



DIGITAL INTERVENTION IN RECRUITMENT AND SELECTION

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Abstract: This study, conducted at TATA Steel Meramandali, examines the digital interventions in the recruitment and selection processes, focusing on advanced tools like Applicant Tracking Systems (ATS), HireNext, and SAP HR. These technologies streamline the recruitment process, from candidate sourcing to onboarding, enabling more efficient management of HR functions. By automating routine tasks and enhancing data-driven decision-making, these platforms optimize recruitment strategies and improve overall organizational effectiveness. The research highlights how digital transformation in HR enhances the hiring experience, reducing time-to-hire and improving candidate quality, thereby contributing to operational efficiency and strategic HR outcomes.

Key Word - Applicant Tracking system, Systems Application and Products, HRIS

1. Introduction:

THE RECRUITMENT AND SELECTION PROCESS is a crucial part of human resource management that involves attracting, identifying, and hiring the most suitable candidates for an organization. This process ensures that businesses can find employees who are not only qualified for the job but also align with the company's culture and goals. Here's an introduction to the recruitment and selection process, including its importance, steps, methods, and best practices.

In the rapidly evolving landscape of human resources, digital intervention has emerged as a pivotal force transforming traditional recruitment and selection processes. At Tata Steel Meramandali, this paradigm shift is not just about leveraging technology but also about enhancing the efficiency, accuracy, and inclusiveness of talent acquisition. The integration of digital tools and platforms facilitates a more streamlined and data-driven approach, ensuring that the recruitment process is both efficient and equitable. From the initial stages of candidate sourcing to the final selection, digital interventions enable real-time data analysis, predictive analytics, and AI-driven insights, significantly reducing the time-to-hire and improving the quality of hires.

This digital transformation is particularly evident in how Tata Steel Meramandali utilizes advanced applicant tracking systems (ATS), AI-powered chatbots, and video interviewing platforms to manage the influx of applications. The ATS automates the initial screening process, sifting through resumes with precision to identify the most suitable candidates based on predefined criteria. AI-powered chatbots engage with candidates, providing them with instant responses to their queries and guiding them through the application process, thereby enhancing candidate experience. Furthermore, video interviewing platforms allow for a more



flexible and convenient interview process, enabling recruiters to evaluate candidates' competencies and cultural fit from anywhere in the world.

In addition, the use of predictive analytics in recruitment at Tata Steel Meramandali provides a competitive edge by forecasting hiring needs and identifying potential candidates who are likely to succeed and stay with the company long-term. This strategic approach not only reduces turnover rates but also ensures that the organization attracts and retains top talent. Moreover, digital tools facilitate a more inclusive hiring process by minimizing unconscious bias, thus promoting diversity and inclusion within the workforce.

Overall, the digital intervention in recruitment and selection at Tata Steel Meramandali underscores a commitment to leveraging technology to build a robust, agile, and diverse workforce. By embracing these digital advancements, Tata Steel Meramandali not only enhances its recruitment efficiency but also sets a benchmark for innovation and excellence in the industry.

1.1 Objective of the study

1. This study evaluates the effectiveness of digital recruitment tools in enhancing hiring efficiency, accuracy, and overall success.
2. It focuses on technologies like Applicant Tracking Systems (ATS), job boards, and AI-powered assessment platforms.
3. The research examines how these tools streamline recruitment processes and reduce human error.
4. It also explores how digital tools improve candidate selection and optimize recruitment efforts.

1.2 Scope of the study

The study is crucial in today's fast-evolving job market, where organizations must adapt quickly to remain competitive. It focuses on the importance of utilizing advanced recruitment technologies to increase efficiency and accuracy in hiring processes. By evaluating the latest digital tools, the research provides valuable insights for HR professionals on optimizing recruitment strategies, which directly impacts organizational productivity and competitiveness. Its findings are relevant globally, as they shed light on the broader implications of integrating technology into recruitment practices. This research fills the knowledge gap by providing evidence-based recommendations for leveraging digital platforms to improve hiring outcomes, helping organizations navigate the complexities of modern recruitment.

1.3 Hiring system of tata steel



Tata Steel, part of the renowned Tata Group, was founded by Jamsetji Tata, father of Ratan Naval Tata in 1907 and is currently led by T. V. Narendran, the CEO and Managing Director. The company has earned a global reputation for its commitment to innovation, sustainability, and ethical business practices. Known for its contributions to India's industrial growth, Tata Steel is consistently recognized as one of the world's most ethical companies. Its emphasis on community development and environmental responsibility further enhances its standing in the industry.

Tata Steel Meramandali, a leading steel manufacturing plant in Odisha, has implemented the *Hire Next* software as part of its *Applicant Tracking System (ATS)* to streamline recruitment. This software automates the entire hiring process, from job postings to interviews, ensuring efficiency. The recruitment process at Tata Steel Meramandali involves three rounds. The first is a preliminary screening interview, assessing basic qualifications. The second is a technical interview focusing on specific skills and expertise, while the final round is a panel interview to evaluate cultural fit, communication, and teamwork. This thorough approach ensures candidates align with the company's values and technical needs.

2. Literature Review

Using digital tools in the recruitment and retention in randomized controlled trials[1]: a survey of UK Clinical Trial Units and a qualitative study. This review synthesizes findings from around 40 recent meta-analyses and literature reviews in recruitment and selection research. It identifies three primary areas of development: advancements in selection research, trends in recruitment practices, and the influence of new technologies. In **selection research**, the review highlights recent findings on the validity of various methods, an expanded criterion space, and the impact of applicant reactions and impression management. **Recruitment research** trends focus on evaluating recruitment methods' effectiveness and understanding factors that drive applicant attraction. The review also explores how **digital tools and technologies** reshape recruitment and selection processes. The authors call for future research to address substantive issues and advocate for theoretical advancements while overcoming methodological challenges. They see the field as evolving to meet the demands of political, cultural, technological, societal, and regulatory changes, ensuring ongoing relevance and impact in organizational practices.

This study wants to identify the various Recruitment [2] and selection process methods in an organization. This study has been analysis and reviewed 40 Articles from reputed Journal 2010 to 2018. The study confirms that recruitment & Selection process that carried out in organization by adopting latest technology like online portal and mobile recruitment application

Perspectives of trial staff on the barriers to recruitment in a digital intervention [3,4] for psychosis and how to work around them: qualitative study within a trial. *JMIR Human Factors*. This study examined recruitment processes in clinical trials for digital interventions targeting psychosis, focusing on trial staff perspectives. Recruitment challenges are seldom detailed in literature, especially from the viewpoint of the staff responsible for meeting targets, highlighting a critical research gap. The study utilized pluralistic ethnographic methods,



analyzing documents, observing, and conducting focus groups with staff involved in the EMPOWER trial—a digital intervention for individuals with schizophrenia. Two main categories of recruitment barriers emerged: service characteristics and clinician expectations. Service characteristics included issues like time constraints for mental health staff, turnover of staff and patients, community mental health team management styles, and physical setting. Clinician expectations involved factors like filtering potential participants and resistance to research. Staff employed strategies like emotional labour and relationship-building with community mental health teams to mitigate these challenges, enhancing flexibility and teamwork to meet recruitment goals.

Digital tools for the recruitment and retention of participants in randomized [5,6] controlled trials: a systematic map. This study systematically mapped digital tools used to recruit and retain participants in health-related randomized controlled trials (RCTs). From 9163 references, 104 articles covering 105 studies were included. Most research focused on recruitment, especially via social media, Internet sites, and email, while retention tools (e.g., email and text-messaging) were less studied. Studies rarely targeted underserved populations or measured participants' attitudes toward digital tools. The findings highlight the need for further rigorous research on digital tools' efficiency, especially in retention and their impact on participants and investigators.

Online and social media recruitment: Hospitality employer and prospective employee considerations, in the study look [7,8] at how online and social media recruitment methods have redefined the recruitment landscape, with relevance across various sectors. And it defines online as well as offline impacts on recruitment and selection process. Discusses the growing intersection between HRM and technology, providing insights on how digital transformation impacts recruitment processes

3. Research Methodology

The Universe of the study of the employees working in Corporate Office, HRBP professionals at plant setup and HR Practitioners from various other organizations. The HR managers and HR fraternity of the organization have also given extremely valuable inputs for this study.

1. Primary Data:

Surveys: Distribute an online survey to HR professionals to gather quantitative data on the use of recruitment tools and their perceived effectiveness. And also using the google form.

Interviews: Conduct semi-structured interviews with selected HR managers to gain qualitative insights into their experiences and challenges with recruitment technology.

2. Secondary Data:

Literature Review: Analyse existing research articles, industry reports, and white papers on recruitment technologies and their impact.



Industry Reports: Review reports from recruitment technology providers and industry associations to obtain current market data and trends.

3. Data Analysis

The survey questionnaire had questions which particularly target the following areas, concerning the current HR Practices and assumptions of HR.

The data was collected through questionnaire method in google form and response were collected in form of google sheets discussed in figure 1. Respondents were from various public and private companies like NALCO, OHPC, Vedanta LTD and TATA.

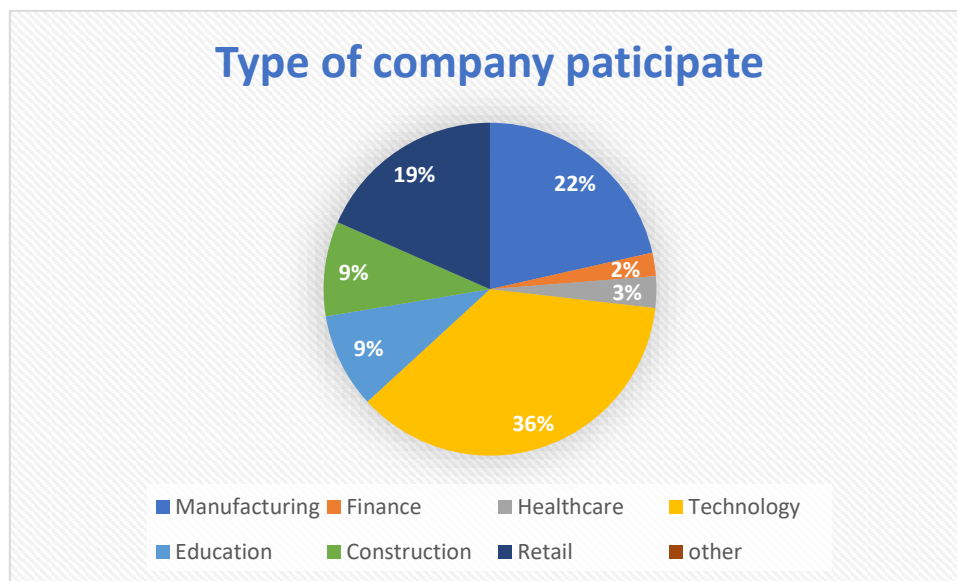


Figure 1: Types of company

The survey has a strong representation from the manufacturing and technology sectors. Lesser representation from industries like education, construction, health care, and graphic designing/digital marketing may imply the survey topic less relevant to them or their participation was lower. **Technical companies**, which is like IT sector using the digital tool more for the HR practices discussed in figure 2. From the above survey it is clear that technical company are more active in the field of digitalization. Finance and health sector participation is very low.

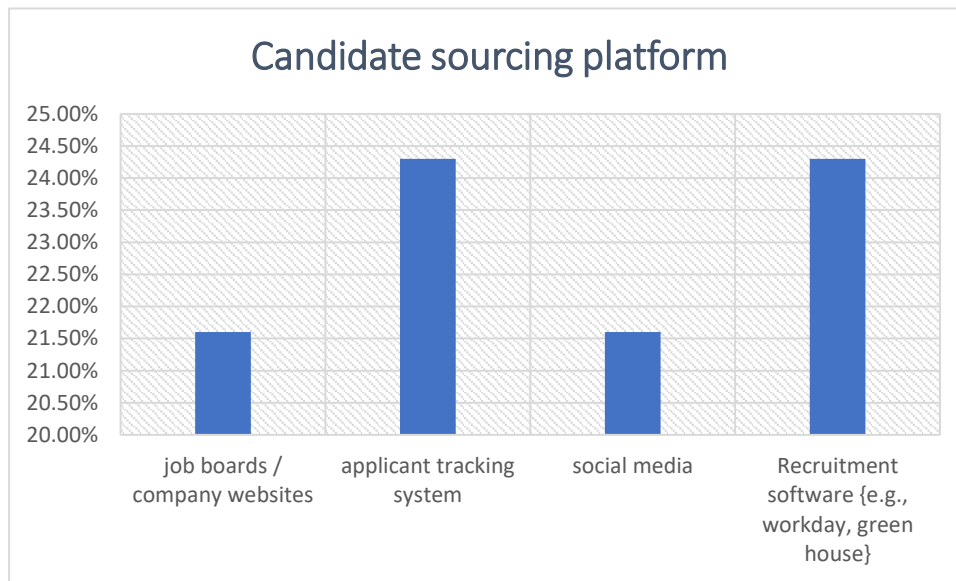


Figure 2: Candidate sourcing Platform

The graphs represent the responses of 35 participants regarding the most effective digital tools for managing the recruitment pipeline. Which reflect that free platforms are more used. The distribution is as follows:

- Applicant tracking system: 24% of respondents find this tool most effective.
- Other Software: 25.7% of respondents prefer this tool.
- Social media: 22.9% of respondents favor this system.
- Naukri LinkedIn: 13.3% of respondents believe that a combination of all three tools is most effective.
- Job boards, company websites: 22.9% of respondents support this & Darwinbox and other tools are also part of this

This data suggests that while applicant tracking systems, other recruitment software and video interviewing platforms are highly valued individually, a significant portion of respondents also recognize the benefit of utilizing all available digital tools to manage the recruitment pipeline effectively. It shows that ATS is the most useful and effective platform but many companies are using recruitment software like Greenhouse, company job boards are also useful and after all social media is also cost-friendly so small organizations use social media platforms like Instagram and Facebook for job posting.

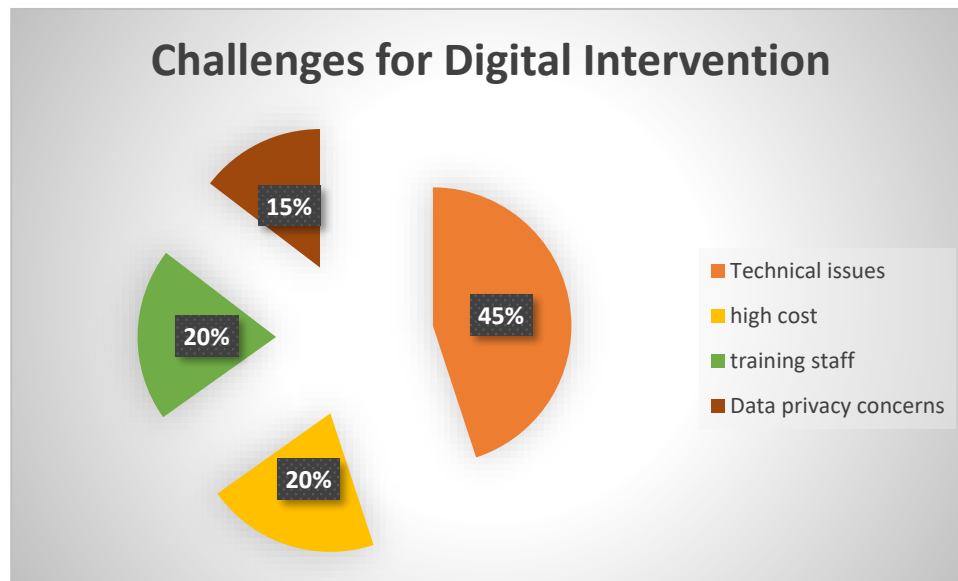


Figure 3: Challenges for digital intervention

The pie chart illustrates the challenges faced by companies in implementing digital interventions in the recruitment discussed in figure 3 and selection process, based on responses from 35 participants.

The breakdown is as follows:

- **Technical issues:** Represented by the segment, 42.9% of respondents cited technical issues as a challenge. This indicates that nearly half of the participants struggle with technological problems when integrating digital tools into their recruitment processes.
- **High costs:** The segment shows that 17.1% of respondents mentioned high costs as a barrier. This suggests that nearly a quarter of the participants find the financial investment required for digital tools to be a significant challenge.
- **Training staff:** Represented by the segment, 17.1% of respondents identified training staff as a challenge. This indicates that over one-tenth of the participants face difficulties in equipping their staff with the necessary skills to use digital recruitment tools effectively.
- **Data privacy concerns:** The segment indicates that 14% of respondents are concerned about data privacy. This suggests that one-fifth of the participants worry about the security and confidentiality of candidate information when using digital platforms. Overall, the data reveals that technical issues are the most common challenge, followed by high costs, data privacy concerns, and training staff. This highlights the need for reliable technology solutions, cost-effective strategies, robust data protection measures, and comprehensive training programs to overcome these challenges discussed in figure 4.



On the scale of 1-5 , how satisfied are you with the digital tool overall

35 responses

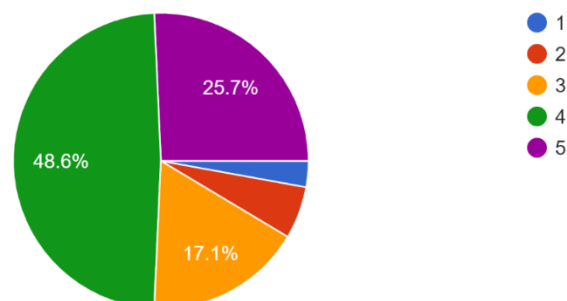


Figure 4: Satisfaction level

48.6% of the sampling give the 4 rating to their tool, 25.7% give 5 which reflect more satisfaction, 17.1% reflect 3 rating here for the satisfaction with digital tool survey. Large sector is satisfied with the digital intervention and somehow the medium enterprise is not that much attached with the digital platform. Small enterprise facing many problems to adopt the digital tool so that they go for the low rating point.

4. Findings

In the course of this survey, it was discovered that large companies, especially in the IT sector, are increasingly leveraging digital interventions for their recruitment and selection processes. These organizations typically invest in sophisticated software solutions that streamline various aspects of hiring, from applicant tracking to interview scheduling and assessment. The use of advanced digital tools not only enhances efficiency but also improves the quality of hires by utilizing data analytics and AI to identify the best candidates. This technological edge is crucial for large companies to maintain their competitive advantage in attracting top talent.

However, medium-sized companies face significant challenges in adopting similar software solutions due to the high costs involved. These companies often operate with tighter budgets and cannot justify the substantial expenditure required for comprehensive recruitment software. Despite recognizing the benefits of digital tools, their financial constraints make it difficult to implement such systems. As a result, medium-sized companies may struggle to compete with larger firms in the talent acquisition market, potentially leading to a talent gap.

On the other hand, small companies tend to favor social media platforms for job postings. These platforms offer a cost-effective way to reach potential candidates without the need for expensive software. Social media channels like LinkedIn, Facebook, and Twitter provide a wide reach and are user-friendly, making them ideal for small businesses with limited resources. Additionally, the informal nature of social media can help small companies build a more personable brand image, which can be attractive to candidates looking for a more intimate work environment.



Training has emerged as a crucial element in optimizing the hiring process through digital tools. Both medium and small companies can greatly benefit from investing in training programs that enhance their staff's ability to utilize digital recruitment platforms effectively. By allocating a relatively small amount of their budget to training, these companies can take full advantage of portals like Naukri and LinkedIn. These platforms do not require extensive software infrastructure but do necessitate a certain level of proficiency to maximize their potential. Proper training ensures that HR personnel can efficiently manage job postings, candidate interactions, and application tracking, thus improving the overall recruitment process.

In conclusion, while large companies in the IT sector are well-positioned to capitalize on digital interventions in recruitment, medium and small companies face distinct challenges. Medium-sized firms struggle with the costs of advanced software, whereas small companies successfully leverage social media. Nonetheless, with strategic investment in training, both medium and small enterprises can enhance their recruitment processes using accessible digital platforms like Naukri and LinkedIn.

5. Conclusion

In conclusion, digital recruitment tools have undoubtedly revolutionized the hiring process by enhancing efficiency, streamlining workflows, and enabling organizations to access a broader talent pool. However, the adoption of these tools is not without challenges. High costs, especially for advanced technologies, can be prohibitive for smaller companies, and a lack of proper training for HR personnel may lead to underutilization and inefficiencies. Additionally, the reluctance to move away from traditional recruitment methods can further limit the effectiveness of digital interventions. To fully capitalize on these advancements, companies must strike a balance between automation and human judgment, invest in training programs for HR professionals, and ensure regular monitoring of AI tools for bias and ethical compliance. By addressing these limitations and implementing best practices, organizations can optimize their recruitment processes, promote fairness, and build a more inclusive, efficient hiring framework.

References

1. Stone, D. L., Deadrick, D. L., Lukaszewski, K. M., & Johnson, R.* (2015). "The influence of technology on the future of human resource management." *Human Resource Management Review*, 25(2), 216–231.
2. Holm, A. B. (2014). "E-recruitment: Towards a ubiquitous recruitment process and candidate relationship management." *Procedia - Social and Behavioral Sciences*, 35, 508–515.



3. Dhamija, P. (2012). "E-recruitment: A roadmap towards e-human resource management." *Research Journal of Management Sciences*, 1(1), 23–26.
4. Breaugh, J. A. (2013). "Employee recruitment: Current knowledge and important areas for future research." *Human Resource Management Review*, 23(3), 300–313.
5. Chamorro-Premuzic, T., Winsborough, D., Sherman, R. A., & Hogan, R. (2016). "New talent signals: Shiny new objects or a brave new world?" *Industrial and Organizational Psychology*, 9(3), 621–640.
6. Parry, E., & Tyson, S. (2008). "An analysis of the use and success of online recruitment methods in the UK." *Human Resource Management Journal*, 18(3), 257–274.
7. Bondar Ouk, T., & Brewster, C. (2016). "Conceptualizing the future of HRM and technology research." *The International Journal of Human Resource Management*, 27(21), 2652–2671.
8. Lievens, F., & Chapman, D. (2019). *Recruitment and selection. The SAGE handbook of human resource management.*