



# Disruption of Artificial Intelligence on Human Resource Management: The Impact on Hiring Process

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## Abstract

Organizations with effective recruiting strategies are able to hire the right individuals to control the digital world and develop the business environment. Therefore, an organization's recruitment strategy is the most important factor in recruiting qualified employees who will be the most effective and efficient in accomplishing their job goals. Recruitment strategy seems to use data analysis in its decision-making process as it is a key function of the organization. Data analysis is known as "Artificial Intelligence" and plays an important role in hiring decisions. In its most basic form, artificial intelligence is created by intelligent machines created by humans. AI acts and reacts like humans. The ultimate goal is to make it easier for computers to do tasks that humans normally do. AI takes the lead with unbelievable speed and accuracy. The main purpose of this paper is to investigate how artificial intelligence influences recruitment strategies. The study also sheds light on how companies are using AI in their recruitment. This research is based entirely on secondary sources of information, such as articles on the concept, various books, journal papers, and websites were used to delve deeper into the idea.

Keywords: Disruption. Artificial Intelligence. Automation. Human Resource Management. Recruitment. Recruiters.

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# 1 Introduction

AI is an umbrella term that encompasses various related concepts such as machine learning, machine intelligence, and cognitive computing. In general, AI is technology that can make judgments without direct human input and independently of people. This means that machines can learn autonomously from their environment and base their conclusions on what they discover. One industry undergoing major changes due to AI is human resources (HR). HR professionals use tools and software to handle the hiring, onboarding, and training processes. The future of artificial intelligence in HR includes automating some of these processes, allowing HR to use time and money more strategically (Nawaz et al., 2024). A major application area for AI is recruitment. This process involves filtering applicants based on skills, experience, competencies, and cultural fit to find the best fit for open positions. Machine learning helps HR professionals identify these attributes with greater accuracy than traditional classification methods such as resume screening or phone screening. AI in recruitment plays a key role in talent acquisition (Laurano, 2022). In order to cut costs and downtime and fill open positions with qualified candidates, about 30% of businesses employ AI in their hiring processes. AI helps HR managers make the hiring process more efficient by making intelligent, data-driven decisions. According to a study conducted by Wahdaniah et al.'s (2023), 87% of 4,444 HR leaders agree that digital technology will transform the way central HR works. By validating a candidate's available skills and improving matching to open positions, you can attract better talent faster and more accurately. Improve HR services by increasing productivity, reducing costs, and eliminating human error and bias. However, Organizations must train their employees on the use of these machines or software designed for business purposes (Chen, 2023)

Swedish luxury car giant Volvo made headlines at its Brussels Motor show by unveiling his AI-integrated car, which was used to interview job seekers for service technicians. It reduced labor and created some ambiguity between the labor force of and the capabilities of machines (Geetha & Bhanu Sree, 2018; Ul-Hameed et al., 2019). However, people's daily lives have been greatly changed by AI technology in many different ways. In contrast to how it was, how it would be, or how it is perceived, technology and its innovations have reached every corner of the world among people, from the use of smartphone keyboards to voice-controlled assistants on tablets and laptops. Even the exploitation of AI can be done for the benefit of a country & people working in sectors such as economic sectors, healthcare, security services, education, defense and governance. However, AI is integrated in almost all the sectors of the economy (Gautam & Mittal, 2022). Finding the appropriate candidate at the ideal time is the human resource manager's primary goal during the recruitment process. The use of the extra sources or numbers will allow you to extend this activity. We would use a wide range of channels to locate and place the best applicants to fill the designated vacancies. The efficacy of every firm using various methods and

processes when recruiting depends on the two major components of recruitment, or internal factor and external factor. The hiring process is successful when top candidates who can perform well on the job are chosen and encouraged. When information, data, and sources are developed and supplied precisely for each application, it is more effective.

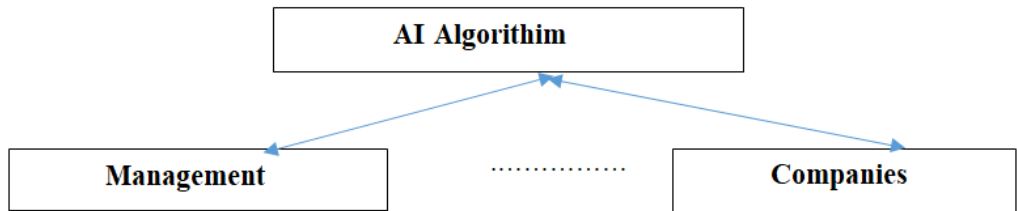


Figure 1. Relationship between company, Management and Artificial Intelligence

Sandeep et al.'s (2022) examined a relationship between company, management and AI.(see figure 1). The researchers Geetha and Bhanu Sree's (2018) have described how artificial intelligence is used in the hiring process, where it plays a crucial role. Artificial intelligence assists in interview scheduling, auto-generated communications to applicants, employee relations, and candidate screening. Jarrahi's (2018) cover the benefits of AI for people. Artificial intelligence has aided organizations in making decisions, managing ambiguity, and particularly ambiguous decisions. Still, when subconscious choices are necessary to assess and assist the consequences of decisions, humans play a crucial part in a business and technology must rely on them. Amla and Malhotra's (2017) in his research paper digital technologies are being used by companies like SAT, Facebook, and GE to evaluate applicants, conduct interviews, and find fresh talent for the hiring process. Hiring managers can examine applications using AI, and candidates might get swift responses. In the study by Pratap Singh Rathore's (2023) chat box systems or automated response machines play a crucial role in resolving inquiries and issues related to AI's application in reducing favoritism and enhancing workplace openness. The company will then have the option of selecting the CV. The use of AI tools can be used to analyse job descriptions.

Table 1 highlights the differences between the human mind and artificial intelligence in handling decision-making. The human mind navigates uncertainty quickly and intuitively, relying on experience and gut feelings, while AI leverages real-time data for informed decisions. Humans decide where to seek information and negotiate agreements, whereas AI processes and analyzes data systematically, providing multiple perspectives based on emotional analysis. This comparison underscores the complementary strengths of human intuition and AI's data-driven precision.

Table 1. Comparison Between Human Mind and Artificial Intelligence in Decision-Making

	Human Mind	Artificial intelligence
Uncertainty	Quickly and intuitively decides in the face of uncertainty	Access "real time" data is available
Complexity	Decide where to look for information and acquire it. Choose a choice that has comparable data support	Data collection, correct processing, and analysis
Equivocality	Develop an agreement via negotiation and mobilise support	Analyse feelings and give several points of view

## 2 Objectives

1. To comprehend AI's function in modern human resource management.
2. To comprehend the justifications for using artificial intelligence.
3. To comprehend the chatbot-based AI hiring process.
4. To research the kind of skill set needed for human-machine interaction and HRM function to coexist.

## 3 Research Methodology

The study makes use of a descriptive research design. The researcher employed secondary data in the research investigation. The secondary data were acquired from websites, research reports from various research organizations, academic publications on human resources, books, blogs, and websites.

## 4 Recruitment Process through Chatbots

1. Simplifying the first stage

Today's chatbots are very versatile. You can analyze CVs and ask for clarification. Chatbots are automated software programs that interact directly with applicants via text messages. Chatbots get their information from the experience of their applicants, solve their queries and collect vast amounts of data that a representative of human selection must analyze. After the application is received, screening it is a very time-consuming process. During the first round of pre-screening calls, recruiters often confirm which candidates are suitable; while we know this works, the process

needs to be revised. The use of chatbots is a remarkable innovation that makes the review process much better and better. The right candidates can be distinguished from the unsuitable ones by sending a text message to each potential applicant, asking a series of short, pre-written questions. Using AI chatbot technology, recruiters may send numerous texts in a matter of minutes and receive responses rapidly, as opposed to the days or even weeks that call and texts might take during the traditional recruiting process. The eligible candidates can be successfully distinguished from the unfit candidates by asking an applicant a series of quick, predetermined questions.

## 2. Correct Data at Real time

Every firm want to update its candidate database daily, respond to customers more quickly, and build long-term relationships with their applicants It. Companies can use a chatbot that is linked to the database to update it daily. Companies may examine the information in their database, which has a significant impact. Companies can update candidates' accessibility, present situation, flexibility, or even a new certification through personalized and automated interactions. By using a chatbot among their target audience, businesses can enrich their database.

## 3. Qualifying Candidates

By asking candidates queries about their skills, credentials, and experience. chatbots can do an excellent job of separating the good candidates from the undesirables. Otherwise, it would be a tedious and time-consuming task for recruiters. With the help of the skills, ability it can then efficiently rank and qualify a large group of applicants based on organizational needs (Albassam, 2023). Chatbots can save a lot of administrative work related to recruiting a candidate by scheduling the required conversations and appointments with mutual consideration. Although it seems that humans are needed at different stages of the process, the chatbot makes sure that all prerequisites are met before humans take control.

## 4. Get more Qualified Appliers into Job Offers

In order to increase the number of job applicants, organizations are actively forwarding emails to their database. The success rate, however, falls short of expectations. With the help of a chatbot on messaging applications, organizations may access a database of applicants and direct them to the ideal position at the right moment. Through the chatbot, applicants may apply without any hassle. They do not need to sign in or go through a time-consuming application procedure to access a website. Instead of emails, job offers are sent to candidates via their messaging apps.

## 5. Question and Answer (FAQ)

Candidates must investigate the position, the organization, and a number of prerequisites before applying. It is really annoying to have to go through an FAQ page to get all these answers. With the use of chatbots, this can change completely. Chatbots can be used by companies to respond to frequently asked questions by identifying keywords provided by applicants. Responses need to be straightforward and informative so the candidate can quickly get information and a thorough understanding, leading to their satisfaction. If the answer is unclear, chatbots can respond to candidates in an approachable manner, and also connect the application to the right person to ensure a positive experience. In the era of data-driven decisions, chatbots might be connected to a platform that gathers essential information. The business will be able to monitor how frequently a particular issue is raised and what prospects want and are seeking for with the use of this kind of platform. Chatbots are a fantastic resource for recruiters as they are quick to respond and always available.

## 6. Screening Candidates Application

When applicants apply on a company's employment site, chatbots can start a dialogue with them. While conversing with chatbots, they may ask several queries. The inquiries might range from inquiring about job experience. When this procedure is completed, the chatbots evaluate the application for relevance to the available post. Using information from the conversation, the candidate's resume, and an evaluation of the position's requirements, the recruitment chatbot determines whether the applicant is the best fit for the job.

## 7. Interview Scheduling of the Candidates

Setting up the candidate's interview is yet another time-consuming procedure. Intellectual chatbots can query recruiter's calendars to see whether they are available and then plan a day and time for the suitable candidate. The majority of candidates no longer respond to unidentified phone numbers, therefore contacting them directly is no longer effective. Also, calling the applicant when they are working at their present firm won't be convenient to pick the calls. This entire procedure might take a long time. This activity, however, will not be boring for a chatbot, as chatbots flourish at this sort of repetitious task.

## 8. Candidate Experience

It is not surprising that a chatbot will be required for this part of the operation. When a new position becomes available, many people will apply, making it challenging for someone to manage. In other words, a chatbot can step in and speed up the

process with a quicker response. Recruiters must rethink their strategy and become more applicant-driven if they want to break through the confusion. There should be little delay between when candidates submit applications and when recruiters get in touch with them. Chabots can assist in it by responding rapidly to applicants, keeping both candidates and recruiters happy.

## 5 Importance of Artificial Intelligence in HR

### 1. Bots doing in-person interviews:

Bots, another name for robots, are now taught to conduct in-person interviews as part of the employment procedure. These bots evaluate a candidate's eligibility by scanning their soft skills and personality traits using both natural language processing (NLP) and interview analytics. Bots may conduct physical interviews, which is useful for recruiters since it maintains consistency throughout the interview process and ensures that all candidates have the same interview experience.

### 2. Background checks powered by AI:

Although laborious and time-consuming, background screening for candidates is just as crucial as a skills evaluation. Background checks are performed by 92% of businesses for the straightforward reason of risk reduction. In comparison to using the manual process, AI has made that experience faster, easier, and more effective. Background checks enabled by AI assure businesses of fair, private processes that safeguard both the business and the candidates.

### 3. Improving employee satisfaction :

Once the individuals have been located and contacted by your AI software, it may quickly and efficiently lead them through the hiring process, providing a pleasant candidate experience. Recruiter chatbots can provide prompt responses to candidate questions, provide succinct remarks, and suggest next steps. They can schedule interviews, explain firm hours and location, and provide links to promising job descriptions (Huseynov, 2023).

### 4. Onboarding:

Onboarding AI is also enhancing the onboarding process by, for example, automating time-consuming operations like producing offer letter templates, completing background checks, and compiling benefit paperwork. All onboarding paperwork can be organized, printed, and sent with the aid of AI.

## 5.1 Advancement of Hiring Process through Artificial Intelligence

In this way Hiring process is advanced through Artificial Intelligence:

1. Lessen the workload of the office employees.
2. It will aid in the recruitment of talent and help find the best candidates for the position.
3. AI enables forecasting of workplace employee retention rates.
4. It is able to function properly and get around human limitations.
5. There will be a reduced possibility of error.
6. It keeps the various departments' workflows running smoothly.
7. Businesses can obtain precise results through AI.
8. It will boost workplace morale among employees.
9. It will lessen the tendency to make biased decisions.

## 5.2 Some problems may occur due to Artificial Intelligence

### 1. Potentially Less Accurate

Because AI requires data to work, it may not be accurate enough for your hiring process if you have poor or insufficient data. There are still some aspects of AI that are developing, so you might occasionally make a mistake.

### 2. Less Human Interaction

In this regard, artificial intelligence has both benefits and drawbacks. Sometimes it's difficult to determine someone's suitability for a job based solely on their application. A machine won't always be able to meet the organization's precise objectives when looking for the appropriate candidate.

### 3. It May Not Always Be Realisable

Similar to how personnel in the HR department do not feel ready to upgrade their abilities, companies believe they are not yet ready to integrate AI into their processes. Any kind of major change requires a lot of time and work, which some firms just don't have.



#### 4. Too many keywords are used too frequently

AI primarily relies on certain keywords when sifting through its candidate pool. Candidates who are well-informed about the programming behind AI might be able to exploit this flaw by providing specific phrases that could fool the system and make them seem like good fits for various positions when they are not.

### 5.3 Traditional Recruitment V/S AI Recruitment

#### 1. Better Job Description

A comprehensive list of job qualifications is necessary in the conventional hiring procedure. Always be a good fit for the talent pool. Because of this, many deserving abilities are simply disregarded. This is due to the fact that not every box on the list is ticked. Companies go broke when they are thus strict and inflexible. His leader in the company cannot permit it in the tumultuous environment of today.

#### 2. Market Scenario

Adopting AI enables businesses to utilize algorithms to carry out quick but important operations. Companies may entice more talent without losing the essential job criteria by revising processes in a way that produces different and better results in real time. Additionally, AI systems may develop and learn by selecting the best candidate based on consistent feedback.

#### 3. Intelligent Screening

Traditional hiring practices are cumbersome, ineffective, and even prone to mistakes. Additionally, it prolongs the employment process and eventually raises hiring expenses for the business. By assessing candidate profiles based on performance, turnover, tenure, skills, aptitudes, public data/social media, and more, AI recruiting enables organisations to use the potential of intelligence screening throughout the recruiting process.

#### 4. Identification of Relevant Passive Candidates

Any company's candidate search should include passive applicants. Finding and attracting resistant individuals is becoming more and more crucial due to a skill shortage. Talent in today's market is aware of their value and always considers what recruiters have to say. In comparison to conventional recruitment methods, passive applicant search is far more frictionless using AI and ML algorithms. Companies may make the most of AI and ML technologies to locate the finest employees fast by taking into account a variety of factors, including employee tenure, if the firm is decreasing, experience, and relevancy to position.

## 5. Automatic Candidate Search

The manual search for candidates, which is frequently a key step in conventional recruitment strategies, takes a lot of time and money. Additionally, recruiting efforts are being led by HR teams, which adds to the strain and pressure. Adopting AI enables businesses to locate people by utilizing the potential of intelligent solutions. It not only helps hiring teams do more extensive searches and reach a bigger talent pool for effective hiring, but it also saves time and money.

## 6. Affective Computing and Emotional AI

Utilising AI in recruiting does not yet need eliminating the human component. Companies today have access to emotional AI, which ensures a natural type of connection while bringing the advantages of artificial intelligence to the employment process. Although traditional recruiting adds a crucial human aspect, it is time, money, and effort-intensive. Emotional AI or Emotional Computing technology may be used by recruiting teams to provide a quicker, more effective, fair, and less expensive hiring process.

## 7. Real-Time Interactions

One of the main difficulties with conventional recruiting is communication. Increased talent turnover, more misconceptions, and a general bad perception of the company are all caused by ineffective and premature communication. Companies may use AI-powered chatbots to ensure real-time engagement with applicants by adopting AI. Companies should avoid losing talent because of poor communication by providing responses to inquiries and comments as soon as possible. Additionally, it can result in a better candidate experience, which might draw in more talent for your business. One of the major problems with conventional recruiting is communication. Increased talent turnover, more misunderstandings, and an overall unfavorable perception of the organization are all caused by inefficient and hasty communication. Adopting AI enables businesses to use chatbots that are AI-powered to connect with candidates in real-time. Companies can avoid losing talent due to communication failures by providing questions and comments in a timely manner. Additionally, it can result in a better candidate experience, which might help your business draw in more talent.

## 8. Faster Setup

Businesses pay high price for vacancies, and lengthy hiring procedures are more expensive than you may imagine. Additionally, typical recruitment techniques are time-consuming and expensive for companies to use. This results in inefficient budgeting and wasteful losses. This is a benefit that businesses can get from AI adoption.

## 5.4 Limitations of Artificial Intelligence in Human Resource recruitment Process

Machines and technology should support people, not replace them. Apart from the profits obtained, using AI for recruitment has certain limitations. HR is all about people. Therefore, the human element cannot be removed from the procedure. Human qualities such as intuition, empathy, and emotional understanding are irreplaceable. Decision-making with integrated AI tools ignores the human factor and bases analysis and decisions solely on data. But too much of this data has been given to machines by humans. Keywords can also limit the selection of a recruiter's pool when searching for another potential applicant cannot be added. However, recruiters may lack the ideal baby boomer applicant with extensive experience in this field. Resumes cannot follow AI-powered application tracking systems. AI tools cannot replace observing the human body language in face-to-face interviews at the workplace.

Facial expressions in face-to-face interviews still play an important role in decision making in the selection process. For high-income jobs, it is difficult for AI to determine psychological traits. Machine language is difficult. Evaluate human capabilities for rapid learning, motivation, and decision making. Recruitment-related activity remains questionable. It reduces the handbook, but the participation and prejudice factors associated with people cause major problems. Relationships play an important role in the early stages of the hiring process. Since these are machines, candidates have no chance of knowing future employees. But these limitations aside, the future of AI in HR is just around the corner.

## 6 Conclusion

Artificial intelligence is technology that functions intelligently in a variety of situations, much like the human brain does. Compared to traditional recruiting methods, there is an increasing focus and importance in automating recruiting systems. Recruitment is the central activity of all labor organizations. Many industries are also focusing on changing their hiring processes. Recruiters who have AI technology can tweak all aspects and thus have a significant impact on hiring. These days, recruiters view this AI technology as a rival. However, it is made-up software designed to make your task easier. The procedure will go on. AI plays a role that combines human and AI capabilities. This ensures data maintenance, saves companies money and time, and makes it more accurate. Accessible throughout the hiring process, some settings remain traditional, but most of the setting area is digitization using AI tools and applications. It saves cost and time while automating various processes and making effective and efficient decisions.

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