**Review Paper** 



# Impact of Artificial Intelligence (AI) on Human Resource Management (HRM): A Cross Organizational Analysis

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*Abstract*— the study aims to emphasize the significance and requirements of artificial intelligence (AI) as a fundamental element for the effectiveness and efficient functioning of organizations. Human resource management (HRM), known for its dynamic and labor-intensive role in management, has embraced the utilization of AI to enhance efficiency and optimization in their operations. To comprehensively explore this subject, a wide range of case studies have been examined. The study relies on secondary data and employs a descriptive approach to align with the study's objectives and importance. Within HR activities, AI finds notable applications in Natural Language Processing (NLP) and robotics. Moreover, this research highlights how AI can alleviate the burdensome tasks associated with recruitment, training and development, and employee support, thus contributing to the organization's mission. Consequently, it can be inferred from this study that AI not only reduces human effort but also complements employee competence, thereby becoming a valuable asset for the organization.

Keywords — Artificial Intelligence, Competence, Human Resource Management, & Robotics

# 1. Introduction

Artificial intelligence (AI) is a revolutionary concept in the realm of Science and Technology, permeating every facet of our lives. While human intelligence remains indispensable in our daily existence, the development and implementation of artificial intelligence in today's world have contributed to solving a wide range of problems, opening up new frontiers, and paving the way for novel advancements. Just as human intelligence enables to think logically, make appropriate decisions, and effectively navigate life's challenges, the power of machines such as computers, mobile devices, and other electronic gadgets possesses inherent capabilities that address our cognitive issues, determine the outcomes of our actions, and yield specific and suitable results for every endeavor [11]. This research publication delves into the profound influence of man-made intelligence, leveraging the advancements in science and technology, known as artificial intelligence, and sheds light on its administration and application within social structures.

# 1.1 Significance of the Study

The primary objective of this research paper is to examine the influence of Artificial Intelligence (AI) on human resource management practices and the ways in which HR functions are leveraging its benefits. The advancements in Science and Technology have revolutionized the structure and operations of human and social organizations. AI has demonstrated

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superior capabilities compared to conventional cognitive abilities, effectively resolving persistent challenges and leading to a more enhanced, contented, and fulfilling life. It serves as a focal point, an immediate solution, and a rapid means of assistance, possessing exceptional intelligence. The integration of AI has become a prevalent trend across societies, as its absence hinders significant achievements. Given its impact on modern society and current organizational setups, it is crucial to assess the extent of its influence. Simultaneously, it is essential to explore the potential for its utilization and adaptation within key organizational frameworks in society.

# 1.2 Statement of the Problem

The field of HR is undergoing a transformative revolution through the application of artificial intelligence. However, the practical implementation of AI in HR comes with several challenges. Many employees harbor concerns about the use of artificial intelligence in their work environment. It is important to recognize that while robots have their place, they cannot fully replace humans in HR, especially when it comes to addressing sensitive workplace issues. Organizations employ human resource structures to optimize productivity and enhance employee performance. AI undoubtedly has the potential to modernize HR, overseeing talent management and improving the employee experience. However, it should not be seen as a complete substitute for human interaction, which remains at the core of all HR functions. Over the past

decade, HR as a function has undergone significant transformations due to technological advancements. Today, artificial intelligence is reshaping how companies approach hiring, managing, and engaging with their workforce. Alongside these advancements, several obstacles have emerged, including a lack of expertise in adopting automation, inadequate support for change management, and insufficient infrastructure for managing employee records.

# 1.3 Objectives of the Study

- To find out the extent to which Artificial Intelligence is Reinventing Human Resource management practices.
- To explore the use of artificial intelligence (AI) in select organizations.

# 1.4 Research Methodology

This research paper employs a combination of descriptive and applied research methodologies, drawing on a range of secondary data sources. The objective of the study is to comprehensively analyze and describe the subject matter. By addressing the limitations of existing concepts, the study aims to provide a meaningful conclusion. The sources utilized include books, research papers, published materials, and survey reports from reputable research organizations. The research also includes a case study approach to examine the application of AI in organizations, with a specific focus on companies like Amazon and IBM. Furthermore, the paper explores the impact of AI on HR operations within organizations, providing a descriptive evaluation of their functioning and the intervention of AI.

# 2. Related Work

The term "Artificial Intelligence" was originally coined by John McCarthy in 1956, who defined it as "The science and engineering of making intelligent machines" [1]. Artificial intelligence is a field of study that aims to make computers perform tasks better than humans. It involves tasks that require human intelligence, such as decision-making, calculation, problem-solving, and more. However, its current potential is limited due to the continuous improvement of computer science through inventions, experiments, modifications, and adaptations. As a result, there are some shortcomings in its use. For example, it may fail and have a significant impact in areas where any part of the system is absent or experiences a failure, including problems that neither humans nor computers can solve. Nonetheless, artificial intelligence shapes what we consider to be while simultaneously intelligence avoiding complete assimilation with philosophy. Philosophy has historically been the study of poorly understood branches of knowledge or areas that have not yet become separate disciplines in their own right. This distinction becomes even more intriguing in fields like mathematics or physics when they break off from philosophy as they advance. Therefore, it has been suggested that if AI succeeds, it can ultimately reduce itself to the empty set.

Artificial intelligence (AI) is an umbrella term encompassing areas such as machine learning and cognitive computing. It is

a branch of computer science focused on simulating intelligent behavior in computers. AI has found successful applications in visual perception, natural language processing, speech recognition, language translation, and other areas [2]. However, achieving true artificial intelligence has not been a simple task. Efforts in AI have faced periods of examination, judgment, criticism, and fluctuating government funding and interest in the field. The accomplishment of artificial intelligence has been controversial. Experts in the field have questioned the validity of the Turing test as a measure of true AI, as it only examines external behavior and does not necessarily capture the essence of intelligence. Some scientists are now working on developing an updated version of the test. Furthermore, the field of AI has expanded beyond the pursuit of humanlike intelligence. Various research papers have explored the applications and implications of artificial intelligence. AI technologies enable non-experts in data analysis to perform prompt data analysis [3]. The role of business intelligence and its uses in human resource management, highlighting the incorporation of business intelligence and data analytics features in HR modules [4]. The impact of robotics and artificial intelligence on business and economics is examined, with a focus on potential negative effects in banking, coaching, and customer relationship management [5]. The study investigates the symbiosis between humans and AI in organizational decisionmaking, highlighting the usefulness of AI in decision-making processes while acknowledging the importance of human evaluation and performance analysis [6]. Furthermore, the paper discusses the limitations of AI in human resource development, such as its inability to assess the costeffectiveness of training and the need for human intervention in data analysis [7]. Additionally, the research explores the role of AI in human resource management, proposing its application in recruitment, selection, data collection, and realtime information provision [8]. Lastly, the study delves into the intersection of innovation theory and artificial intelligence, emphasizing how continuous innovation revolutionizes the economic structure [9].

# **3.** Artificial Intelligence for Competence Human Resource Management Practices

The use of artificial intelligence has revolutionized various aspects of human resources practices by simplifying tasks and making complex processes more manageable. It not only simplifies work but also eliminates repetitive tasks that were previously handled by human resource managers. For instance, during the recruitment process, HR managers had to manually screen a large number of resumes, each with varying formats and content. This tedious and timeconsuming task can now be automated using AI, saving valuable time and resources. Artificial intelligence is capable of performing tasks beyond human capabilities, such as voice analysis. By analyzing recorded and real-time voices, AI can detect an employee's mood, which is believed to impact productivity. Recognizing whether a person is in a positive or negative mood can help organizations optimize their productivity levels accordingly. In the current era, as the world battles the COVID-19 pandemic, robots have assumed

the role of humans in various capacities. They educate the general public about preventive measures, reducing the risk of virus transmission. Robots have also alleviated the burden on medical practitioners, enabling them to focus on critical tasks. By replacing human workers in department stores and assisting in healthcare, robots have effectively reduced workloads and alleviated human stress. At least by 2020, at least 30% of global companies would incorporate AI into their sales processes. AI has also overcome language barriers, facilitating seamless communication between individuals from different countries. Translation and interpretation services powered by AI have made it possible for people to travel and interact without language hindrances. Moreover, AI has found applications in the hospitality industry, where it tracks guest preferences and information. This allows establishments to anticipate and cater to guest needs, providing a personalized experience. Additionally, AI aids administrators in identifying the most valuable customers and optimizing booking rates across various channels.

#### 3.2 Types of AI

Over time, artificial intelligence has undergone refinements and transformations, becoming an integral part of human resource management. Various types of AI have significantly impacted the field, streamlining processes and enhancing overall efficiency. They include:

#### 3.2.1 HR BOTS

The HR bot represents an intelligent business solution that leverages highly innovative and powerful technology. It goes beyond traditional Robotic Process Automation (RPA) and chatbots, incorporating sophisticated machine learning techniques. This advancement opens up new possibilities for promoting and enhancing overall firm productivity, tasks previously performed solely by humans [10]. As a result, it significantly reduces both time and delivery requirements. This groundbreaking discovery holds immense value for recruiters and HR administrators, as it simplifies basic HR duties, enhances efficiency, and enables professionals to focus on more complex responsibilities. The HR bot excels at information gathering, data compilation and storage, and even human-like communication, such as providing user directions. Moreover, HR bots offer numerous benefits encompassing enrollment, recruitment, onboarding, training, and payroll processes, all of which typically demand significant manual effort.

#### **3.2.2 Applications of HR Chatbots**

According to Oxford Dictionaries, a Chatbot is defined as a computer program designed to engage in conversation with human users, particularly over the internet. Chatbots have been proposed as a means to enhance communication with human users from the initial stages of their employment until retirement. The utilization of HR Chatbots encompasses various purposes, including the following:

#### 3.2.2.1 Recruitment

Chatbots play a crucial role in streamlining the recruitment process, especially in scenarios involving a large number of job applicants and information overload. These bots assist candidates by engaging with them and addressing their queries. For instance, they provide information on job roles, qualifications, and requirements. Organizations employ AI algorithms to screen thousands of job applications, utilizing data parsing and pattern recognition to identify the most suitable candidates, thereby minimizing hiring biasness. Additionally, Chatbots facilitate efficient communication by informing candidates about examination, interview, and joining dates, eliminating the need for traditional communication methods such as sending letters.

# 3.2.2.2 Learning and Development

Chatbots can serve as virtual tutors, assuming various teaching tasks such as answering questions, assessing performance, and filtering relevant information. Mentor Bots not only help in problem-solving but also encourage learners to independently solve problems. These bots track areas where learners frequently struggle and offer additional practice exercises in those specific areas or topics. Moreover, Chatbots engage learners through motivational feedback, congratulating them on correct assessments and informing them about related courses. They also maintain a record of frequently asked questions (FAQs).

#### 3.2.2.3 Employee Engagement or Sentiment Analysis

Chatbots have the capability to detect and analyze human emotions, utilizing advanced image processing software, voice recognition technology, and natural language processing. By discerning emotions such as fear, joy, and sadness, these programs can evaluate employee sentiments and engagement levels.

#### 3.2.2.4 Quick and Accurate Responses

Compared to humans, Chatbots are significantly faster in completing tasks. For instance, while screening job applicants with over five years of experience might take hours for a human, a Chatbot can accomplish the same task in less than a minute, with higher accuracy (WotNot, 2018).

#### **3.2.2.5 Bias Elimination**

By employing Chatbots in the recruitment process, organizations can reduce the potential for biased decisionmaking. Chatbots operate based on predefined criteria, minimizing the influence of subjective judgments that may lead to unfair practices. It is crucial to ensure the initial coding of AI systems is free from biases, as the technology can inadvertently inherit and amplify biases present in the creators' mindset.

#### 3.2.2.6 Delivery of Smart and Flexible Analytics

Chatbots facilitate the collection of valuable data by tracking conversations, whether through voice or messaging. This streamlines data collection for administrative purposes and equips organizations with the ability to analyze them in order to meet future needs.

#### **3.2.2.7 Simplified Billing**

Chatbots also contribute to increased efficiency in managing payroll and expenses. By automating processes such as transportation expense reimbursements, employees no longer

need to spend time filling out forms. The bots handle this task by sending notifications directly to the manager for approval and subsequent processing of the reimbursement amount.

# 3.2.3 Natural Language Processing (NLP)

Natural Language Processing (NLP) is an interdisciplinary field encompassing linguistics, computer science, information engineering, and artificial intelligence. It focuses on the interaction between computers and human languages, specifically programming computers to process and analyze natural language data.

NLP refers to the use of AI techniques for communicating with intelligent systems using natural languages like English. Processing natural language is crucial when instructing intelligent systems, such as robots, or when seeking decisions from dialogue-based clinical expert systems.

The field of NLP involves enabling computers to perform useful tasks using the natural languages humans use. An NLP system can accept various forms of input and produce corresponding outputs, including speech and written text.

# **3.2.3.1** Applications of Natural Language Processing include:

#### 3.2.3.1.1 Machine translation

This involves translating human language to a machineunderstandable language using algorithms. For example, Google Translate.

# 3.2.3.1.2 Voice recognition

Primarily used in computer games, mobile phones, and more, voice recognition software decodes human speech, replacing physical input methods and saving time while minimizing errors.

# 3.2.3.1.3 Sentiment analysis

Also known as opinion mining, sentiment analysis measures people's opinions to gauge satisfaction without requiring time-consuming questionnaires. It helps organizations improve performance by understanding customer sentiments and evaluating product and service ratings.

#### 3.2.3.1.4 Spell checking

Software tools that identify and correct spelling mistakes in text. Most text editors provide grammar and spelling error checking, highlighting mistakes and offering correction suggestions.

#### **3.2.3.1.5 Market Intelligence**

Smart badges and wearable devices within offices can collect valuable information, such as employee conversations and interactions. While this provides insights, privacy concerns should be addressed. Companies like Atmel are introducing machine learning HR apps for Android phones, enabling behavior tracking and facilitating communication analysis between departments, like marketing and HR.

# 3.2.4 Robotics

A robot can be defined as a machine that possesses the ability to move independently, resembling a living creature. It can achieve this through various means such as using a wheelchair or walking, similar to humans. Furthermore, robots are capable of performing complex tasks, just like humans. Another definition of a robot is a device that carries out intricate and often repetitive tasks, typically guided by automatic controls, such as those found in industrial assembly lines. According to the Oxford dictionary, a robot is described as a machine that resembles a human and performs mechanical, routine tasks on command, or as a person who behaves and responds in a mechanical, routine manner, often subject to the will of others. The study of robots is known as robotics.

Unlike humans, robots have the remarkable ability to work tirelessly, without requiring additional compensation and without succumbing to fatigue when faced with excessive workloads. They have significantly simplified HR processes, with Robotic Process Automation (RPA) being applied in the human resources industry to automate tasks such as candidate hiring. Robots like Blue Prism and UiPath have been implemented to reduce the workload for HR personnel by performing tasks accurately, much like humans. Previously, these robots operated at the level of computer programming code; however, in recent times, they can be operated by anyone, as tasks can be executed with a simple mouse click. RPA combines HR core system data fields, cloud-based software fields, and desktop applications like Excel into a streamlined, standardized, and automated process.

It's important to note that robots do not make all decisions in this context. They do not replace humans but rather handle repetitive and clerical actions. Robotic Process Automation refers to the process of assigning mundane and tedious jobs, such as data entry and spreadsheet creation, to robots instead of humans.

#### **3.3 Applications of Robotics 3.3.1 Employee Relations**

Robots play a crucial role in managing relationships between employees and employers by ensuring fair and consistent treatment for all employees. They eliminate nepotism and favoritism, promoting a merit-based system that rewards capable and hardworking individuals. By removing bias, robots contribute to increasing employee retention and job satisfaction. Moreover, they provide invaluable insights into employee satisfaction levels, enabling companies to take proactive measures to retain talent.

#### **3.3.2 Training and Development**

Robots streamline information across various systems, offering comprehensive training to newly hired employees or those unfamiliar with recent trends and technologies.

# 3.3.3 Recruiting and Hiring

Robots assist in assessing, preparing, and managing new joiner data by screening CVs and online applications. They handle candidate inquiries and notifications for interviews, rejections, and feedback. Research indicates that robots can make more effective hiring decisions compared to experienced HR professionals.

#### **3.3.4 Benefits and Compensation**

Robots enhance productivity, accuracy, and efficiency in managing benefits and compensation. They help prevent costly mistakes, ultimately contributing to improved organizational outcomes.

#### 3.3.5 HR Generalist Activities

In major factories, robots are deployed in production and assembly lines to reduce reliance on human resources. This approach saves both time and costs. Additionally, robots possess a significant advantage over humans in terms of data analysis capabilities.

### 3.4 How AI can be used In HR

The use of AI in HR can appear throughout the talent lifecycle.

#### 3.4.1 Attraction

Candidates are drawn to specific jobs that match their skills and qualifications, with recruiters leveraging chatbots to facilitate the process. These chatbots act as HR representatives, conducting interviews and responding to general and personal inquiries using natural language processing. This eliminates the need for candidates to directly face recruiters during interviews.

#### 3.4.2 Hiring

AI enables faster, transparent, and accurate selection of the best candidates, eliminating issues of nepotism or bias. By deploying AI, organizations can improve the effectiveness and efficiency of their recruitment processes.

#### 3.4.3 Engagement

AI analyzes social media content and surveys from within the company to assess employee engagement. By leveraging this data, organizations can identify opportunities and make informed decisions about their workforce based on information gathered from group interactions and social media conversations among team members.

#### 3.4. 4 Retentions

AI not only enhances employee engagement but also contributes to employee retention by recording performance metrics, skills, and areas of expertise. Through this data, deserving candidates can be identified and rewarded with bonuses and promotions, thereby reducing bias in compensation.

#### 3.4.5 Development

In today's dynamic world, continuous knowledge and skill development are essential. AI facilitates individual learning by providing easily accessible resources such as online courses and open learning platforms. Dashboards track individual progress and identify gaps in the business to help achieve organizational goals.

#### 3.4.6 Growth

Continuous development minimizes limitations and weaknesses, increasing the likelihood of organizational growth. Through ongoing learning and skill enhancement, organizations acquire the ability to handle previously lacking competencies.

#### 3.4.7 Service

Unlike humans who have limitations in terms of working hours and breaks, AI can operate 24/7 without interruptions. Chatbots exemplify AI's continuous availability, working day and night. They continuously learn from feedback, particularly through frequently asked questions (FAQs), and improve their performance based on the suggestions provided.

# 3.5 Practical Implication of AI

Artificial intelligence (AI) finds applications across diverse sectors and is utilized by professionals in different fields to enhance their operations.

#### 3.5.1. Information Technology

AI revolutionizes data collection processes, saving time and increasing organizational efficiency and effectiveness. Modern software plays a crucial role in refining complex programs, employing techniques such as object-oriented or symbolic programming.

# 3.5.2. Marketing

AI improves decision-making for higher-level management, leading to enhanced efficiency. Market forecasting has become quicker and less resource-intensive in the current era. With the advent of social marketing platforms and online shopping, buying and selling products have become more convenient, irrespective of geographical location. AI streamlines business processes, simplifies operations, and improves product quality and cost through automation.

#### 3.5.3. Finance

AI enhances efficiency through data mining techniques, simplifying market analysis. Organizations can evaluate their strengths, weaknesses, opportunities, and threats more easily. AI empowers individuals to make investment decisions in various sectors with greater confidence and insight into performance risks.

#### **3.5.4. Human Resources**

AI is particularly useful in hiring and recruitment processes. Organizations employ chatbots to save time, ensure unbiased candidate selection, and facilitate decision-making and appropriate actions. Real-time learning and information extraction are possible at any moment.

#### **3.5.5. Operations**

AI enables accurate delivery and manufacturing processes, facilitating smoother retail operations. Learning has evolved from traditional offline methods to online education, making it more accessible and advanced. AI has simplified healthcare operations, allowing patients to receive faster treatments as receptionists spend less time gathering patient information, especially for returning visitors.

### 3.5.6. Aviation

The tourism and travel sector benefits from AI and the internet in various ways, such as booking flights and hotel

rooms. Online apps eliminate the need for long queues, enabling travelers to make bookings with just one click. AI is also employed in air traffic control, providing pilots with valuable insights into aircraft performance and operations.

# 4. Case Studies

4.1. The use of artificial intelligence (AI) in select organizations

The Case studies on the practices of main companies and organization in different countries which used AI to make their work simpler and more accurate are analyzed and may be concluded as:

# 4. 1Robotic Process Automation (RPA)

As per research study by Everest Group, 2018, the different stages of adoption maturity think and what they could specifically considered to be the be a best fit enterprise solution are shown in the following paragraph.

HR department slashed processing time by 85% in four months. RPA software provider UiPath reports the success of a Swiss insurance provider's HR department. Six staffers were manually processing 100,000 events every month, with a handling time that averaged 60 hours. Within 7 weeks of RPA implementation, they slashed processing time by 85%, reduced their error rate to zero, and cut manual work by 25%. They realized their ROI in 4 months.

New hire onboarding task time reduces by 90%.Before HR RPA, a global IT firm required a half-hour for each new hire to complete onboarding forms. They suffered low accuracy rates because of repeated human errors in processing. After implementation the same task took 10% of the original time, and errors were reduced to zero. This solution was 100% scalable, with the added benefit of easy expansion during seasonal hiring spikes.

# 4.2 Amazon Delivery

Amazon have drones manning their warehouses and they also plan to do door delivery of goods using drones in the future.

In the case of healthcare, robot-assisted surgeries are highly common these days, we also have robots taking the role of general physicians by imbibing all the knowledge that are essential to analyze patient cases and take necessary actions. Artificially intelligent healthcare chat-bots could evolve to treat many common ailments.

A company called Alexander Mann Solutions uses a robot that goes by the name of Doris that is able to go through 72,000 candidate documents in a record time of 48 hours, whereas 10 people doing the same task would need two entire months to complete it.

# 4.3 International Business Machines Corporation (IBM)

According to a case study conducted by Nigel Guenole, Ph.D., and Sheri Feinzig in 2018, IBM's primary objective was to establish a meaningful environment for job seekers from their initial interaction. They developed Watson Candidate Assistant (WCA), allowing job seekers to engage with IBM easily. In a trial study comparing WCA to a traditional static website, the conversion rate from exploration to application was 36% for WCA, compared to 12% for the traditional website. WCA also received higher Net Promoter Scores (NPS) and significantly reduced the time from application to interview. IBM also created "YOUR Learning," a personalized digital learning marketplace visited by 98% of its employees. A learning chatbot within this platform answers queries, enhancing overall performance and skills.

IBM incorporated AI skills inference, enabling employees to access their skill profiles through an expertise management interface. This empowers workers to monitor their skills, identify gaps, and bridge them to align with business needs. The accuracy of this process ranges from 85% to 95%.

Additionally, IBM introduced Watson Career Coach, an expert system that offers career advice to its employees. This system utilizes natural language processing to understand the desires, preferences, and frequently asked questions of candidates, providing personalized suggestions. IBM's chatbot handles up to 700 questions per day, aiming to provide quick and accurate responses to employee inquiries while reducing HR's time and effort.

IBM's funding for AI initiatives involves evaluating ideas and selecting the most promising ones. The proposals are reviewed and approved by the CHRO (Chief Human Resources Officer), and the HR team collaborates with different business lines to secure funding based on the business case projections. IBM aims to maintain a flat budget while reinvesting savings to grow its AI capabilities and the associated benefits.

# 4.4 The KORE.AI Bots Platform

It is a groundbreaking enterprise-grade conversational AI solution that offers end-to-end functionality. It stands out as the first and only platform of its kind in the industry, enabling the design, creation, training, testing, and hosting of AI-powered bots. Widely recognized as the leading choice for business communication channels, KORE.AI bots facilitate valuable insights into the perspectives and experiences of employees, suppliers, customers, and partners. By fostering human-like conversations between users and bots, it successfully tracks and captures crucial feedback.

This innovative platform boasts an omni-channel approach, allowing businesses to engage with customers regardless of their location. With AI-powered bots that adapt to unique operational requirements, KORE.AI serves a diverse range of industries such as banking, internet and communication technology, travel and hospitality, medicine, and media entertainment. The capabilities of KORE.AI extend beyond traditional boundaries, enabling it to perform various functions across sectors including IT Service Management, Human Resources, Sales, Marketing, and even Finance..

# 5. Results and Discussion

The research paper examines the current state of Artificial Intelligence (AI) and its implications for HR departments. It

emphasizes that AI is still in the early stages of development and highlights the rapid pace of technological advancements facilitated by the internet.

The paper identifies the limited technical skills in HR departments, particularly in relation to AI usage in selection and recruitment processes. While AI has shown promise in these areas, it faces limitations such as repetitive questioning and an inability to assess candidates' intelligence levels. Additionally, AI struggles to determine appropriate actions for situations like employee absences.

Furthermore, the paper emphasizes that HR departments often struggle to leverage the massive amounts of data they collect. Only HR professionals with technical expertise can effectively apply technology to HR functions and learning and development applications. To attract and retain employees, HR departments must embrace both AI and human elements in their strategies.

The paper highlights the lack of preparedness in HR departments to manage a mixed workforce. It cites a Microsoft study showing that only 8% of HR professionals in the UK believe their organizations have an AI strategy. The author calls this a concerning statistic, indicating a disconnect between HR professionals who understand the benefits of AI and those who translate this understanding into action. HR should play a vital role in helping organizations prepare for the future of work, incorporating new ways of learning and training to enhance employee productivity and consistency across tasks and roles.

The paper suggests that HR processes can be automated to a greater extent, citing a study by Ernst & Young revealing that HR employees spend 93% of their time on repetitive tasks. It also highlights that 65% of HR rules-based processes have the potential to be automated. The study by Oxford University predicts that approximately 47% of jobs could be replaced by robots within the next 17 years, emphasizing the increasing reliance on robotics in various aspects of life.

The paper mentions Amazon's approach to human-robot collaboration, highlighting that the future will see more packaging designed specifically for robotic handling. The integration of new technologies enables HR professionals to improve efficiency, effectiveness, and user experiences in areas like hiring decisions, employee development, and team performance evaluation. While technologies cannot make subjective judgments, their utilization can help organizations achieve their goals and adapt to new challenges.

The paper summarizes important findings from various studies, including the relationship between AI and management/organization, the role of AI in decision making and dealing with uncertainty, and its usefulness in helping HR professionals understand their work and identify problems and trends in advance.

In addition, the paper highlights the positive reception of AI by workers, with a majority expressing optimism and

excitement about having robot co-workers. However, it notes that there are differences in how men and women perceive AI at work. The research also emphasizes that AI integration into HR practices can lead to better decision-making through analysis, prediction, and diagnosis.

The paper mentions the progress of AI as a whole and its impact on various fields, such as control and economics. It provides examples of AI applications and highlights the agent perspective, which has brought AI closer to other disciplines. A cautionary note is raised regarding the potential pitfalls of AI in HR. The paper suggests that big companies must consider potential repercussions, such as replacing and demotivating managers. It cites IBM's AI-powered performance system as an example that combines AI insights with human decision-making to maintain motivation and managerial involvement.

Finally, the paper stresses the importance of cautious implementation of AI in HR, as it can lead to misuse of data and other fraudulent activities. It advises HR professionals to consider factors such as reliable learning data sets, appropriate implementation approaches, clarity, bias elimination, and unintended consequences.

# 6. Conclusion and Future Scope

Artificial Intelligence (AI) is widely regarded as the future of the business world. However, in our current era, we have become increasingly reliant on AI for every aspect of our operations, from the smallest tasks to the most complex undertakings such as employee recruitment and taking appropriate actions. Therefore, organizations, whether they are institutions or businesses, need to embrace and adapt to the latest generation of AI technologies. Specifically, the human resource department of an organization plays a vital role in educating employees about the benefits of AI. It is crucial for humans and technology to work hand in hand to accomplish organizational goals.

AI not only simplifies the work of HR professionals but also reduces their workload. It eliminates routine HR tasks, allowing them to allocate their time and effort towards more critical and high-priority responsibilities, such as analyzing data that requires human involvement and cannot be replaced by machines.

While AI is transformative, it cannot completely replace the human effort involved in HR functions. Therefore, leaders should develop strategies that empower recruiters and help them adapt to technological advancements. AI empowers recruiters by making them more intelligent and efficient, significantly enhancing the hiring process.

# **Conflict of Interest**

The authors whose names are listed certify that there are NO affiliations with any entity financially in the subject matter or materials discussed in this manuscript.

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#### **Authors' Contributions**

The author demonstrated initiative by conducting a comprehensive study to understand and examine the impact of AI in Human Resource Management. The study involved a thorough investigation and comparison of various organizations. To make the study more interesting and radicle case study methodology is being adopted.

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**Berechah Myrchiang** earned her MBA with HR specialization, she has a good corporate experience from Bandhan Bank as a customer relationship officer where she work there for one year and is currently engaged at ISBT Shillong, where she holds a reputed position as supervisor. Apart from academic



success, she is interested in music, gardening, travelling and sightseeing.



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