

A Study on AI-Based Talent Matching for Enhancing Recruitment Efficiency in HR Consultancy Firm

J. Nivetha

Student, II -MBA (Sec-A),

Department of Management Studies,

Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology,

Avadi

Dr. D. Kottteswaran

Assistance Professor,

Department of Management Studies,

Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology,

Avadi.

Abstract

Artificial Intelligence, also known as AI in recruitment is changing how HR consultancy firms find employees in case of finding the right person for a job has been done by looking at resumes and then analysing them which is often tedious and subject to human error. With the introduction of AI recruitment intelligent algorithms and data analysis are used to match candidates with job requirements. This study seeks to explore the role played by AI recruitment systems in enhancing efficiency and client satisfaction for HR consultancy services.

In this research, a descriptive and analytical approach is used to analyze the role played by AI recruitment systems. Secondary research is used to retrieve data from journals, HR reports and case studies. The research seeks to analyze the effectiveness of AI recruitment tools for candidate screening and analysis. From the research findings it is evident that AI recruitment systems are effective and help reduce the recruitment process and provide HR consultants with more insight for clients. The study concludes that using AI in HR consultancy services makes recruitment processes more efficient. It also helps build client relationships through quality hires. AI improves the recruitment process. This leads to better client

relationships. The incorporation of AI in HR consultancy services improves efficiency. It also positively impacts client relationships through quality recruitment.

Keywords: Artificial Intelligence, HR Consultancy, Talent Matching Systems, Recruitment Efficiency, Client Satisfaction.

I. INTRODUCTION

Artificial Intelligence is really changing a lot of things in business especially when it comes to Human Resource Management. HR consultancy firms are using AI to make recruitment better. Old recruitment ways rely on resume checks, recruiter instincts and slow evaluations. With job applications and faster hiring needs these old methods are less efficient and more biased.

AI helps HR consultancy firms use systems to match candidates with job roles. These systems use machine learning and other tools to look at information about people who want to work like their resumes what they are good at and what they have done before. The systems that match people with jobs quickly find people who're a good fit for what the job needs and what the company.

For companies that help other companies find workers artificial intelligence makes the process of finding people easier by doing things like looking for candidates checking resumes and seeing if they have the skills. This reduces recruitment time. Improves hiring decision accuracy. HR consultants can give clients reliable candidate recommendations improving recruitment services.

Moreover AI-driven talent matching systems lead to higher client satisfaction. Faster data-driven and precise recruitment means clients get candidates that match their needs. This improves placement success rates. Strengthens relationships between HR consultancy firms and their clients. HR consultancy firms and clients can really benefit from this.

Despite these benefits using intelligence in HR consultancy also creates problems. This can really affect how well HR consultancy firms recruit people and how happy their clients are, with the service they get from HR consultancy firms.

This study explores the role of AI-based talent matching systems in enhancing recruitment and improving client satisfaction in HR consultancy firms. By analysing AI in recruitment, the study provides insights into how intelligent technologies support HR professionals in making effective hiring decisions, with Artificial Intelligence.

Review of Literature

Many people who study this topic have looked into how Artificial Intelligence's changing the way companies find and manage people to work for them. The studies that have been done show that more and more companies are

using Artificial Intelligence technologies like machine learning and natural language processing to make finding new employees more efficient and to match people with the jobs.

Maree, Kmail and Belkhatir (2020) studied how online recruitment systems have changed and how they use technologies to screen people who apply for jobs. Their research showed that modern recruitment systems use natural language processing to match resumes with job descriptions. This makes the recruitment process faster and less expensive. However the study also pointed out some challenges, such as having trouble accurately identifying the skills of people who apply for jobs from their resumes.

Nosratabadi and other researchers (2022) looked at how Artificial Intelligence models are used to manage the entire process of hiring and keeping employees. The researchers said that Artificial Intelligence helps companies make decisions about human resources and makes the process more efficient. They also said that more research is needed on Artificial Intelligence in resources.

Gan, Zhang and Mori (2024) came up with a plan for using Artificial Intelligence to screen resumes using Large Language Models. Their study showed that Artificial Intelligence can process resumes quickly and find suitable candidates much faster than traditional methods. The results of their experiment showed that Artificial Intelligence systems can screen resumes up to eleven times faster while still being accurate.

Frazzetto and other researchers (2025) developed a way to use machine learning to get insights from the profiles of people who apply for jobs and to recommend them for job openings. Their research emphasized the use of models to analyse the relationship between job requirements and the skills of people who apply. The study found that using Artificial Intelligence improves the accuracy of matching people with jobs and helps companies find talent efficiently.

Sharma and Harisha (2025) looked at the impact of Artificial Intelligence on recruitment processes. They found that Artificial Intelligence technologies make recruitment more efficient by automating the process of finding and screening candidates. The study said that Artificial Intelligence tools improve the quality of hiring decisions and reduce the time it takes to fill job openings. The researchers also said that it is important to address concerns such as bias in algorithms and data privacy.

Zhang and other researchers (2025) reviewed Artificial Intelligence recruitment systems in terms of efficiency and fairness. Their research showed that Artificial Intelligence-based hiring systems can reduce bias and improve hiring outcomes. They also pose risks if the training data is biased. The study said that there is a need for guidelines on using Artificial Intelligence in recruitment practices.

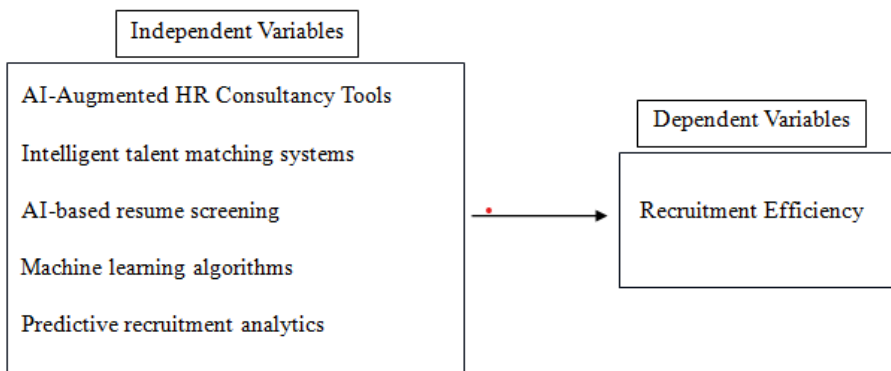
Objectives for this Study

- To examine the role of AI enhanced HR consultancy: smart talent matching solutions for effective recruitment and improved client satisfaction.
- To analyse how AI technologies assist HR consultants in candidate screening and talent matching.
- To evaluate the impact of AI-based recruitment systems on hiring speed and accuracy.

Conceptual Framework

The idea behind this study is to see how Artificial Intelligence tools used in HR consultancy affect recruitment efficiency and client satisfaction. It looks at how Artificial Intelligence tools help HR consultants make the recruitment process better by matching the people with the right jobs. In this study Artificial Intelligence tools for recruitment are the thing being looked at while recruitment efficiency and client satisfaction are the results we are trying to measure. The study assumes that using Artificial Intelligence tools like resume screening algorithms, predictive analytics and talent matching systems makes recruitment decisions better and faster. This means that the people hired are a fit for the job which makes clients happier.

Key Variables in the Framework



Methodology for this Study

This study looks at how Artificial Intelligence's used in HR consultancy especially when it comes to matching the right people with the right jobs. We want to see how Artificial Intelligence affects how well recruitment works and how happy clients are. To do this we are using an analytical approach. The descriptive approach helps us understand what is currently happening with Artificial Intelligence in recruitment. The analytical approach helps us see how Artificial

Intelligence is changing the way recruitment works. With the sample of 41, collected our information by reviewing what has already been written about this topic. We looked at databases, research journals, HR management publications and reputable websites. We chose studies that were relevant to Artificial Intelligence in recruitment and analysed them to find the points about how Artificial Intelligence is used in recruitment how it works and how it affects recruitment and client satisfaction. We focused on Artificial Intelligence and its role, in matching the people with the right jobs and how this affects the recruitment process and client satisfaction.

Statistical Analysis

Chi Square

Table 1
Chi square test

Test	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.12	2	0.047
Likelihood Ratio	6.30	2	0.043
Linear-by-Linear Association	3.95	1	0.047

Interpretation

Since the p-value (0.047) is less than 0.05, the null hypothesis is rejected. This indicates that there is a statistically significant association between AI usage and hiring quality. The Chi-Square analysis confirms that AI adoption significantly influences hiring outcomes in HR consultancy firms.

Correlation Analysis

This analysis represents the Pearson correlation analysis to examine the relationship between AI usage, recruitment efficiency, and hiring quality in HR consultancy firms.

Table 2
Correlation Analysis

Variables	AI Usage	Recruitment Efficiency	Hiring Quality
AI Usage	1	0.68	0.72
Recruitment Efficiency	0.68	1	0.65
Hiring Quality	0.72	0.65	1

Correlation is significant at the 0.01 level (2-tailed).

Interpretation

The correlation results indicate a strong positive relationship between AI usage and recruitment efficiency ($r = 0.68$), as well as between AI usage and hiring quality ($r = 0.72$). Additionally, recruitment efficiency and hiring quality are also positively correlated ($r = 0.65$). Since all correlations are significant at the 0.01 level, it can be concluded that increased AI adoption leads to improved recruitment outcomes.

Therefore, this analysis confirms that AI usage has a statistically significant and positive impact on both recruitment efficiency and hiring quality in HR consultancy firms.

Results and Discussion

The study shows that Artificial Intelligence plays a role in improving how recruitment works in HR consultancy firms. Artificial Intelligence systems, those that match talent can look at lots of candidate information quickly and accurately. These systems help HR consultants find the candidates based on their skills, experience and job requirements.

This helps reduce the time spent on manually going through resumes. This result is that recruitment gets more efficient. Artificial Intelligence technologies make it faster to candidates and match them with jobs. This helps HR consultants give client organizations candidates more efficiently. Predictive analytics also helps recruiters see if a candidate is suitable and how well they will do in the job. The study also found that Artificial Intelligence recruitment systems make clients happier.

When recruitment is faster more accurate and based on data client organizations get candidates that fit their needs. This leads to hiring and a stronger relationship between HR consultancy firms and their clients. Artificial Intelligence helps make recruitment better. This benefits both HR consultancy firms and their clients.

Findings

The major findings of the study are summarized as follows:

- Human Resources consultancy firms should use Artificial Intelligence-based recruitment tools to make their hiring processes more efficient and accurate.
- Artificial Intelligence technologies should be used to help with decision-making not to replace recruiters so that human judgment is still part of the recruitment process.

- Firms should train their Human Resources professionals to use Artificial Intelligence-based recruitment technologies and to understand the insights that Artificial Intelligence generates.
- Organizations must make sure that they are using Artificial Intelligence in an transparent way including protecting people data and monitoring algorithms for bias in recruitment decisions.
- Human Resources consultancy firms should always be evaluating how well their Artificial Intelligence systems are working to make sure they meet the needs of both candidates and clients.

Recommendations

- HR consultancy firms are recommended to integrate AI technologies with existing recruitment platforms such as Applicant Tracking Systems (ATS) to improve hiring efficiency.
- Organizations should develop clear policies and ethical guidelines for the responsible use of AI in recruitment processes.
- HR consultancies should invest in advanced AI analytics tools that support predictive hiring and workforce planning.
- Collaboration between technology developers and HR professionals is recommended to design AI systems that meet real recruitment needs.
- Companies should conduct regular audits of AI recruitment systems to ensure fairness, transparency and compliance with employment regulations.
- Future HR consultancy strategies should focus on using AI to enhance both recruitment efficiency and long-term client relationships

II. CONCLUSION

According to the study's findings, the impact of employing Artificial Intelligence (AI) represents a dramatic shift in how Recruitment & Selection processes are conducted within Human Resources consultancy firms. By performing procedures like resume screening, shortlisting candidates for interviews and matching candidate skills with available job opportunities automatically, the use of AI makes recruitment faster and more efficient; therefore, allowing HR consultants to quickly and accurately assess large datasets of candidate submissions, thus resulting in better decisions and higher quality of poor candidates hired. The way in which AI-powered systems affect both the level of client satisfaction and the degree of fit between an applicant's skill set and a prospective employer's job specifications is profound.

In addition to improving the level of client care relative to hiring clients, the use of AI provides HR professionals with an opportunity to move from routine tasks (such as reviewing and processing resumes) towards more strategic functions (such as engaging with candidates, creating relationships with hiring clients and planning for workforce needs). AI provides valuable input into the decision-making process, decision-makers will always need to include themselves in order to ensure fairness, accountability and sound judgment in recruitment decisions.

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