# "The Future Of Hr In The Silicon Age, How Ai And Automation Are Transforming Hr Functions."

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#### Abstract:

This study focuses on the revolutionary influence of Artificial Intelligence (AI) on HR processes, namely in recruiting and selection. Traditionally considered operational, HR is now transforming into a managerial position as a result of integrating AI. Although there have been inadequate intellectual investigating professionals acknowledge the immense potential of AI in transforming the recruitment industry. The study intends to examine the impact of AI on businesses and job seekers, with an emphasis on the first phases of the recruiting process. The goal is to offer suggestions for improving recruiting procedures in light of AI implementation. This research seeks to provide thorough insights for enhancing HR practices by analysing the role of AI in modern recruiting.

Keywords: Artificial intelligence, Employee Engagement, HR Functions, Employee Engagement

**Methodology:** The research performed a comprehensive analysis of human resources employee perspectives using a questionnaire approach, with a particular emphasis on the current application of artificial intelligence (AI) in the effective recruitment of top-performing individuals. More than 130 human resource managers participated in examining the different AI technologies used in the recruitment process. The study's analysis reveals insightful information about how AI impacts recruiting and evaluates its efficiency and consequences for companies and job seekers. The anticipated results will provide information on the frequency and effectiveness of AI tools in contemporary recruiting, along with recognising obstacles and possibilities linked to AI incorporation. The study's analysis offers useful insights into AI-driven recruiting, enhancing knowledge of its impact on stakeholders. The results are expected to help improve recruiting outcomes by meeting changing professional demands and expectations.

**Finding** Automation and artificial intelligence are altering HRM in multiple ways. Initially, they had enhanced the applicant screening procedure. Human resources specialists can employ AI-powered technologies to evaluate curriculum vitae, assess applicant profiles, and conduct preliminary interviews, accelerating the hiring process. Improved efficacy. Human resources departments may concentrate on higher-level elements of recruiting candidates. AI and automation have enhanced staff satisfaction and retention. Management may use statistical analysis to locate patterns and variables that impact satisfaction among staff members, allowing managers to respond with preventative steps. Chabot's and virtual assistants can be utilised to offer immediate answers to employee questions, improving the overall work experience.

Additionally, AI-powered statistical analysis can assist HR in predicting workforce requirements while building talent pools. By taking a preventive stance, a corporation may guarantee it continually hires the appropriate person, which leads to lower turnover rates and reduced hiring costs.

HR is making an investment. Research conducted suggests that HR. Leaders emphasise putting funds into workplace technology as the top area in the modern era, with 30percent of HR leaders intending to expand their work in this field. Huge procedural, technological, and cultural changes are required to successfully utilise capabilities and link the technology used by HR investment with essential business results, similar to other aspects of HR's operating model. They customised instructional programmes with curriculum suggestions tailored to individual employee performance data to enhance skills and maintain competitiveness in their positions.

**Research limitations/implications** The paper is based on human resource competence to do the business analysis to get the true pictures which will help them to make truthful and accurate decisions for their employee, because nowadays employees are assets.

## Introduction

**HUMAN RESOURCE MANAGEMENT:** The development of modernization in the late 19th and early 20th centuries is when human resource management (HRM) first evolved. It was primarily brought into being to recognize the demand for improved relations between workers and management, especially in manufacturing industries. Relations

between employers and employees, employee welfare, and labour regulations are being focused on. A new era came into existence where human resources were treated as assets.

The "Father" of Human Resource Management (HRM) is often credited to Elton Mayo, an Australian psychologist and researcher. Mayo is renowned for his work in industrial sociology and is best known for his Hawthorne Studies conducted between 1924 and 1932 at the Western Electric Hawthorne Works in Chicago, Illinois, USA.

"Mayo's definition of HRM would likely emphasize the importance of understanding and addressing the social and psychological needs of employees in the workplace to enhance productivity, job satisfaction, and overall organizational performance."

**Traditional to Contemporary Era Shifts:** Evolution of HRM Functions: In the past, HRM was mainly administrative, concentrating on grievance management, payroll, and labour legislation enforcement. But in the present day, HRM has developed into an administrative position that synchronizes human resources with corporate goals. Corporate culture, recruitment and retention, and the development of leadership are highlighted.

**Technological Developments**: The introduction of technology has completely changed HRM procedures. HR personnel can now concentrate on better-planned initiatives because repetitive operations like payroll administration and hiring have been automated. Additionally, HRM is now able to make better decisions on employee engagement, performance management, and talent acquisition thanks to technology like artificial intelligence and data analytics.

**Transformation in the Culture of Organizations:** Traditional organizations were frequently characterized by fixed roles and duties within bureaucratic hierarchies. On the other hand, adaptability, teamwork, and creativity are given top priority in modern enterprises. Through encouraging diversity and inclusion, advancing employee well-being, and facilitating continuous growth and education, HRM plays a critical role in forming company culture.

**HRM Assists Contemporary Companies:** Personnel Recruitment and Retention: By developing competitive compensation plans, putting into effect successful recruitment techniques, and offering chances for professional advancement and development, HRM assists businesses in attracting and retaining top personnel Performance Management: Strategic human resource management makes it easier to set up mechanisms for overseeing performance so that strong performers may be identified and rewarded, as well as to set established standards and give continuous input. This promotes inspiration and employee participation.

Organizational Development: HRM implements workforce planning, succession planning, and leadership development initiatives to support organizational growth and transformation. It guarantees that the company has the personnel on hand to adjust to changing business requirements. The Well-being of Staff and Engagement: HRM attempts to support the well-being of staff members by addressing concerns about employees' well-being, creating a positive work environment, and encouraging work-life balance. Employees that are engaged are more creative, productive, and dedicated to the success of the company.

Artificial Intelligence (AI) solutions are transforming Human Resource Management (HRM) practices by optimizing workflows, boosting judgment, and boosting employee satisfaction. These are some of the methods AI tools support HRM:

AI has revolutionized HRM procedures by improving data mining, instruction, participation, performance management, initial integration, and recruiting. AI-driven application monitoring systems effectively sort across credentials and forecast the achievement of applicants. Chatbots and personalized on boarding tools simplify the integration process for new hires. Performance analytics provide information and enable objective assessments. Employee feedback is gathered by chatbots and sentiment analysis, and AI-driven learning systems customize training. Virtual reality simulations increase interest. Workforce demands are predicted by HR analytics and predictive systems. In general, AI gives HR the ability to make data-driven choices, increase productivity, and improve the employee experience—as long as it is applied sensibly and morally.

## **OBJECTIVES OF THE STUDY**:

- 1. To examine how new AI tools and methods are used to manage the personnel of an organization.
- 2. To research how platforms with AI capabilities alter work procedures.
- 3. To find exactly if human resources can be replaced by AI and Machine language.
- 4. To research how automation affects workers and the company when it comes to HR functions.
- 5. To go over the advantages and disadvantages of automotive HR procedures and methods.

## **NEED OF THE STUDY:**

- 1. Although the HR function is changing quickly, administrators must broaden their domains of knowledge and experience.
- 2. To understand how automation can lower expenses related to human labour.

- 3. To adapt to new developments in HR practices.
- 4. To obtain technology that promotes well-being.
- 5. To acquire sophisticated responsibilities related to basic HR, such as training and development, planning, and design.

#### **SCOPE OF THE STUDY:**

To study innovative HR breakthroughs that can support human resources professionals in assisting workers and their organizations.

Relationship teams in human resources are relying more and more on automation to do repetitive duties rapidly, resulting in simplifying human resources tasks..

The incorporation of confidentiality and reliability: HR managers are using AI tools which result in no integrity issues. HR managers must strive toward reliability, confidence, and uniformity. Identical to network encryption.

**Review of Literature :** Generating a theoretical framework or platform for the study for referencing accepted ideas, concepts, and techniques.

It is claimed that there are several scenarios in which AI technology has impacted the daily lives of individuals. In contrast to the past, present, and perception, technological advancements and their breakthroughs have affected people worldwide, from using keyboards on cell phones to voice-activated tabs and laptops. Exploitation can happen in the fields of health, finance, safety, education, and government—sector areas where AI has the potential to help the country as a whole.

However, artificial intelligence (AI) is practically present in every sector of the economy.

1. (Albert 2019)<sup>3</sup> under the title study "AI in Talent Acquisition: A Review of AI-Applications Used in

Recruitment and Selection." Stated that the daily lives of the people have been limit it is claimed that there are several scenarios in which AI technology has impacted the daily lives of individuals. In contrast to the past, present, and perception, technological advancements and their breakthroughs have affected people worldwide, from using keyboards on cell phones to voice-activated tabs and laptops. Exploitation can happen in the fields of health, finance, safety, education, and government—sector areas where AI has the potential to help the country as a whole. However, artificial intelligence (AI) is practically present in every sector of the economy.

2.(Breaugh 2008)<sup>4</sup> seeks to determine the suitable The ideal applicant at the appropriate moment. A human resources manager could use more applicants or a broader range of sources during the hiring process. Wed employs a range of techniques to find and choose the most qualified candidates for the available roles. An organization's utilization of different strategies and methods, which may be categorized as an internal or external factor, determines its recruitment efforts' effectiveness. Effective recruiting requires stimulating candidates and choosing them based on their proven ability to perform the job well. Personalized information from sources and data is more effective for recruiting operations.

Progressive technological improvements have had an extensive effect on almost every aspect of life in the past few years—one example related to technological advances that can bring change.

3. Artificial Intelligence is currently revolutionizing many different sectors and is frequently discussed, discussed, and implemented. Artificial intelligence (AI) refers to software that can think intelligently, akin to a highly intelligent human's cognitive processes. According to several studies, AI can be classified into four categories: systems that mimic human thinking (Haugeland, 1985; Bellman, 1978), systems that think rationally (Charnaik & McDermott, 1985; Winston, 1992), systems that mimic human behaviour (Kurzweil, 1990; Rich & Knight, 1991), and systems that act rationally (Schalkoff, 1990; Luger & Stubblefield, 1993). According to Bersin (2018), artificial intelligence (AI) is prevalent in most software and has been incorporated into many commercial operations.

4. Ginu George, Mary Rani Thomas <sup>6</sup> One area where the integration of AI is occurring rapidly is in Human Resources (HR), specifically concerning several HR tasks like the hiring process, on boarding, and training. Implementing AI in HR does not imply that AI will entirely supplant the responsibilities of HR managers. This would enable HR professionals to prioritize strategic work and reduce their involvement in repetitive and low-value chores. Therefore, AI would provide a more intricate understanding of how it may enhance and restructure HR tasks to improve efficiency and adaptability. This study specifically examines qualitative research methods and seeks to elucidate the integration of artificial intelligence (AI) into many aspects of human resources (HR) and its effects on organizations, employees, and HR professionals.

The term AI was initially used by McCarthy in 1956. It encompasses the idea of a cognitive machine that incorporates robotics, mechanization theory, and multimedia processing.

5. (McCarthy, 1959). Currently, AI is described in several ways, such as the ability to solve cognitive problems

(Marr, 2018) or the capacity to do tasks like an intelligent entity (Copeland, 2018), among others. The progress and advancement in AI have made significant strides, leading many organizations to integrate it into their daily business operations. Some commercial sectors where it is widely utilized include healthcare, manufacturing, retail, sports, HR, accounting, and finance. The analysis by Narrative Science reveals that approximately 61% of firms have implemented AI in their operations, a significant increase from 38% in 2016 (Rayome, 2018). This indicates that organizations are increasingly embracing AI for their commercial activities

6. (Upadhyay and Khandelwal 2018).This research examines the uses of artificial intelligence (AI) in hiring procedures and its real-world consequences. This study focuses on the transforming strategies in the employment industry resulting from implementing artificial intelligence (AI) in recruitment. This study examines the influence of artificial intelligence (AI) advancements on hiring and the recruitment industry. The utilization of artificial intelligence (AI) in managing the recruiting process is resulting in increased efficiency and improved quality for both customers and candidates. This paper provides strategic insights into the automation of the recruiting process and presents practical solutions for implementing artificial intelligence (AI) in the recruitment sector.

Additionally, it explores the strategic ramifications of employing artificial intelligence in the recruitment sector. This article explores the impact of technology breakthroughs in artificial intelligence (AI) and how they can be used to provide value for the recruiting industry and its clients. It efficiently preserves the important reading time of practitioners and academics by succinctly and straightforwardly showcasing AI applications in the recruiting sector.

7. (Muhammad Subhan Iswahyudi, Agustus 2023) the management of human resources (HRM) is a crucial factor when evaluating the accomplishments of a company or corporation. Efficient and effective HR management can enhance organizational goal attainment and optimize individual team members' performance. Nevertheless, HR management is also confronted with We are dealing with many intricate obstacles, such as overseeing sizable teams, addressing team members' varying requirements and expectations, and adapting to swift changes in the commercial and technological landscape.

This study aims to examine the efficacy and possible application of ChatGPT as a tool for assisting decision- making in HR management. This literature review uses a qualitative methodology to analyze and interpret data by combining text and information from various sources. The study findings demonstrate that using ChatGPT as a decision-support tool in human resource management holds significant promise for enhancing the productivity, efficacy, and openness of HR procedures. Artificial intelligence models like ChatGPT can function as virtual assistants, offering text-based replies to aid recruitment, employee growth, performance evaluation, and employee assistance procedures. ChatGPT can collect useful data and provide significant insights into people and the work environment. This can assist HR managers in making better-informed decisions.

8. Yawalkar, M. V. V. (2019). In the highly competitive environment of industries, companies must get the correct data and evaluate it to facilitate their growth and daily operations. Artificial intelligence enables faster and more efficient work completion in the industry. Artificial Intelligence is being integrated into several departments, such as the organisation consists of the human resource department, finance department, marketing department, and production department. Using AI, organisations may effectively analyse and report on their current performance and daily operations. In the business world, there has been a growing sense of pressure. However, astute managers have recognised the significance of incorporating artificial intelligence into the workplace. The research paper is characterised by its descriptive nature. The researcher utilised secondary data sources such as research papers, journals, websites, HR blogs, and survey reports. The study's primary aim was to investigate the function of artificial intelligence in the human resources department and gain insights into the issues faced by the HR department. The research study has determined that AI plays a significant role in many operations within the human resources department. Robotics firms may handle recruitment, hiring, data analysis, data collection, lowering workloads, and enhancing workplace productivity.

9. R Baldegger, M Caon, K Sadiku This study examines the incorporation of artificial intelligence (AI) into human resource management (HRM) procedures, with a specific emphasis on entrepreneurial orientation (EO) and its relationship with the use of This study confirms the perceived benefits of artificial intelligence (AI) in human resource management (HRM). Additionally, it establishes a correlation between a company's level of equal opportunity (EO) and its inclination to use AI projects and tools. The paper emphasizes that a significant obstacle to adopting AI in HRM is the perceived need for more skills and training. It also proposes viable measures for integrating AI technology into HRM operations.

Furthermore, it underscores the need for small and medium-sized firms (SMEs) to invest in information technology (IT) to maintain competitiveness in global marketplaces. This study recommends that SMEs adopt information technology (IT) to achieve considerable benefits and promote further growth. Unlike previous studies that mainly focused on IT adoption in large companies, this research emphasizes SMEs' gradual adoption of IT.

10 (Kumar, 2023)the emerging concept of "HR analytics" has significantly impacted the daily operations of HR professionals. It involves comprehending employee data, organizing it, and doing analysis to gain valuable insights that can inform decision-making. The implementation of HR analytics in the Organizational effectiveness empowers the

company to gain a strong competitive advantage in the market and overcome challenges related to talent acquisition, performance problems, and cultural disparities. Failure to embrace or delay an organization's adoption of HR analytics can result in a lack of awareness of resources and increased costs. The literature also emphasizes the need for a better understanding of funding allocations for the workforce. The research examines the factors that come before HR analytics, the difficulties encountered in implementing HR analytics, the technologies employed for HR analytics, and the outcomes of HR analytics, specifically strategic workforce management.

11. A Margherita The expansion of the global workforce and the growing significance of business analytics as a strategic competency within organizations are currently impacting the management of human resources. In recent literature, there has been extensive discussion on human resources analytics.

Despite the passage of ten years, a methodic yet to bess has not been introduced to identify and categorize important subjects. Specifically, there is an opportunity for conceptual contributions to offer a thorough explanation of concepts and areas of inquiry about HR analytics. Through a systematic literature review process, we analyse and break down the idea of human resources analytics as discussed in a large but scattered body of literature. We identify 106 important research topics that are connected to three main areas:

- The factors that enable HR analytics (both technological and organizational).
- The different applications of HR analytics (descriptive and diagnostic/prescriptive).
- The value that HR analytics brings to both employees and organizations.

We also consider the possibility of an "exponential" perspective on HR analytics, made possible by using artificial intelligence and cognitive technologies. The article presents a comprehensive attempt to organize and categorize information and a plan for future study on HR analytics. From a practitioner's viewpoint, this study provides valuable insights that may be used to enhance the development of cutting-edge analytics projects within businesses.

12. Gupta, A., Mishra, M. (2022). Artificial Intelligence (AI) has emerged as a substitute for human Intelligence. It profoundly impacts the everyday activities of hundreds of millions of individuals. It emulates human behaviour by effectively solving issues and comprehending tasks. Artificial intelligence technologies must be imbued with moral principles and ethics. The utilization of artificial Intelligence (AI) is growing. globally presenting additional ethical concerns to contemplate. Recently, numerous companies have employed diverse artificial intelligence tools, such as chatbots and face recognition software, to meet their hiring requirements. This research will examine technologies that aid in recruiting management, a crucial aspect of human resources. This analysis will uncover a company's diverse problems and ethical dilemmas when integrating artificial intelligence tools into recruitment. The recruiting organizations must communicate to job seekers that AI-powered technologies do not discriminate and ensure privacy protection. The study aims to investigate the ethical concerns associated with integrating artificial Intelligence into the employment process. The study will rely on the analysis of app reviews and features. The paper discusses several applications that could be considered unethical for individuals seeking employment. The findings indicate that the primary corrupt challenges recruiting organizations encounter are data privacy and unconscious bias. The bias results from the algorithm's operation, determined by the inputs used to construct it.

Additionally, the programmer may have unintentional biases influencing their decisions. Artificial Intelligence has heightened issues surrounding privacy and the safeguarding of data. UNESCO's survey reveals that a mere 22% of AI professionals are women. The underrepresentation of gender in the AI sector leads to the perpetuation of gender stereotypes and stereotyping in AI technology. Virtual personal assistants like Siri, Alexa, and Cortana are intentionally designed to assume a feminine gender. The obedience they exhibit serves as an example of how Artificial Intelligence (AI) could perpetuate and amplify discrimination based on gender in our culture.

## **Research Design**

Research methodology refers to the systematic approach used to do research and gather data. The source of data, on the other hand, refers to the specific location or means from which the data is collected. The study is characterized as descriptive, utilizing both primary and secondary data. The human resources management staff directly collected primary data. The study collected secondary data from a variety of sources, including libraries, research centres, industries, autonomous entities, and online sources. A comprehensive literature review was conducted to collect data and information from e-journals, textbooks, theses, official publications, reports, and other publications, as well as social media platforms and social media optimization.

## **Data analysis and Interpretation**

The main method for gathering information will be descriptive research design, and a questionnaire will be the major tool used for this. The survey has been issued by the human resources management staff at 131. The inquiry would be

customized based on the respondents' level of comprehension of the study's

conclusions. Using the exploratory study design, secondary data will be gathered by searching through books, scientific journals, and research papers that are available to the public.

#### **Demographic Segmentation**

Demographic Profile of Respondents The demographic and economic profile of respondents are examined in terms of Gender, Age, Educational Qualification, position within the organization, experience The findings are displayed in the section that follows.

Age wise distribution of respondents

Age range	
25-34	46
35-44	47
45-54	13
55-64	3
65 or older	2
Under 25	20
Grand Total	131

Table 1.1 age range of HR employee Source: Primary Survey Data



Fig 1.1 age range of HR employee Source: Primary Survey Data

**Interpretation This** data suggests that most respondents fall within the 25-44 age range, accounting for approximately 70.99% of the total sample. This significant concentration in the middle-aged groups could indicate a particular interest or relevance of the research topic to individuals in their late twenties to early forties. The relatively lower participation rates among the younger (under 25) and older (45 and above) age groups may reflect varying levels of engagement, access, or interest in the research subject matter across different age demographics.

Highest level of education	
Associate degree	23
Doctoral or professional degree	10
High school diploma or equivalent	8
Master's degree	87
Some college, no degree	3
Grand Total	131

 Table 1.2 highest level of education HR employee Source: (Primary Survey Data)



Fig 1.2 highest level of education HR employee Source: (Primary Survey Data)

**Interpretation** This distribution highlights a significant concentration of respondents with Master's degrees, representing approximately 66.41% of the total sample. In contrast, those with some college education but no degree constitute the smallest group, accounting for merely 2.29% of the participants. The presence of 23 respondents with Associate degrees and 10 with Doctoral or professional degrees suggests a diverse range of educational backgrounds among the participants. However, there is a clear predominance of postgraduate education levels. This gap could impact the diversity of perspectives and experiences captured by the research, potentially skewing results towards the viewpoints of those with more advanced educational backgrounds.

Position within the organization	
Entry Level	15
Executive	29
HR Specialist	20
Lecturer	1
Managerial/Supervisor	45
Professional/Technical	16
Pursuing post-graduation	1
Senior Executive	1
Senior Talent On boarding Specialist	2
Grand Total	130

Table 1.3 position within the organization HR employee Source: (Primary Survey Data)



f.g 1.3 Positions within the organization

Analysing the organizational positions of respondents provides critical context for interpreting the study's findings, particularly regarding the representativeness and applicability of the results. The emphasis on managerial/supervisory and executive positions underscores the need for careful consideration of how professional roles influence perceptions, experiences, and responses within organizational research

Years of experience of have in HR employee	
10-19 years	38
1-4 years	32
20 years or more	14
5-9 years	32
Less than 1 year	14

Table 1.4 years of experience of have in HR employee (Source: Primary Survey Data)



Fig 1.4 years of experience of have in HR employee (Source: Primary Survey Data)

This distribution has implications for the organization's succession planning, knowledge management, and training programs. With a substantial portion of the population being in the 10-19 year range, there may soon be a wave of retirements or shifts to higher positions. Conversely, the smaller but significant group with less than 1 year suggests recent hiring or turnover, and the need for effective on boarding and training processes.

#### Awareness currently using AI tools in your recruitment process

HR employee using AI tools in recruitment process	
Maybe	8
No	24
Yes	97
Grand Total	129

Table 1.5 HR employee using AI tools in recruitment process Source: Primary Survey Data



Fig 1.5 HR employee using AI tools in recruitment process Source: Primary Survey Data

The large percentage of respondents who use artificial intelligence (AI) tools in recruitment suggests a growing trend and acceptance of technology in HR operations.

The substantial proportion of participants who need to utilize AI technologies suggests a possible deficiency or room for enhancement in the utilization of technology in the recruitment process.

A lack of awareness or familiarity with AI technologies in recruitment among some respondents may be indicated by the tiny percentage of respondents who expressed doubt

Benefits have observed from using AI in recruitment?		
Cost savings	б	
Enhanced candidate experience	5	
Improved quality of hire	16	
Improved quality of hire, Cost savings	1	
Improved quality of hire, Enhanced candidate experience	1	
Improved quality of hire, Reduced bias in candidate selection	4	
Improved quality of hire, Reduced bias in candidate selection, Cost savings	1	
Improved quality of hire, Reduced bias in candidate selection, Enhanced candidate experience	2	
NA	14	
Reduced bias in candidate selection	12	
Reduced bias in candidate selection, Cost savings	1	
Reduced time-to-hire	21	
Reduced time-to-hire, Cost savings	1	
Reduced time-to-hire, Enhanced candidate experience, Cost savings	2	
Reduced time-to-hire, Improved quality of hire	13	
Reduced time-to-hire, Improved quality of hire, Cost savings	2	
Reduced time-to-hire, Improved quality of hire, Enhanced candidate experience	1	
Reduced time-to-hire, Improved quality of hire, Enhanced candidate experience, Cost savings	1	
Reduced time-to-hire, Improved quality of hire, Reduced bias in candidate selection	14	
Reduced time-to-hire, Improved quality of hire, Reduced bias in candidate selection, Cost savings	1	
Reduced time-to-hire, Improved quality of hire, Reduced bias in candidate selection, Enhanced	1	
candidate experience		
Reduced time-to-hire, Improved quality of hire, Reduced bias in candidate selection, Enhanced		
candidate experience, Cost savings	4	
Reduced time-to-hire, Reduced bias in candidate selection	2	
Reduced time-to-hire, Reduced bias in candidate selection, Cost savings	2	
Grand Total	128	

TABEL 1.6 benefits have observed from using AI in recruitment Source: Primary Survey Data



The data from 129 responses on AI in recruitment highlights varied perceptions. While reduced time-to-hire was most cited (21 responses), benefits like cost savings (14), improved quality of hire (16), and reduced bias

(12) were notable. Many respondents noted combined benefits, suggesting AI's potential to address multiple challenges simultaneously. However, 14 respondents saw no benefits, indicating potential scepticism or lack of awareness. Further exploration of specific AI tools and industry contexts could enhance understanding and utilization of AI in recruitment processes

stage in the recruitment process are using AI tools		
Candidate assessment	20	
Interview scheduling	18	
Not using AI	14	
Other (please specify)	2	
Recruitment	1	
Screening resumes	24	
Sourcing candidates	49	
Grand Total	128	

TABEL 1.7 stage in the recruitment process are using AI tools Source: Primary Survey Data



FIG 1.7 stage in the recruitment process are using AI tools Source: Primary Survey Data

The data from 128 responses on AI tool usage in recruitment stages reveals a widespread adoption, particularly in sourcing candidates (49) and screening resumes (24). While candidate assessment (20) and interview scheduling (18) also see significant AI implementation, a notable portion (14) reported not using AI tools. This suggests varying levels of adoption and recognition of AI's potential benefits across different stages of the recruitment process. Further exploration into the reasons behind specific stage choices and types of AI tools utilized could provide valuable insights for optimizing recruitment processes and promoting wider adoption of AI technologies.

Challenges faced in implementing AI tools in your recruitment process	
Candidate scepticism or resistance	3
Candidate scepticism or resistance, High costs of AI tools	1
Data privacy and security concerns	25
Data privacy and security concerns, Lack of understanding/training on AI tools	4
Data privacy and security concerns, Lack of understanding/training on AI tools, Candidate scepticism or	
resistance	1
Data privacy and security concerns, Lack of understanding/training on AI tools, High costs of AI tools	1
High costs of AI tools	4
Integration with existing HR systems	33
Integration with existing HR systems, Candidate scepticism or resistance	1
Integration with existing HR systems, Data privacy and security concerns	13
Integration with existing HR systems, Data privacy and security concerns, Candidate scepticism or resistance	2
Integration with existing HR systems, Data privacy and security concerns, Candidate scepticism or resistance,	
High costs of AI tools	1
Integration with existing HR systems, Data privacy and security concerns, Lack of understanding/training on AI	
tools	7

 Integration with existing HR systems, Data privacy and security concerns, Lack of understanding/training on AI tools, Candidate scepticism or resistance, High costs of AI tools
 1

 Integration with existing HR systems, Data privacy and security concerns, Lack of understanding/training on AI tools, High costs of AI tools
 1

 Integration with existing HR systems, Lack of understanding/training on AI tools, High costs of AI tools
 1

 Integration with existing HR systems, Lack of understanding/training on AI tools
 1

 Integration with existing HR systems, Lack of understanding/training on AI tools, Candidate scepticism or resistance
 1

 Integration with existing HR systems, Lack of understanding/training on AI tools, Candidate scepticism or resistance
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 Integration with existing HR systems, Lack of understanding/training on AI tools, Candidate scepticism or resistance
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 Integration with existing HR systems, Lack of understanding/training on AI tools, High costs of AI tools
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 Integration with existing HR systems, Lack of understanding/training on AI tools, High costs of AI tools
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 Integration with existing HR systems, Lack of understanding/training on AI tools, High costs of AI tools
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 Integration with existing HR systems, Lack of understanding/training on AI tools, High costs of AI tools
 1

 Integration with existing HR systems, Lack of understanding/training on AI tools, High costs of AI tools
 1

 Integration with existi

#### TABLE1.8 challenges faced in implementing AI tools in your recruitment process Source: Primary Survey Data



FIG 1.8 Challenges faced in implementing AI tools in your recruitment process Source: Primary Survey Data

INTERPETATATION Data Privacy and Security Concerns: Most prevalent, indicating organizations' apprehensions regarding candidate data protection.

Integration with Existing HR Systems: Emphasizes the importance of seamless integration to ensure efficient operations.

Lack of Understanding/Training on AI Tools: Underscores the need for education and training to effectively utilize AI tools.

Candidate Skepticism or Resistance: Indicates potential reluctance among candidates towards AI-driven recruitment. High Costs of AI Tools: Financial barriers that may hinder adoption.

Combined Challenges: Some responses cited multiple challenges, highlighting the complexity of issues faced.

Perceive the impact of AI and automation o opportunities within HR	n job
Will create more jobs	52
Will have no significant impact	3
Will reduce the number of jobs	14
Will transform existing jobs	54
Grand Total	123

 TABLE 1.9 perceive the impact of AI and automation on job opportunities within HR



FIG 1.9 perceive the impact of AI and automation on job opportunities within HR

Mean	23.66666667
Standard Error	15.49551907
Median	14
Standard Deviation	26.83902631
Sample Variance	720.3333333
Skewness	1.410521015
Range	51
Minimum	3
Maximum	54
Sum	71
Count	3
Largest(1)	54
Smallest(1)	3
Confidence Level (95.0%)	66.67183741

Perceive the impact of AI and automation on job opportunities within HR

Mean: The mean, or average, is calculated by summing up all the values and dividing by the count. In this dataset, the mean is approximately 23.67. It provides a central measure of the data's distribution.

Standard Error: This represents the standard deviation of the sampling distribution of the sample mean. It measures the accuracy of the sample mean as an estimate of the population mean. A smaller standard error indicates a more precise estimate. Here, the standard error is approximately 15.50.

Median: The median is the middle value of a dataset when it is ordered from least to greatest. In this case, the median is 14. It's less influenced by extreme values compared to the mean and is useful for describing the central tendency of skewed distributions.

Standard Deviation: This measures the amount of variation or dispersion in a dataset. A higher standard deviation indicates greater variability. Here, the standard deviation is approximately 26.84.

Sample Variance: The sample variance measures how much the value in a dataset vary from the mean. It's the square of the standard deviation. In this dataset, the sample variance is approximately 720.33.

Skewness: Skewness measures the asymmetry of the distribution. A positive skewness indicates that the right tail of the distribution is longer or fatter than the left tail, while a negative skewness indicates the opposite. Here, the skewness is approximately 1.41, indicating a right-skewed distribution.

Range: The range is the difference between the maximum and minimum values in a dataset. In this case, the range is 51. Minimum and Maximum: These values represent the smallest and largest values in the dataset, which are 3 and 54, respectively.

Sum: This is the total sum of all values in the dataset, which is 71 in this case.

Count: This represents the number of data points in the dataset, which is 3.

Confidence Level (95.0%): This indicates the level of confidence that the interval contains the population parameter, in this case, the mean. A 95% confidence level suggests that if the study were repeated multiple times, the calculated confidence interval would contain the true population parameter (mean) in 95% of the intervals. Here, the confidence interval is approximately 66.67.

Consider the biggest challenge in implementing AI in HR?	
Cost of implementation	51
Cost of implementation, Employee resistance to change	6
Cost of implementation, Ethical and privacy concerns	2
Cost of implementation, Lack of technical expertise	6
Cost of implementation, Lack of technical expertise, Employee resistance to change	7
Cost of implementation, Lack of technical expertise, Ethical and privacy concerns	1
Employee resistance to change	17
Employee resistance to change, Ethical and privacy concerns	1
Ethical and privacy concerns	5
Lack of technical expertise	25
Lack of technical expertise, Employee resistance to change	2
Lack of technical expertise, Employee resistance to change, Ethical and privacy concerns	1
Grand Total	124

Table 1.10 consider the biggest challenge in implementing AI in HR Source: Primary Survey Data



Fig 1.10 consider the biggest challenge in implementing AI in HR Source: Primary Survey Data

INTERPETATION The analysis highlights that lack of technical expertise and employee resistance to change are the most common factors influencing implementation. Ethical and privacy concerns also play a significant role, albeit to a lesser extent.

Understanding these prevalent challenges can assist organizations in resource allocation and strategy development to address these issues effectively during implementation processes.

#### SUGGESSTIONS Address Lack of Technical Expertise:

Since lack of technical expertise is frequently mentioned, investing in training programs or hiring individuals with the required technical skills is crucial. This can help reduce errors, improve efficiency, and minimise the need for external support, ultimately reducing costs.

### 1. Manage employee resistance to change:

• Employee resistance to change can significantly impact implementation processes. To address this, organisations should focus on effective change management strategies, such as clear communication, the involvement of

employees in the decision-making process, and offering assistance and instruction to facilitate the change.

- 2. Mitigate ethical and privacy concerns:
- To avoid potential legal or reputational issues, ethical and privacy concerns should be addressed proactively. This can involve implementing robust data protection measures,

ensuring compliance with relevant regulations, and fostering a culture of ethical behaviour within the organisation.

#### **3 Evaluate Cost-Effective Solutions:**

- Evaluate the cost-effectiveness of different implementation strategies and technologies. It's essential to balance the upfront costs with long-term benefits and consider factors such as scalability, maintenance requirements, and potential return on investment.
- 4. Collaboration and Cross-Functional Teams:
- Encourage collaboration between departments and stakeholders to identify potential cost- saving opportunities and streamline implementation processes. Cross-functional teams can provide diverse perspectives and expertise, leading to more effective problem-solving and decision-making.

## 5. Continuous Improvement:

• Establish a feedback-driven culture of continuous improvement. Actively solicited and used to refine implementation processes over time. This iterative approach can help identify inefficiencies and areas for optimisation, ultimately reducing costs and enhancing overall performance.

#### **Conclusion:**

An overview of the literature on intelligent automation in HRM was the aim of this presentation. To elucidate the originality of intelligent automation for HRM, we searched 131 HRM, GM, IB, and IM publications for possibly pertinent papers. Following the selection procedure, 45 articles that provided a summary of

This subject is cutting edge. This article provides some insight into how AI, robotics, and other cutting-edge technology are affecting HRM, albeit it is not comprehensive. Additionally, suggestions for further study were given, focusing on ways to use an international business perspective to broaden the field's theory and empirical understanding.

We all expect that our study's contribution will help to promote the next generation of research, which will be significantly expanded upon and confirmed in real-world settings.

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