may lead to selection bias. The sample may not contain all job postings that are available for the platform, especially within various industries or regions. The survey study utilises 141 responses, this is adequate for exploratory analysis but may not provide enough responses to be able to generalise the findings. More extensive and varied samples could be used in future studies to enhance the robustness of the results. Lastly, the data was manually collected, which can lead to subjective interpretations for postings (e.g., incomplete or overly complex job descriptions). Automated or large-scale data collection methods could be explored in future research to improve consistency and scalability.

XI. CONCLUSION

This study examined the transparency and completeness of job postings on LinkedIn using a dataset of 1,258 job listings collected between 2019 and 2025. The results reveal several structural issues in online recruitment systems, including limited employer responsiveness, incomplete job descriptions, low salary transparency, and a lack of disclosure of recruitment timelines. The results indicate that many job postings provide only weak or incomplete organisational signals, which reduce candidates' decision-making in applying for a job and may lead to uncertainty about job fit and the credibility of the recruitment process. To tackle these issues, a framework for recruitment transparency is proposed that provides a structured identification of the information that should be shared in the process of notifying job vacancies. It is important that employers who are writing job descriptions also be provided with sufficient training to enhance their recruitment communication.

Improving transparency and standardisation in job postings may enhance trust, signalling quality, and efficiency within digital recruitment ecosystems, better aligning employer practices with candidate expectations. Structured job posting standards will also enhance transparency for applicants, help minimise irrelevant applications, streamline the matching process between the applicant and the job, and decrease the processing costs for organisations. Future research may involve examining job postings from a variety of job boards or using automatic techniques to identify poor quality, deceptive or even fraudulent job postings. Various formatted data from public job postings on various job sites would be very helpful for sophisticated analysis. Another path would be to explore the relationship of transparency in recruitment with organizational recruitment outcomes, recruitment behavior and trust of candidates in online recruitment system.

The dataset used in this study is publicly available on Kaggle and can be accessed at:

[LinkedIn job posting transparency dataset](#)

The survey questionnaire used in this study is available at: [Job Search Process Survey - Google Forms](#)

Conflicts of Interest

The author(s) declare(s) that there is no conflict of interest concerning the publishing of this paper.

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Ethical Approval and Informed Consent

The survey conducted as part of this study collected anonymous responses and did not involve sensitive personal data. Participation in the survey was voluntary.

XII. REFERENCES

1. D. Autor, "Wiring the Labor Market," *Journal of Economic Perspectives*, vol. 15, no. 1, pp. 25–40, 2001. [Google Scholar](#) | [Publisher Link](#)
2. G.A. Akerlof, "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism," *The Quarterly Journal of Economics*, vol. 84, no. 3, pp. 488–500, 1970. [Google Scholar](#) | [Publisher Link](#)
3. M. Spence, "Job Market Signaling," *The Quarterly Journal of Economics*, vol. 87, no. 3, pp. 355–374, 1973. [Google Scholar](#) | [Publisher Link](#)
4. E. Parry and S. Tyson, "An Analysis of the Use and Success of Online Recruitment Methods in the UK," *Human Resource Management Journal*, vol. 18, no. 3, pp. 257–274, 2008. [Google Scholar](#) | [Publisher Link](#)
5. H. Mansour and P. Kuhn, "Is Internet Job Search Still Ineffective?," *The Economic Journal*, vol. 124, no. 581, pp. 1213–1233, 2014. [Google Scholar](#) | [Publisher Link](#)
6. N. Srnicek, *Platform Capitalism*, Polity Press, 2017. [Google Scholar](#) | [Publisher Link](#)
7. J.A. Breugh, "Employee Recruitment: Current Knowledge and Important Areas for Future Research," *Human Resource Management Review*, vol. 18, no. 3, pp. 103–118, 2008. [Google Scholar](#) | [Publisher Link](#)
8. H. Ng, "Why Is It So Hard to Find a Job Now? Enter Ghost Jobs," *arXiv preprint arXiv:2410.21771*, 2024. [Google Scholar](#) | [Publisher Link](#)
9. V.K.G. Lim, D.J.Q. Chen, and M. Tan, "Unemployed and Exhausted? Fatigue During Job-Search and Its Impact on Reemployment Quality," *Academy of Management Proceedings*, vol. 2013, no. 1, p. 13399, 2013. [Google Scholar](#) | [Publisher Link](#)
10. L. Niu, S. Amin, I. Yasin, and Y. Yang, "Unemployment and Mental Health: A Global Study of Unemployment's Influence on Diverse Mental Disorders," *Frontiers in Public Health*, vol. 12, p. 1440403, 2024. [Google Scholar](#) | [Publisher Link](#)
11. H. Chen, C.M. Mason, and Y. Zhao, "A Framework for Duplicate Detection From Online Job Postings," *IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology*, pp. 249–256, 2021. [Google Scholar](#) | [Publisher Link](#)
12. V. Jijkoun, "Online Job Postings Have Many Duplicates. But How Can You Detect Them If They Are Not Exact Copies of Each Other," 2016. [Google Scholar](#)
13. J. Song, A. Şahin, G. Topa, and G.L. Violante, "Mismatch Unemployment," *American Economic Review*, vol. 104, no. 11, pp. 3529–3564, 2014. [Google Scholar](#) | [Publisher Link](#)