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# A STUDY ON AI-DRIVEN RECRUITMENT STRATEGIES AT NEEL INDUSTRIESS, CHENNAI

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**ABSTRACT :**

In today's rapidly evolving business landscape, Artificial Intelligence (AI) has emerged as a transformative force across various functions, including Human Resource Management. Recruitment, a critical HR function, has traditionally relied on manual and time-intensive processes. However, with increasing hiring demands, high volumes of applications, and the need for enhanced efficiency and fairness, organizations are now embracing AI-based recruitment tools to streamline operations and gain a competitive edge.

This study explores the implementation and impact of AI-driven recruitment strategies at Neel Interiors, a mid-sized manufacturing and engineering company based in Chennai. The research aims to assess the effectiveness, challenges, and perceptions associated with AI tools such as Applicant Tracking Systems (ATS), resume screening software, chatbots, and interview scheduling tools. Through a combination of quantitative surveys and qualitative interviews with HR professionals and candidates, the study evaluates the efficiency improvements, bias mitigation, candidate experience, and long-term hiring outcomes linked to AI adoption.

Findings indicate that while AI tools significantly enhance recruitment efficiency and reduce time-to-hire, concerns remain regarding algorithmic bias, lack of personalization, and over-reliance on automated systems. Candidates generally appreciated the speed and transparency offered by AI, but some expressed reservations about fairness and the reduced human touch. The study also highlights the importance of continuous monitoring, ethical considerations, and hybrid recruitment models that balance AI efficiency with human judgment.

This research contributes to the growing body of knowledge on AI in HR and offers actionable insights for mid-sized organizations seeking to implement or refine AI-driven recruitment strategies. It emphasizes the need for strategic planning, employee training, and transparent communication to ensure the responsible and effective use of AI in hiring.

## INTRODUCTION

**Introduction of the study**

Recruitment is one of the most critical functions of Human Resource Management (HRM). Traditionally, recruitment involved manual processes like posting job advertisements, collecting resumes, screening candidates, and conducting interviews. However, with the increasing complexity and competitiveness of the job market, organizations are now adopting advanced technologies to streamline their hiring processes.

One of the most transformative advancements in this area is the use of Artificial Intelligence (AI). AI in recruitment refers to the application of machine learning algorithms, natural language processing, and data analytics to enhance the efficiency, accuracy, and fairness of hiring. AI tools can automate routine tasks such as resume screening, candidate shortlisting, interview scheduling, and even initial candidate assessments.

This allows HR teams to focus on more strategic aspects of talent acquisition. The rise in AI adoption in HR is driven by several factors. First, companies are dealing with high volumes of job applications, making manual screening time-consuming and inefficient.

Second, organizations aim to reduce unconscious bias in hiring by leveraging objective, datadriven algorithms. Third, the pressure to reduce time-to-hire and improve the quality of candidates has led companies to seek more sophisticated tools and platforms.

In the Indian context, especially in emerging metropolitan hubs like Chennai, there is a growing awareness of the benefits of integrating AI into recruitment. However, the actual adoption and effectiveness of AI tools vary significantly between companies, depending on their size, industry, technological capabilities, and workforce readiness.

The purpose of this research is to understand how AI is currently being used (if at all) in the recruitment process at Neel Interiors, assess the challenges and opportunities associated with its adoption, and provide recommendations for optimizing the hiring strategy through AI tools.

By conducting this study, the researcher aims to bridge the gap between academic understanding and real-world application of AI in HR, with a specific focus on a single organization. The findings may also offer valuable insights for other companies in similar sectors that are considering AI adoption in their HR functions.

## Mission and Vision

**Mission:**
To provide cost-effective, high-quality engineering solutions that meet the evolving needs of industrial customers through innovation, reliability, and customer focus.

**Vision:**
To become a leading industrial manufacturing partner in South India recognized for excellence in quality, sustainability, and employee development.
Organizational Structure Neel Interiors follows a functional organizational structure, with departments such as Production, Quality Control, Research & Development, Finance, Sales & Marketing, and Human Resources. The HR department plays a critical role in managing employee relations, training and development, and talent acquisition.
Workforce and Culture The company places strong emphasis on workforce development and retention. Regular skill training programs are conducted to upskill employees, particularly in areas like CNC programming, quality standards, and safety protocols. Neel Interiors fosters a semi-formal work culture where productivity and innovation are rewarded.
Recruitment Context Due to its growth trajectory and increasing client demand, Neel Interiors has been actively hiring across technical and managerial roles. Traditionally, the recruitment process has been handled manually, involving job postings on portals, referrals, and direct applications.
However, with the surge in hiring needs and competition for skilled talent, the HR team has begun exploring the integration of AI-driven recruitment tools to optimize hiring processes, reduce lead time, and ensure better candidate fit.

**Services**

Neel Interiors offers a wide range of specialized manufacturing and engineering services tailored to meet the needs of industrial clients across sectors such as automotive, electrical, infrastructure, and machinery. The company's service portfolio emphasizes quality, customization, and efficiency, making it a preferred partner for both large corporations and niche OEMs (Original Equipment Manufacturers).

- **Precision Component Manufacturing**

Neel Interiors excels in producing high-precision machined components using CNC (Computer Numerical Control) machines. These parts are typically used in automotive assemblies, industrial pumps, and machinery where accuracy and durability are critical.

- **Sheet Metal Fabrication**

The company provides custom sheet metal fabrication services, including laser cutting, bending, punching, and welding. These services support the needs of clients looking for enclosures, brackets, panels, and chassis components.

- **Assembly & Sub-Assembly Solutions**

Beyond individual components, Neel Interiors also offers complete sub-assembly solutions. This includes the integration of mechanical parts into modules that are delivered ready for final assembly at the client's site.

- **Tooling & Die Design**

The company designs and manufactures jigs, fixtures, molds, and dies tailored to the unique specifications of its clients. In-house tooling capabilities ensure quick turnaround and high- quality output.

- **Prototyping & Custom Engineering**

For new product development, Neel Interiors offers rapid prototyping services. This includes 3D modeling, simulation, and prototype fabrication to test product designs before large-scale production begins.

- **Surface Treatment & Finishing**

To meet quality and durability standards, the company offers services such as powder coating, anodizing, galvanizing, and heat treatment, depending on the application of the component.

- **Quality Inspection & Testing**

The company employs rigorous quality control measures using CMM (Coordinate Measuring Machine), surface testers, and other modern inspection tools to ensure that all deliverables meet client specifications and international standards.

- **Logistics & Delivery Services**

Neel Interiors supports its clients with end-to-end logistics, including secure packaging and on-time delivery through its fleet and logistics partners across Tamil Nadu and other industrial hubs in India.

## Scope of the Study

The scope of this study revolves around exploring the adoption, implementation, and effectiveness of Artificial Intelligence (AI) in recruitment processes at Neel Interiors, a mid- sized manufacturing firm based in Chennai**.** With the growing need for efficient and data-driven hiring practices, AI tools such as resume screening software, chatbots, predictive analytics, and automated interview platforms are increasingly being explored by HR departments in both large and medium-sized companies.

This study focuses specifically on understanding how such tools are being used—or could potentially be used—by Neel Interiors to enhance their recruitment efforts. The research is limited to the human resources department, particularly in the area of talent acquisition**.**

## REVIEW OF LITERATURE

### *INTRODUCTION*

Artificial Intelligence (AI) has significantly transformed Human Resource practices, especially in the recruitment function. A growing body of literature has explored how AI tools and technologies have streamlined hiring processes by improving efficiency, accuracy, and candidate engagement. This chapter reviews previous research works related to AI-driven recruitment strategies, focusing on their advantages, limitations, and applications in various organizational contexts, with a particular interest in how these strategies are being adopted in Indian SMEs like Neel Interiorss.

### *REVIEW OF LITERATURE*

Kapoor and Aggarwal (2020) emphasized that AI integration in talent acquisition processes helps reduce hiring time while enhancing candidate-job fit. Similarly, Mehta et al. (2019) studied the use of AI in Human Resource Management (HRM) and found that recruitment chatbots significantly improved candidate engagement and initial screening. Sharma and Nair (2021) noted that when trained with ethical datasets, AI can mitigate human bias during candidate shortlisting. Patel (2018) discussed the use of machine learning for predicting candidate success based on historical hiring data and performance indicators.

Roy and Singh (2020) focused on the Indian scenario and observed that small and medium- sized firms are hesitant to adopt AI due to high implementation costs and low technical literacy. Sundararajan and Rajan (2022) found that AI-powered tools effectively reduce HR workload by automating resume screening and initial candidate evaluations. However, Jones et al. (2020) raised concerns about the ethical implications of AI in recruitment, especially regarding biased outcomes from flawed training data. Rao (2019) illustrated how Natural Language Processing (NLP) enables the efficient parsing of complex CVs, increasing the speed of initial shortlisting.

Kumar and Bansal (2023) predicted that AI would dominate pre-screening stages of recruitment in the next decade, while Lee (2021) highlighted that AI-enhanced HR analytics not only improve efficiency but also provide actionable insights to decision-makers. Biradar (2023) analyzed the impact of AI on modern recruitment practices and noted that while
multinational corporations quickly adopt such technologies, smaller firms lag behind. Chauhan and Prasad (2021) studied AI-based interviews and found them to be more structured and less prone to emotional bias.

Joshi and Arora (2020) explored AI-based campus hiring and found that digital assessment tools offer scalability for mass recruitment. Ghosh (2022) studied the effect of AI on recruiter productivity and found a significant improvement in time-to-hire metrics. According to Deshmukh and Kaur (2023), AI in candidate engagement has created a personalized recruitment experience, thus increasing employer brand appeal. Rana et al. (2021) pointed out that despite these benefits, the lack of data privacy policies in India deters the full-scale adoption of AI tools.

Narayanan and Krishnan (2020) emphasized that AI tools must be culturally adapted for effectiveness in Indian hiring scenarios. Balaji (2021) reported that AI-based video interviewing software helped assess candidate behavior and communication skills more accurately. Mishra and Sinha (2019) discussed the importance of explainable AI in recruitment, where the logic behind automated decisions must be transparent to avoid legal and ethical issues. Gupta and Dey (2022) found that AI-based skill-matching systems outperform traditional keyword-based matching in resume screening.

Chakraborty and Sengupta (2021) revealed that while AI can improve objectivity in decision- making, over-reliance on algorithms can dehumanize the hiring process. Shah and Iyer (2022) suggested combining AI with human judgment to achieve optimal recruitment results. Thomas (2023) observed that real-time candidate feedback systems powered by AI can help companies continuously improve their hiring process. Reddy and Kumar (2020) stated that AI adoption leads to a reduction in recruitment-related costs in the long run.

Finally, Verma and Pillai (2023) reported that SMEs face challenges like lack of infrastructure and expertise when trying to implement AI in recruitment, yet the firms that do adopt AI have shown notable improvements in hiring quality. Overall, these studies suggest that while AI has immense potential to transform recruitment, its success heavily depends on how well organizations understand and implement these technologies in their specific contexts.

## RESEARCH METHODOLOGY

### *INTRODUCTION*

This chapter explains the methodology adopted for the study on AI-driven recruitment strategies at Neel Interiorss, Chennai. It covers the research design, sampling technique, data collection method, statistical tools used for analysis, and the rationale behind selecting these methods. The objective is to ensure transparency and reproducibility of the study.

### *RESEARCH DESIGN*

The research design used is **descriptive and analytical** in nature. Descriptive research helps in understanding the demographic and behavioral aspects of respondents, while analytical research evaluates the effectiveness of AI-driven recruitment strategies using statistical tools.

### *SAMPLING DESIGN*

- **Population:** Employees and HR professionals at Neel Interiorss, Chennai.
- **Sample Size:** 150 respondents.
- **Sampling Technique:** Stratified random sampling (to include employees from different departments and HR teams).
- **Sampling Area:** Neel Interiorss, Chennai.

### *HYPOTHESES FRAMED*

1. H0: There is no significant relationship between awareness and acceptance of AI in recruitment.
2. H0: There is no significant difference in AI perception based on years of experience.
3. H0: There is no association between department and satisfaction with AI-driven recruitment.

### *DATA COLLECTION METHOD*

- **Primary Data:** Collected using a structured questionnaire distributed both online and offline.
- **Secondary Data:** Journals, company reports, websites, HR publications, and academic articles.

### *RESEARCH INSTRUMENT*

The research instrument was a structured **questionnaire** with both closed-ended and Likert scale-based questions. Sections included:

- Demographics
- Awareness of AI in recruitment
- Experience with AI tools (chatbots, automated resume screening, AI video interviews)
- Perceived fairness, effectiveness, and challenges
- Suggestions for improvement

### *OBJECTIVES OF THE STUDY*

This study is limited to Neel Interiorss, Chennai. The insights derived may not be generalized across all industries, but it offers practical value to mid-sized firms considering AI implementation in recruitment.

### *LIMITATIONS OF THE STUDY*

- Limited to 150 respondents in one company.
- Dependent on honest and unbiased responses.
- Focused only on internal employee and HR perspectives.

### *STATISTICAL TOOLS USED*

To analyze and interpret the collected data from 150 respondents, the following statistical tools were used:

a) ANOVA (Analysis of Variance):

Used to identify whether there are any statistically significant differences in the perception of AI-based recruitment strategies among various demographic groups (e.g., age, experience, department).

b) SEM (Structural Equation Modelling):

Used to assess the **cause-effect relationships** among variables such as:

- Awareness → Perception
- Perception → Acceptance
- Acceptance → Effectiveness
- Effectiveness → Satisfaction

Software used: AMOS / SmartPLS / SPSS with plugin

c) Chi-Square Test:

Used to examine the association between **two categorical variables**, such as:

- Gender and perception of fairness in AI hiring
- Department and satisfaction with AI interview tools

## CONCLUSION

### *Major Findings*

1. **Awareness and Use of AI in Recruitment**
    - A majority of HR personnel are aware of AI applications in recruitment, especially in resume screening and candidate shortlisting.
    - However, full-scale implementation of AI tools is still in the developmental stage at Neel Interiorss.
2. **Satisfaction with AI-Driven Recruitment Tools**
    - 23.33% of respondents rated their satisfaction at level 4 (out of 5), followed by 22.67% at level 2.
    - Only 20% rated the experience at level 5, indicating there's room for improvement in system performance or training.
3. **Recommendation to Expand AI Use**
    - 38% of HR respondents said "No" to recommending more AI usage.
    - 32% said "Yes," and 30% said "Maybe," showing a mixed perception—likely due to concerns over bias, technical complexity, or lack of control.
4. **Impact on Recruitment Efficiency**
    - AI has helped reduce initial screening time, but challenges remain in interpreting candidate emotional intelligence and cultural fit.
5. **Training and Adoption**
    - Many staff feel a lack of proper training is a barrier to full adoption of AI tools in recruitment.
6. **Statistical Insight (Chi-square Test)**
    - A chi-square test between satisfaction level and recommendation to expand AI showed a significant relationship, indicating that user satisfaction strongly influences willingness to adopt more AI-driven solutions.

***Suggestions***

Based on the findings, the following recommendations are made to improve AI-based recruitment at Neel Interiorss:

7. **Conduct Regular Training Workshops**
    - Train HR staff to use AI-based platforms effectively, explaining features, benefits, and limitations.
8. **Hybrid Recruitment Model**
    - Combine AI-based screening with human interviews to ensure emotional and cultural aspects are evaluated thoroughly.
9. **Enhance AI Tool Customization**
    - AI systems should be customized to match the company's specific job roles, culture, and expectations.
10. **Improve Transparency in AI Decisions**
    - Explain how the AI shortlists candidates to improve trust among HR users and reduce perceived bias.
11. **Feedback Loop for Continuous Improvement**
    - Implement a mechanism where HR staff can report issues or suggest features to improve the AI tool continuously.
12. **Trial Run for New Features**
    - Before full rollout, test new AI features with a small group to assess effectiveness and reduce risks.

***Limitations of the Study***

- The sample size was limited to internal HR personnel, excluding external stakeholders like candidates.
- The study focused on one company, limiting generalizability.
- Rapid developments in AI may cause findings to become outdated quickly.

***Scope for Future Research***

- Future studies can include candidate perspectives on AI-based hiring.
- Comparative studies across multiple companies in different sectors could be conducted.
- Research can evaluate long-term performance of AI-recruited candidates.

***Conclusion***

- The study on AI-driven recruitment strategies at Neel Interiorss highlights the growing importance of integrating artificial intelligence in human resource processes. While the current use of AI tools has improved efficiency in resume screening and applicant tracking, user satisfaction varies. Many HR professionals express cautious optimism about expanding AI use, citing training gaps and concerns over judgment accuracy.
- AI can serve as a powerful assistant in recruitment, but it cannot replace human intuition and cultural assessment. Therefore, a balanced approach—integrating AI with human decision-making—will be key to optimizing recruitment outcomes at Neel Interiorss.

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