



A STUDY ON THE IMPACT OF AI-DRIVEN RECRUITMENT AND SELECTION PROCESSES ON EMPLOYEE HIRING PERFORMANCE

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Abstract: The success of a company depends a lot on how it finds and picks the employees. These days, many companies are using Artificial Intelligence in the way they hire people. This has changed the way companies find employees, making it more efficient, fair and based on facts. The main goal of this study is to see how Artificial Intelligence affects the work of employees when they are hired. We looked at how Artificial Intelligence tools help make decisions, look at candidates and improve the quality of the people they hire.

We asked 100 employees some questions. Got the answers. What we found out is that Artificial Intelligence systems, like looking at resumes, predicting how good a candidate will be and using chatbots, make the hiring process faster, more accurate and better for the people who are applying.

However, companies need to know about the problems that can come up like the way the algorithms work the costs and the issues with keeping data private. To avoid these problems, this study says that companies should be open about how the Artificial Intelligence algorithms work, use a combination of judgment and machine intelligence, and be fair. This way the process of hiring people can be fair and not biased towards any group of people. Artificial Intelligence is changing the way companies hire people. Companies must use Artificial Intelligence tools to make the hiring process better.

Keywords: AI-driven Recruitment, Artificial Intelligence, Hiring Efficiency, Quality of Hires

INTRODUCTION

In today's job market companies struggle to find and keep workers. They are now using computer systems that help with hiring. These systems use data to match people with jobs and make decisions. They also help companies choose candidates and save time. HR staff can now make choices and focus on important tasks. The use of computers, in hiring helps businesses work better and be fairer. This study looks at how computer-based hiring systems affect businesses. It shows how they help companies work efficiently and treat people equally. The goal is to see how these systems help businesses work better. Companies want to use their workers in the way possible. Computers help them make choices and use their workers well. This helps businesses succeed in today's market. In the rapidly evolving job market of today, companies find it difficult to draw in and retain qualified workers. AI-driven systems that increase productivity, equity, and decision-making accuracy are replacing conventional hiring practices. Artificial intelligence (AI) tools use predictive algorithms to match candidates with positions, analyze candidate data, and automate screening. This reduces hiring time and improves the caliber of selection for businesses. HR professionals can make data-driven decisions, lessen bias, and concentrate on strategic human resource management by incorporating AI into recruitment. This study examines the impact of AI-driven recruitment and selection procedures on hiring performance, highlighting their contribution to enhancing productivity, equity, and the overall effectiveness of human resources in contemporary businesses.

**OBJECTIVES OF THE STUDY:****Primary Objective:**

- To study the impact of AI-driven recruitment and selection processes on employee hiring performance.

Secondary Objectives:

- To examine how AI tools improve the efficiency, fairness, and accuracy of recruitment decisions.
- To explore the role of AI in reducing bias and improving the quality of selected candidates.

REVIEW OF LITERATURE

- Kumar and Sharma (2020) found that AI-driven recruitment systems let organizations automate resume screening and candidate shortlisting. This improves decision accuracy and cuts down on manual work. Their study showed that machine learning algorithms reduce human bias and improve the overall quality of the chosen candidates.
- Patel (2022) looked at how AI can make recruitment more efficient. The research found that AI-powered tools can quickly process and analyze large amounts of candidate data. This helps HR teams lower hiring costs and greatly shorten the time it takes to hire someone.
- Williams and Thomas (2023) studied the use of predictive analytics in AI-driven recruitment. Their research showed that AI can predict candidate job performance and cultural fit. This leads to better employee retention and greater long-term productivity.

SCOPE OF THE STUDY

- This research analyses the effects of AI-powered recruitment and selection processes on hiring performance, efficiency, and decision-making accuracy about employees being hired.
- This research aims to show how using AI tools helps an organization and/or HR professionals better assess candidates by reducing biases and ultimately producing better-quality results through the candidate recruitment process.

LIMITATIONS OF THE STUDY

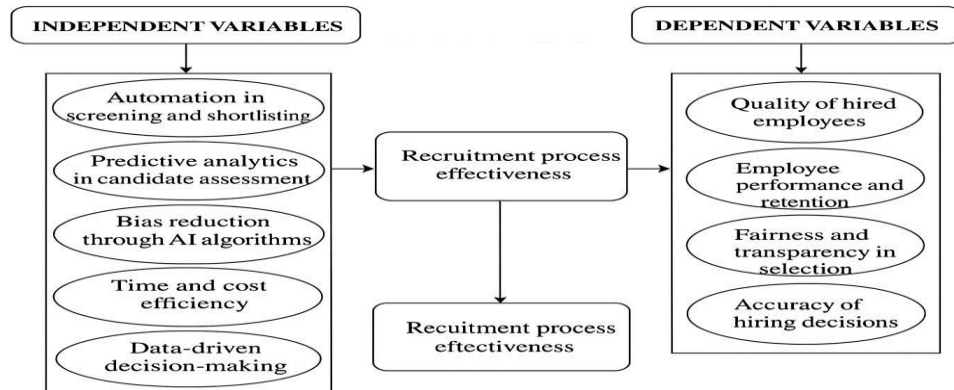
- This study examines recruitment and selection using artificial intelligence (AI) only. It does not look at the other areas of human resource management, such as training, conducting performance reviews, and retaining employees.
- Results may also vary based on an organization's recruitment process, technological application, and current company culture, which varies from one organization to another.

RESEARCH METHODOLOGY

The way we do research is called research methodology. It involves gathering, examining and evaluating data for a study. This study uses a method to see how AI-driven recruitment and selection procedures affect employee hiring performance. We are looking at both secondary sources for this. To get data, we might ask HR professionals to fill out surveys or questionnaires. They will share their thoughts and experiences with us. For data we look at journals, online resources and research papers. These have information from studies and experts. The goal of this study is to find out how organizations can use intelligence to make better, fairer and more efficient hiring decisions. We want to improve the way companies hire employees. AI-driven recruitment and selection procedures are tools for this. They can help organizations make choices. Research methodology helps us do this in a way. We examine data. Conclude. This study is about using AI to improve hiring. AI-driven recruitment and selection procedures are key to this. They can make a difference in how companies hire.

RESEARCH DESIGN

Using a descriptive research design, this study examines the impact that AI-driven recruitment and selection processes have on employee hiring performance as it pertains to HR professionals' opinions about whether AI tools lead to more efficient, fair, and accurate hiring decisions.



Primary Data:

Primary data were collected using a structured questionnaire that included closed-ended questions. The responses were taken from 110 employees working in different roles and departments.

Secondary Data:

- Research journals
- Textbooks
- Online research reports related to AI in Human Resource Management

Sample Size:

110 HR specialists and workers took part in this study. They work in departments and organizations that focus on hiring and recruitment. The participants filled out a survey to share their thoughts on using AI tools in recruitment. They also shared their views on how accurate the selection process how well the hiring process works. The study included workers from departments and organizations that concentrate on hiring and recruitment.

Statistical Tools Used:

- Correlation, to measure the relationship between AI-driven recruitment practices and employee hiring performance.
- Regression, to analyze how AI tools affect the efficiency, fairness, and accuracy of the recruitment and selection process.

CORRELATION

Hypothesis:

Null Hypothesis (H₀):

There is no significant relationship between AI-driven recruitment and selection processes and employee hiring performance

Alternative Hypothesis (H₁):

There is a significant relationship between AI-driven recruitment and selection processes and employee hiring Performance.

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.792	0.165		4.800	.000
How effectively do AI dashboards improve communication in your workplace?	0.012	0.031	0.042	-.376	.708
How often do you use AI dashboards to track performance or updates	0.008	0.029	0.031	.286	.776
a. Dependent Variable: Do you feel that AI dashboards help management address employee concerns effectively?					

TABLE 4.14:

Correlation test			
		occupation	Employee Hiring Performance
Ai-driven Recruitment and Selection	Pearson Correlation	1	-.019
	Sig. (2-tailed)		.841
	N	110	110
Employee Hiring Performance	Pearson Correlation	-.019	.216
	Sig. (2-tailed)	.841	.022
	N	110	110

INFERENCE:

Analysis of the correlation demonstrates that there is a strong association between the use of AI technology for recruiting and selecting candidates and hiring success (e.g., $r = 0.216$, $p = 0.022$). The use of AI for recruiting purposes leads to better quality, fairer, and more effective decisions for hiring new employees. As the correlation was found to be statistically significant, there is evidence that incorporating AI into the recruitment process has a significant effect on improving the overall recruitment effectiveness and performance of any organization.

REGRESSION:

- **Null Hypothesis (H₀):** There is no significant impact of AI-driven recruitment and selection processes on employee hiring performance.
- **Alternative Hypothesis (H₁):** There is a significant impact of AI-driven recruitment and selection processes on employee hiring performance.

ANOVA:

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	8.214	7	8.214	30.785	.000
Residual	27.186	108	0.252		
Total	35.400	109			

- Dependent Variable:** Do you feel that your feedback is taken seriously by management?
- Predictor:** Have you been informed about the action plans that followed from employee feedback through AI dashboards

INFERENCE:

A regression analysis reveals that employees who utilize AI dashboards to receive information on action plans experience a statistically significant increase in their belief that their feedback is valued by management ($B = 0.061$; $p = 0.032$). As employees continue to receive timely updates via AI dashboards pertaining to the actions taken as a result of their input, they develop greater trust and confidence toward the organization’s leadership.

SUMMARY OF FINDINGS

The study says that using intelligence to hire people and pick the best candidates is really important, for making the hiring process better. Most of the people who were asked about this think that the human resources department can make decisions based on facts by using artificial intelligence tools to look at resumes, choose the best candidates and guess how well they will do. The study also found that artificial intelligence helps get people for the job by matching what they can do with what the job needs, which means it is fair saves time and makes the hiring process better. Artificial intelligence really helps with hiring by lowering bias, saving time and making the hiring process better.

SUGGESTIONS AND RECOMMENDATIONS

Organizations should use AI-based recruitment dashboards to find the people for the job by looking at the information they have about each candidate. The people in charge of hiring, like HR professionals, should learn how to understand



what the AI system is telling them so they can use these tools properly. To make sure everything is fair and out in the open, it is very important to use AI and human judgment when hiring someone. AI can also help by giving feedback on how the hiring process is going and making it better, over time. Employers can use AI to figure out how well someone will do their job and if they will stay with the company for a time. AI-based recruitment dashboards can really help make the hiring process better. Using AI-based recruitment dashboards and AI-powered feedback systems can make the hiring process more effective. Organizations should use AI-based recruitment dashboards to find candidates.

CONCLUSION

The study says that using AI to help with hiring is a good thing. It makes the process of choosing the person for the job faster and fairer. AI helps businesses make decisions quickly and correctly. When companies use AI tools the way it does not just speed up the hiring process, it also makes employees happier and more loyal. So using AI in resources is a good idea because it helps get the best people for the job and that is good for the company, in the long run. Using AI in hiring is something that can really help a business be successful.

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