



# Impact Of Artificial Intelligence On Hybrid Recruitment

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## I.ABSTRACT

Artificial Intelligence(AI) is changing the business dynamics immensely today. Organizations today are moving towards digitalization. AI is one recent trend that has created a lot of relevance today. AI tools have helped businesses simplify their business process to a large extent as AI helps work to be done faster. AI is being used significantly in all the domains of businesses today. In the HR domain, hybrid recruitment is emerging as a new trend. AI tools are easily available and are easy to use. This makes organizations use AI for HR related activities increasingly today. The usage of AI is gaining importance today. This study primarily focuses on the usage of AI tools in the Hybrid Recruitment process.

**Keywords:** *Artificial Intelligence, Hybrid recruitment, HR effectiveness*

## II.INTRODUCTION

AI technology develops machines that can function like humans. AI develops systems that can replicate the functions of human intelligence. AI can perform various functions using computers such as recognition of images, speech, problem solving. In the emerging environment, AI is widely is Human Resource.HR managers use AI in recruitment to select the best available talent for their company. Baby Boomers, Gen X and Y used to search for jobs using advertisements provided in the newspapers and apply for jobs. The Millennial and Gen Z population today search for jobs through various job portals. LinkedIn is a popularly used online portal by HR managers to hunt talented individuals. AI aids smooth recruitment process [\(Ibrahim, 2019\)](#). To handle the toughest business situation. The organisation is supporting the strategies for human-robot, cooperation robots are robots that are planned to communicate with humans in a workplace and work simultaneously to insist humans in accomplishing professional aims. Even though, organisations are safely considering this transformation, implementation of cobots is often fulfilled without safety consideration of employee's motivation and practices. Who will be working in hybrid workspace. There is a positive as well as negative impact on hybrid work environment. [\(Verma, S., & Singh, V., 2022\)](#) Firms are supporting highly in programs meant to upgrade services employees and practice of employees during service experience this practices/behaviour are nothing but ither than planned communication and behavioural schemes. Service standardisation is dangerous specifically when it becomes drastic. Employees are required to act like a robot. For, example description of scripts. The standardisation of services regularly decreases on the job obstacles, which disrupt innovation and encourages adaption. The

influence of work life on non-work life is extensive and together reinforcing and career satisfactions lead to life satisfaction and hence, career, work and life satisfaction are linked to each other. Career and work are the main preference it is probably to be incorporated with other way of life [\(Abubakar, A. M., 2020\)](#). Employee attrition is also one of the important concepts which links to hybrid. The hybrid work impacts on employee attrition highly. It is a loss of employees for the cause rather than termination. Attrition is an unpreventable element of continuing a firm. An employees will ultimately wish to quite a company for the reasons of both personal and professional. This intimate that an organisation has no direct connection over how many workers quite due to attrition because of many causes the employee attrition is increasing. These causes include the changing prospects of employees, work-life balance and workplace environment. Regular employee attrition spoils the firm's image or good will. The reputation of the company is also more important. [\(Racherla, S., 2020\)](#) Artificial intelligence plays a major role in hiring process. When a human makes a decision with the support of an AI guidance, they can further bring in their own point of view in selecting how to make the use of the model or may select to clear the work individually. Thus, the human decisions are affected by the hybrid work model based on the performance, need an assessment of a various nature that looks at how humans select tis satisfy to particular model. [\(Peng, 2022\)](#) Based on artificial intelligence the firm's decision making will change. To make decisions where, when, how to make and decide all these depends on group of individuals. Hybrid decision making framework mainly worried about company's design, where humans and AI based algorithms subsequently make decisions. Like that results of one decision maker gives the input of another one. It strengthens the both human and AI in making decisions. Because AI technologies advanced quickly. Firms must remain observant to the strengths and weakness of AI in completely entrusted and hybrid human-AI decision making framework. [\(Shrestha, Y. R., Ben-Menahem, S. M., & Von Krogh, G., 2019\)](#) Hybrid recruitment combines modern digital recruiting technique with conventional recruiting techniques. AI in the hiring process focuses on how to make the process easier, faster and less biased by humans. In hybrid recruiting, recruiters can make use of digital resources as well as conventional hiring practices to simplify the recruiting process. Hybrid recruitment attracts wide range of applicants and also saves recruitment expenses. The aim of Hybrid recruitment is to combine the benefits of both traditional and digital recruitment methods. AI plays a major role in hybrid recruiting. AI can save time by identifying the most suitable candidate for a position.

### III.LITERATURE REVIEW

AI is very essential for any business to survive. AI is considered to be very powerful than any other technology. There is an emerging new technology in the market every day. Due to the changing environment and emergence of new technology there is a need for businesses to use AI in HRM. These AI technologies are designed to support personal and professional life [\(Cavaliere, 2021\)](#).

#### *Role of AI in Recruitment process*

AI helps in filtering large amounts of application data very quickly and effectively. AI plays a crucial in processing and screening a large volume of applications. AI will ensure that the right applicant will be chosen. AI can process the data quickly when certain traits are clearly specified. Hence, it can save a lot of time for the HR department. [\(Ibrahim, 2019\)](#) The human resource industry is rapidly changing due to the emergence of Artificial intelligence. Various recruitment tools, apps and solutions provided by AI helps the managers to hire suitable candidates for specific job positions. AI helps in acquiring talented human resources. AI also helps in forecasting a candidate's future performance. AI enabled chatbots help recruiters in the sourcing and screening procedures. Mya is one such chat bot which interacts with candidates to ensure that they fit the job criteria. Mya also responds to inquiries of candidates and keep them updated on the status of their applications [\(Ahmed, 2018\)](#). Recruiters can easily obtain relevant information about the personalities and job fit of candidates using AI. AI has the capacity of handling tasks effectively. AI helps in removal of monotonous and repetitive tasks. AI was primarily developed to remove any sort of bias in the hiring process. With the implementation of AI systems bias on the basis of gender, caste, colour can be eliminated to a certain extend. [\(Fraij, 2021\)](#) Human resources information systems have been very significant over the past 20 years. The focus on AI is increasing on a global scale. E-recruiting uses web-based technologies to help recruiters attract diverse pool of talents. AI helps employers connect with applicants across the nation. [\(Veluchamy, 2021\)](#) E-recruitment has developed immensely over the past decade. As a result of this new recruiting strategies have emerged. Some of the examples of virtual recruiting environment include social networks, specialist job sites. Responsibility of an online recruiter is to inspire the company's employees to take part in the hiring process by asking them to sharing and promote the job openings on social media. [\(Boşcai, 2017\)](#) E-recruitment has proven to be a vital part of the recruiting strategy. E-

recruitment recommendation systems connect the dots between recruiters and job seekers. The suggestions are based on the candidate's suitability for the given job role. E-recruitment plays an important role in creating competitive edge for the company in the market\_(Mashayekhi, 2022) E-Recruitment has enabled cost and efficiency improvements. It is linked with various other activities of HR\_(Hada, 2015) Employment websites have transformed the recruitment procedure for both employers and job seekers. Online websites for hiring have increased the hiring efficiency. The recruitment environment for both employers and job seekers has been revolutionized by online job portals. There are hundreds of online platforms for recruitment. Online recruiting usage have increased and the way applicants search for jobs has changed. Companies hiring has been transformed in a very short period of time\_(Rosoiu, 2016) Online recruiting is beneficial to companies since it is less expensive and takes less time. E-recruitment is faster, covers a larger geographic region, and provides a better match. E-recruitment involves cultural and behavioural shifts. Hence, e-recruiting has proven to be an essential component of the recruiting strategy\_(Okolie, 2017) One of the greatest advantages of online recruiting is it crosses the geographical boundaries and connects with various demographics. Online recruiting reaches a greater audience compared to the conventional methods of recruitment. Online recruiting gives candidates an access to obtain additional information and facilitates opportunities for career growth. \_(Sylva, 2009) The development of the Online Recruitment has made conventional methods of recruitment almost obsolete. Every firm is in a race to compete with other firms and employ the best talent. Every firm's objective is to increase their incomes and lower their risks.\_(Chenni, O., Bouda, Y., Benachour, H, 2015) Traditional recruiting approaches are becoming insufficient due to the rapid expansion of job markets. The companies receive a large number of applications but it is very difficult to sort them manually. Several automatic recruiting solutions have been developed to overcome this issue. Although these systems are successful in processing applicant resumes, they still have low accuracy due to various limitations\_(Kmail, 2015) Online recruiting fraud (ORF) is one of the major concerns in recent years. ORF is a type of employment scam in which individual with fraudulent intentions puts a fake job posting on a job portal. Job searchers who are innocent or desperate do not consider the authenticity of the posting and they end up disclosing their personal information and private data. This confidential data is used by the fraudsters in a variety of ways. There is threat of misusing the personal data provided by the job seekers\_(Mahbub, S., & Pardede, E., 2018) Application of AI and Machine learning in HRM has increased over the past years. AI is used to screen candidates, predict turnover and employee attrition. Though AI reduces the bias, it is mainly dependent on human-fed data. Some studies exhibit biases in facial recognition and rating.\_(Mujtaba, 2019) During the coronavirus pandemic, public administration faced the same challenges as the commercial sector. The pandemic forced many companies to completely change their operations. The changes pertaining to the recruitment and onboarding procedures were necessary\_(Czopek, 2020) Due to the COVID-19 outbreak, several businesses shifted to conduct virtual interviews. This saved cost and time for both applicants and interviewers. With less stress, candidates were less stressed and could attend the online interview with more readiness. Interview expenses were reduced since candidates were not hosted. The convenience for interviewers increased because they could participate in interviews from their residences. Even during a challenging situation, both the candidates and interviewers made the most of the situation. Online mode of engagement was found more feasible. (Stoehr, 2022) Many online recruiting platforms have adopted the hybrid recommendation methods to provide end to end solutions. All the models can vary depending upon various factors such as algorithms, data mining and filtering techniques used\_(Mishra, 2016) During COVID-19 a hybrid approach was followed to perform recruitment and selection process. Hybrid approach includes online and offline components. The entire hiring process was online based and only medical examination was conducted in person during COVID-19 pandemic. Registrations and interviews were conducted online and health protocol which was given by the government was followed during the pandemic.\_(Cahyo, 2022) Before the COVID-19 pandemic the hybrid working style was not very common. Now hybrid work model has become a normal part of life. After the pandemic the majority of the companies globally switched to a home-office model. Hybrid work economy will be with us indefinitely and it has become a new normal\_(Kuzior, 2022)

#### IV.RESEARCH GAP

Although there are various advantages of implementing AI in hybrid recruitment process, there are still plenty of research gaps that are found.

- i. There is no sufficient empirical evidence to support that AI is 100% efficient in hiring procedures.
- ii. Though AI claims to reduce biasness and increase transparency, there are still various issues regarding biasness while using AI chat bots. Hence, the ethical factors have to be taken into consideration.

- iii. There are various cultural differences in various countries. AI has limited consideration towards these cultural differences.
- iv. Future studies can include differences and effectiveness of hybrid over virtual recruitment.
- v. Since hybrid recruitment is a recent topic, a deeper analysis on this topic is essential.
- vi.

## V.OBJECTIVES OF THE STUDY

The following are the objectives:

- i. To study the impact of AI on Hybrid recruitment.
- ii. To study the benefits of AI enabled recruitment tools.
- iii. To optimize the recruitment process using AI and also maintain a human-centric approach.

## VI.RESEARCH DESIGN

### *Hypothesis*

The following are the hypothesis:

H<sub>0</sub>: There is no significant relationship between dependent variable (HR effectiveness) and independent variables (employee skills, AI technology cost and time management).

H<sub>1</sub>: There is a significant relationship between dependent variable (HR effectiveness) and independent variables (employee skills, AI technology cost and time management).

## VII.RESEARCH METHODOLOGY

In this study, quantitative research was the primary research approach employed. The survey questionnaire was created by referencing existing literature, news articles, and reports. To ensure the questions' reliability, Cronbach's Alpha was applied, with all values surpassing 0.7, affirming their credibility. The questionnaire, after finalization, was distributed to professionals from different corporate companies, resulting in the collection of



210 responses through both offline and online (Google Form) channels. For data analysis and exploring the interconnections between variables, we have used Multiple Linear Regression technique.

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	78.708	8	9.839	28.853	.023 <sup>b</sup>
	Residual	68.923	202	.341		
	Total	147.631	210			

a. Dependent Variable: Above factors of the Artificial Intelligence helps in fast and smooth Recruitment

b. Predictors: (Constant), Artificial intelligence helps to identify candidates' skills , competency and trait that match the job applied for. , AI-based software and hybrid recruitment are the future for hiring practices, In your opinion , the implementation of hybrid recruitment and artificial intelligence in recruitment tend to eliminate bias in screening CVs, Artificial Intelligence and hybrid recruitment is easing human resource operations, In your opinion , the implementation of artificial intelligence tends to map talents , In your opinion , the implementation of artificial intelligence and hybrid recruitment help management save costs, In your opinion , the implementation of artificial intelligence and hybrid recruitment reduce time wasted, To what extend do you agree that AI-based software and hybrid recruitment are helping to find the best talent for the job

Based on the ANOVA table provided, it can be concluded that the model is statistically significant at a 95% confidence level, as the significance value is 0.26, which is below the critical threshold of 0.05. Consequently, the Null Hypothesis is rejected, and the Alternative Hypothesis is accepted, indicating a meaningful and significant relationship between the dependent and independent variables.

### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.730 <sup>a</sup>	.533	.514	.390	2.015

The R Square value of 0.529 suggests that the model provides a good fit, with a considerable portion of the variance explained. Moreover, the Durbin-Watson value of 2.296 indicates a low level of autocorrelation among the variables.

Regression equation = 2.849 + ( 0.083 \* Finds best talent ) + ( 0.088 \* reduces time ) + ( 0.062 \* saves cost ) + ( 0.076 \* identify the right candidate ) + ( 0.017 \* Eases HR operations ) + ( 0.134 \* Eliminate Bias )

## VIII.SUMMARY OF FINDINGS

The research provides valuable insights into how dependent and independent variables are related in the field of human resource management practices, with a special focus on talent acquisition and recruitment.

With a significance value of 0.26, below the critical threshold of 0.05, statistical significance is confirmed at 95% confidence level, as per the ANOVA table. The dependent and independent variables under study have a meaningful and significant relationship.

The regression model appears to fit the data well, as indicated by the R Square value of 0.529. The independent variables "Finds best talent," "Reduces time," "Saves cost," "Identify the right candidate," "Eases HR operations," and "Eliminate Bias" explain about 52.9% of the variance in the dependent variable.

There is low autocorrelation among the variables, as indicated by the Durbin-Watson value of 2.296. When the data points are relatively independent, it confirms a desirable result in regression analysis, which enhances the model's reliability.

Respondents said that there should be the focus on recruiting top-notch talent by implementing strong hiring strategies and talent acquisition programs. Optimization recruitment to decrease hiring time and uphold productivity and also the optimization resources by adopting cost-effective recruitment practices that deliver quality results. Rigorous assessment methods and competency-based interviews to identify the right candidates for specific roles should be followed. Enhancement of efficiency by using technology and data-driven decision-making to streamline HR operations. Creation of an inclusive and diverse workplace by actively removing bias from recruitment. Seeking of feedback and monitor key performance indicators to ensure that recruitment practices are continuously improving. Usage data analysis to inform HR decisions and implement recruitment strategies. Establishment of a positive reputation in the job market by cultivating a strong employer brand to attract top talent. Encouragement of HR and hiring managers to work together and improve their recruitment skills through training. Above paragraph summarizes the insights from the respondents using both the qualitative and quantitative technique.

Effective talent acquisition and recruitment practices are emphasized as essential in human resource management. Improved organizational performance and success can be achieved by adopting the recommended strategies to build a diverse and high-performing workforce. In order to stay competitive in attracting and retaining top talent, it's important to continuously adapt and refine recruitment strategies.

## IX.RECOMMENDATIONS

- **Focus on Talent Acquisition:** The emphasis should be on finding and attracting the best talent in the industry. A competitive advantage in the marketplace can be achieved by investing in strong recruitment strategies and talent acquisition programs.
- The recruitment process needs to be streamlined in order to hire top talent quickly and maintain productivity. Expedite the hiring cycle by implementing efficient recruitment procedures and leveraging technology.
- Optimize costs by implementing recruitment practices that are both cost-effective and yield quality results. Organizations can save resources and still attract talented individuals by analyzing the most efficient sourcing methods.
- HR teams can improve new hire success rate by identifying suitable candidates for specific roles. Competency-based interviews and skill evaluations are employed to ensure the best fit for each position through rigorous assessment methods.
- The overall efficiency and effectiveness of the human resource department can be improved by streamlining HR operations. Streamline admin tasks and free up resources for strategic HR initiatives by investing in HR technologies, automation, and data-driven decision-making.
- Actively eliminate bias from the recruitment and selection process to create an inclusive and diverse workplace. To ensure a fair and equitable hiring process, incorporate diversity initiatives, blind screening techniques, and unconscious bias training.
- Monitor KPIs and collect feedback from HR teams and candidates to continuously evaluate and enhance recruitment practices for continuous improvement. To remain competitive in hiring and retaining top talent, adopt a culture of ongoing improvement.
- Informed HR decisions can be made by leveraging data analytics and insights. Evaluate the effectiveness of recruitment strategies and make data-driven adjustments by utilizing recruitment metrics such as time-to-fill, cost-per-hire, and candidate conversion rates.
- Establish a strong employer brand to attract top talent. Establish a positive reputation in the job market by showcasing the organization's values, culture, and employee experience.
- Encourage collaboration between HR teams and hiring managers for recruitment goals that align with business objectives. Make sure hiring managers receive training and support to participate effectively in the recruitment process and make informed hiring decisions.

- Organizations can enhance their HR operations, reduce bias, save costs, and improve recruitment effectiveness by following the above recommendations. Building a high-performing workforce and driving organizational success can be achieved by combining these strategies with a data-driven and inclusive approach. It's crucial to keep assessing and modifying recruitment tactics to stay adaptable to changing business requirements and industry patterns.

## X.LIMITATIONS OF THE STUDY

The following are the limitations:

- i. The data available to support the effectiveness of AI in hybrid recruitment is very limited.
- ii. Even though AI claims to remove bias there are various instances where AI provides biased results. The bias maybe based on gender, race, colour or other factors.
- iii. AI has simplified human interference. But lack of human interference can make it difficult for AI to analyse emotional intelligence and other soft skills accurately.
- iv. There can be certain ethical issues related to transparency and fairness.
- v. For a small company implementing AI technology can be expensive.

## XI.CONCLUSION

AI has been extensively used in recruitment in recent times. AI has made the recruitment process hassle free and easy. AI software was created to make human-like computer systems. HRM has seen the advantages of AI in the recruitment process. Over the past two decades, AI's capacity to adapt to recruitment has grown significantly. Conventional recruitment techniques are still used along with AI tools and applications. AI enhances the effectiveness and efficiency of decision-making. AI has made the process more efficient and accurate. The quality of hires has also increased due to the usage of AI. This has led to a significant decrease in the hiring time. However, there are various limitations attached to AI in hybrid recruitment. AI can analyse a huge amount of data and can make judgements based on them. But these judgements can sometimes be biased. Due to immense usage of AI, there can be lack of human interference which is necessary during certain situations.

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