

# The Impact of AI and Automation on HR Practices: Opportunities and Challenges

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## ABSTRACT

Among the most fundamental factors contributing to the development of artificial intelligence (AI) and automation in human resources (HR) practices as a major area for research is the technological growth that we are experiencing in our period also, the possibilities of its impact on the workforce. The purpose of this study is to investigate the advantages and disadvantages of AI and automation in HR practices. The study utilized a multi-method approach, including a literature analysis and a survey of HR experts from diverse businesses. The literature review investigates the current state of research into the impact of AI and automation on HR practices, while the survey examines HR professionals' adoption and views of AI and automation, their perceived benefits, and the problems they encounter.

The findings demonstrate that HR professionals are currently investigating the advantages and potential challenges of AI and automation in HR practices. Many potentials are identified in the research, including higher efficiency, reduced bias, improved decision-making, and improved potential matching. However, the report identifies a variety of issues, including the need for data privacy and security, eligible job replacements, and bias retention. The study also emphasizes the need of HR professionals cooperating with other stakeholders, such as IT and data privacy teams, to ensure the smooth use of AI and automation in HR practices. The study gives important insights on AI and automation adoption and perceptions in HR practices, highlighting the significance of digital literacy, teamwork, and ethical considerations in the effective integration of AI and automation into HR practices. This study has significant implications for HR professionals, policymakers, and enterprises interested in implementing AI and automation in HR practices.

## **Introduction**

The advancement of technology has resulted in the startling creation of artificial intelligence. Artificial intelligence is achieving previously unfathomable things, and its advancement is assisting humans in accomplishing a variety of tasks in a short period of time. The goal of AI is to replicate and override how people see and interact with the world around them. Which is quickly becoming the mainstay of innovation. By doing manual operations more effectively, engaging with clients, recognizing trends, and addressing difficulties. To get started with AI, developers must have a foundation in mathematics and be familiar with algorithms. According to IBM (2023) Artificial intelligence, is a subject that combines computer science with large datasets to solve problems. It also includes the subfields of machine learning and deep learning, which are usually cited in connection with artificial intelligence. These fields are made up of AI algorithms that aim to develop expert systems that make predictions or classifications based on input data. Artificial intelligence (AI) boosts organizational efficiency and productivity by automating processes or tasks that previously required human intervention. AI can also comprehend data on a scale that no human can. This capacity has considerable benefits over human resource practices, yet the downsides of artificial intelligence and automation also influence those practices. When AI is integrated into HR processes, it allows HR employees to focus more on the

strategic parts of the HR function while relieving them of regular HR tasks. Employees are aware of AI and how it is employed in HR procedures. Furthermore, while most employees prefer the use of AI in their company's HR practices, they are wary of some aspects of AI (Bahatt and shah, 2023).

## Literature Review

According to Ganeshan (2022) that AI defines contemporary business paradigms. It automates and completes the bulk of low-value HR processes, allowing the business's strategic focus to receive greater attention. Artificial intelligence (AI) is frequently employed in HR applications such as recruiting, onboarding, internal mobility, employee retention, and job automation. Artificial intelligence may assist HR workers screen prospects. Adoption of AI tools improves the application process for candidates by using more user-friendly models and experiences that attract top talent and ensure that interested parties complete their applications. The researchers agree with the author that the primary goal of artificial intelligence is to assist humans accomplish things more quickly and effectively. This does not mean that the percentage of AI errors has reached 0%, as it has for human errors, but it has decreased.

Singh and Shaurya (2021) stated that the key benefits of artificial intelligence are the removal of mundane activities and the quick quality. Similarly, the fundamental difficulty was a lack of training and technical capability. Some limitations of artificial intelligence make it less enforceable in the overall recruitment process and can call its validity into question. Artificial intelligence is expected to replace administrative responsibilities in both the recruiting process and human resource management in recruitment activities, which will interfere in the relevant aspect of the job and the employment results. Despite its capacity to present the best alternatives for job seekers in the organization, the researchers feel that work on the development of artificial intelligence is still ongoing, but it needs a full recruiting procedure. The growing use of iPaaS (Integration Platform as a Service) solutions in enterprises has raised the demand for efficient and customizable middleware systems to manage various types of data, including numerous use cases for AI and automation. Differences in data kinds are limits of such a paradigm. Such models are challenged by existing middleware best practices that focus on human resource (HR) data, as well as prospective AI applications in iPaaS architecture. When choosing an iPaaS solution for managing HR data and potential AI-driven strategies, consider factors such as data security, data governance, and usability (Datta, 2023).

In this day and age, teams need a collaborative manner to engage diverse competences and capabilities, from analysis through implementation and software product evolution. Without it, crucial features of confidentiality, integrity, and availability put information and software security at considerable risk throughout corporate operations. It is vital to emulate software development techniques while remaining focused on client demands. Teams may model the product throughout its lifespan in this manner, concentrating on making it simpler to give value to the client and having more assurance that requirements, plans, and outcomes are 100% aligned with customer demands (Neves and Araujo, 2023). Researchers argue that the essential elements of confidentiality, integrity, and availability must put information and software security at risk in the context of business operations. Organizations must invest in the protection of information and offer cyber security in the company, which has grown increasingly important as technology advances and spreads throughout the world. The researchers also believe that the availability of robust information security enhances the company's level and makes its competitive aspects stronger than its competitors.

## Methodology

This study will look into the positive and negative aspects of artificial intelligence and automation in human resource procedures. The study included a multi-method approach, which included a review of the literature and a survey of HR professionals from various firms. The literature review investigates the present state of research on the influence

of AI and automation on HR practices, whereas the poll investigates HR professionals' adoption and opinions of AI and automation, as well as their perceived benefits and challenges.

## Result and Conclusion

According to the findings, HR professionals are now investigating the potential benefits and problems of AI and automation in HR procedures. The research discovered several capabilities, including increased efficiency, reduced bias, enhanced decision-making, improved prospective matches, and automation of everyday duties in the HR department. The research does, however, identify a number of difficulties, such as the need for data privacy and security, the replacement of qualified employment, the retention of prejudice, and the inability to execute a thorough recruiting procedure. The report also emphasizes the need of HR professionals cooperating with other stakeholders, including as IT and data privacy teams, to ensure that AI and automation are used seamlessly in HR operations. The study sheds light on the use of AI, automation, and visualizations in HR practices, while emphasizing the necessity of digital literacy, teamwork, and ethical concerns in the efficient integration of AI and automation into HR practices. This study has significant implications for HR practitioners, policymakers, and enterprises interested in implementing AI and automation in HR operations.

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