

EFFECTIVENESS OF AI-DRIVEN RECRUITMENT PRACTICES AMONG SELECT COMPANIES OF KARNATAKA.

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ABSTRACT:

The use of Artificial Intelligence in recruitment practices has significantly changed the hiring practices by improving efficiency, processes automation, access to a broader talent pool, and enabling data-driven decision-making. The application of AI in recruitment practice is not only advancement of technology but also the paradigm shifts in the manner that companies assess, select and recruit candidates. The current study focuses on the effectiveness, perception and certain issues regarding AI in recruitment practices of the sample companies of Karnataka. The study adopts descriptive research, wherein the data was collected through questionnaires distributed to the HR professionals in various industries of Karnataka. The study adopts a sample of 100 HR professionals from the sample companies to derive a fair insight. The study expected to make a contribution to the existing body of knowledge by providing empirical support on the manner in which AI results in better hiring decisions and improve the minimizes human intervention, efficiency and better talent acquisition.

Key Words: Artificial Intelligence, Human Bias, Industry, Talent Recruitment.

INTRODUCTION

Artificial Intelligence (AI) has become a revolutionary concept in HR, when deployed during the talent recruitment and selection of employees. AI-driven human resource management encompasses the incorporation of AI within the human resource function. AI-driven human resource is most commonly associated with the incorporation of AI system in the Recruitment and selection of employees. Modern organization are increasingly turning to AI system to deploy the most efficient recruitment strategies within a highly competitive environment. Past literature shows that the incorporation of AI system during the Human resource function is likely to increase the efficiency of the operation of the business enterprise. AI-driven systems are capable of processing enormous amounts of applicant information within a limited time compared to traditional human resource recruitment strategies (Upadhyay & Khandelwal, 2018; Black & van Esch, 2021). The incorporation of AI systems within the human resource function is a key practice of strategic human resource management.

The already existing literature further emphasizes both the opportunities and challenges related to AI-based recruitment practices. For example, it was asserted within the existing literature that research findings showed the following: AI can improve the candidate experience, such as through chatbots, personalization and transparent recruitment (Vrontis et al., 2022). However, the existing literature asserts that ethical dilemmas, such as AI-based biases, lack of transparency, data privacies, and over-reliance on decision technologies, are present in AI-based recruitment practices (Raghavan et al., 2020; Bogen & Rieke, 2018).

LITERATURE REVIEW

Artificial Intelligence (AI) has now started to emerge as an important strategic option in the overall domain of Human Resource Management. However, it has been emphasized by researchers that AI-based systems, such as machine-learning, NLP systems, and other AI-based technologies, have significantly started to influence the overall recruitment space of organizations across different industries, such as information technology, banking, healthcare, automotive, etc. (Black & van Esch, 2021; Upadhyay & Khandelwal, 2018). AI-based systems are accepted by organizations, and this acceptance has been motivated by the issues related to efficiency, time, and the overall challenge of dealing with voluminous candidate databases (Jahan & Nair, 2020; Gupta & Kohli, 2022). AI integration in hiring practices is not just a passing fad; rather, it reflects a larger movement in human resources toward automation and data-driven decision-making. This study of the literature aims to investigate the complex effects of AI on talent acquisition, emphasizing its importance in boosting productivity, improving the candidate experience, and resolving bias in recruiting procedures. Research has repeatedly show repeatedly show that AI application in hiring may expedite procedures and save a substantial amount of time.

Dr. VN Brims Srujan's 24 ISSN 2456-4079 and the recruiting expenses. AI tools are changing recruitment processes in a number of ways, including chatbots for initial contacts with candidates, automated resume screening, and predictive analytics. For example, research indicates that businesses using AI-driven systems see a significant reduction in the time it takes to fill roles,

which improves operational performance and lowers expenses (Choudhury & Dey, 2022).

With the help of AI technologies, recruiters may use sophisticated sourcing strategies to reach a larger talent pool, which is essential in the current competitive environment. Despite these benefits, the literature shows a complex picture of hiring equality and candidate experience. Theoretically, AI's ability to eradicate human prejudices should result in more fair hiring procedures. Scholars are still concerned, though, because they point out possible dangers such algorithmic discrimination and data bias (O'Neil, 2016). AI systems that penalize particular demographic groups may arise from the unintentional perpetuation of pre-existing prejudices with past hiring data. As a result, even though AI offers chances to improve hiring equity, its application requires close examination and a dedication to moral behaviour. Furthermore, the impact of candidates' perceptions of AI in the hiring

process has been highlighted in the literature that is currently available.

METHODOLOGY

The study is of descriptive in nature employed mixed method approach to understand the multifaceted integration of AI and recruitment practices. This approach facilitates triangulation of data to enhance the robustness of the results. The present study examines the effectiveness, perception, concerns and the impact of artificial intelligence in recruitment practices among the sample companies of Karnataka. The sample size of the study taken as 100 which companies of human resource professionals across manufacturing and service industries. The research is based largely on primary research, where the responses were collected through a structured questionnaire from the Human Resource Professionals from both manufacturing and service sector.

DISCUSSIONS:

Table 1: Social Demographic Characterization

Variable	Variable Description	Relative Frequency
Gender	Male	84.3
	Female	15.3
Age	Below 25 Years	15.7
	25-35 Years	70.6
	35-40 Years	12.1
	Above 40 Years	1.0
Education	Undergraduate	28.4
	Post Graduate	38.2
	Professional	20.6
	Diploma	12.7

Current Role	Recruitment Specialist	25.5
	HR Generalist	48.0
	Hiring Manager	26.5
Experience	Less than 5 Years	48.0
	5-10 Years	35.3
	Above 10 Years	16.7
Industry	Manufacturing	32.4
	Services	67.6

Table 2: Perception of AI in Recruitment Practices

	Mean	Std. Deviation
It improves the quality of recruitment decisions	3.37	1.258
Objectivity of AI-based recruitment compared to traditional recruitment	3.07	1.171
AI tools promote fairness and transparency in hiring	3.40	1.119
I Trust AI Systems Used In Recruitment Decisions	3.37	1.107
AI-assisted recruitment matches up with desired organizational requirements	3.47	1.175

The table no 2 shows the perception of Artificial Intelligence in Recruitment Practices among the respondent of sample companies. It shows the majority of the responses are closed to the mean value

of 3.5 indicating the positive perception which improves the recruitment practices in terms of quality, fairness and organizational requirements.

Table 3: Effectiveness of AI in Recruitment Practices

	Mean	Std. Deviation

AI reduces the time-to-hire	3.34	1.239
AI helps improve the precision of shortlisting the applicants	3.35	1.114
AI Increases Efficiency in the Handling of Large Applicants	3.39	1.136
AI tools enhance the candidate experience in recruitment	3.42	1.121
AI assists in matching candidates' skills and requirements with job needs	3.45	1.077

The table no 3 shows the effectiveness of Artificial Intelligence in Recruitment Practices among the respondent of sample companies. The responses show the mean value of higher than 3 to 3.5 indicating greater effectiveness of the recruitment

practices can be achieved through the implementation of Artificial Intelligence. It improves the time and accuracy of handling the large pool of data.

Table 4: Issues of AI in Recruitment Practices

	Mean	Std. Deviation
AI recruitment tools can also harbor potential biases	3.21	1.053
Dependence on AI will Impose Less Human Judgment in recruitment	2.80	1.046
AI systems ignore contextual skills	3.58	1.066
Ethical and legal risks affect the deployment of AI effectively in the industry	2.30	1.051
Important issues are data privacy and security with AI recruitment	3.81	1.042

The table no 4 shows the concern of employing the Artificial Intelligence in Recruitment Practices among the respondent of sample companies. The responses show the mean value of 3.81 and 3.58 for data privacy and lack of contextual skills indicating issue of implementing AI in recruitment practices. It can be inferred that the better management of AI with proper security and safety with flexibility of human interface can help in overcoming the challenges mentioned above.

Impact of artificial-intelligence on recruitment practices

The aim of this analysis is to test the impact of Artificial Intelligence on the different parameters of Recruitment Practices among the sample companies. The constructs used for the analysis are diversity, process efficiency, quality, equality and candidate experience. The hypotheses are formed for same as follows.

1. **Hypotheses 1:** Artificial Intelligence has impact on Diversity in Recruitment.
2. **Hypotheses 2:** Artificial Intelligence has impact on Recruitment Process Efficiency.
3. **Hypotheses 3:** Artificial Intelligence has impact on Quality of Hiring Decisions.

4. **Hypotheses 4:** Artificial Intelligence has impact on Equality in Recruitment.

5. **Hypotheses 5:** Artificial Intelligence has impact on Candidate Experience.

Table 5: Diagnostic Statistics

Constructs	Durbin-Watson	Multicollinearity	
		Tolerance	VIF
Diversity in Recruitment	1.53	1.00	1.00
Recruitment Process Efficiency	1.82	1.00	1.00
Quality of Hiring Decisions	2.03	1.00	1.00
Equality in Recruitment	2.14	1.00	1.00
Candidate Experience	1.62	1.00	1.00

Table 6: AI and Recruitment Practices

Recruitment Practices	Beta Coefficient
Diversity in Recruitment	.617***
Recruitment Process Efficiency	.501***
Quality of Hiring Decisions	.468***
Equality in Recruitment	.382***
Candidate Experience	.371***

*** indicates significance at 5%.

The table no five and six shows the diagnostic statistics and the results of regression analysis in analysing the impact of AI implementation in the recruitment practices of sample companies. The diagnostic table highlighting the appropriateness of the data for the use of regressing analysis. The Durbin-Watson test parameters are greater than the acceptable range of 1.5- which are 2.5 and the tolerance-level and VIF values are found in the range of 1 which indicates no multicollinearity among the constructs. The table no 6 shows the

CONCLUSION:

The findings show that the majority of the respondents from the sample companies have a positive view regarding the application of AI in recruitment practices. This serves as an evidence

significant impact of AI on the recruitment practices namely diversity in recruitment, recruitment process efficiency, quality in hiring decisions, equality in recruitment and candidate experience. The regression beta coefficient of constructs of recruitment practices found to be significant at 5% level shows the acceptance of alternate hypotheses on recruitment practices indicating the effective use of artificial intelligence in the recruitment practices among the sample companies will leads the better recruitment decisions.

that the application of AI has significantly improved the effectiveness of recruitment practice. The findings also reveals that there are a few concerns such as the security and safety issues related to the application of AI that require proper attentions. And also findings of the hypotheses testing reveals that

the application of AI in recruitment practices not only saves cost and time, but also minimizes human bias and improves the effectiveness of recruitment decisions. Therefore, based on the findings of the sample companies can also apply AI-based recruitment practise to benefits from them and further improve the performance of human resource as a whole.

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