

OVERVIEW OF CHALLENGES AND OPPORTUNITIES OF USING ARTIFICIAL INTELLIGENCE IN HUMAN RESOURCE MANAGEMENT PRACTICES

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Abstract

Human capital is a crucial requirement in this competitive globe to boost the work places' effective performance. In order to increase the workers' performance and stand out from the competition, firms must work to adopt innovative human resource practices. In very near future, human resource management (HRM) will transition from conventional human resource management practices to most advanced practices like augmented intelligence, automation, robotics, and artificial intelligence (AI). This literature analysis was conducted to examine the potential opportunities and challenges of practicing artificial intelligence in HRM. The proliferation of AI-based HRM practical over the past ten years has provoked a delightful new series of researches under the topics of the consequences of AI adoption on both human and corporate results, and the assessment of AI-based HRM practices. The way we work is organized in businesses as a result of the adoption of these technologies. AI has the power to fundamentally decide how we live or life and work. The AI facilitates the HRM with both an opportunities and challenges. Today's HR experts are more focused on maximizing the interaction between human and automated work to provide a straightforward and understandable working environment which provide an adequate time to improve their performance. The true challenge now is how each HR department will retrain and transform their employees to grasp AI and collaborate and interact with AI and advanced machines in order to optimize their performance. In order to present a conceptual overview of AI and its favourable and unfavourable impacts on human resource, this paper will concentrate on the opportunities and challenges of using AI in Human resource management. This is done by investigating numerous journals and published articles on the emergence of artificial intelligence.

Key Words: Artificial Intelligence, Human Resource Management, Augmented Intelligence, Robotics, Automation

Introduction

Artificial intelligence and machine learning have become more and more common in almost every sector, including banking, marketing, biotechnology, healthcare, and communications, among others. Now, we

are starting to see them applied in the human resources sector as well. The way businesses manage their staffs and develop HR strategies is changing, which boosts productivity and employee engagement. Any HR department's top priority is to manage the workforce while concentrating on the rules and procedures that will improve employee performance.

AI offers to accelerate this process by relying more on the analytical analysis of data instead of individual observations. Because of the emerging severe competition in the business world, it is essential to use a computer to stay competitive despite human limitations. This is true regardless of one's intelligence level. Employers are looking for youthful, tech-savvy individuals who are confident taking initiative and transparently sharing information for the benefit of the business.

While the organization striving to apply the Artificial Intelligence on their organization's Human resource management rapidly, they can observe the potential opportunities to develop their business further the same time they must face the respective challenges creating by the AI and other technology applications. This study analyses the potential opportunities and challenges of using Artificial Intelligence in Human Resource Management by analysing the literature.

Problem Statement

Artificial Intelligence (AI) is become one of the most important terminologies in every sector specially in Human Resources Management and it has turn into a top priority for most of the companies to make ease of the HRM practices. AI is used extensively in HR, including in hiring, training, onboarding, performance analysis, retention, and other areas. Therefore, the intention of this concept research study is to be understanding the possible opportunities and challenges of using AI in HRM Practices.

The connection between Artificial Intelligence and Human Resource Management has been at the forefront of numerous research in the world. In spite of the importance of artificial intelligence on using HRM practices, there is very much narrow published works that overviewing the opportunities and challenges of artificial intelligence on using HRM practices. Hence conceptual research on AI using in HRM practices has turn out to be a research area of much prominence in today's background. As a result, attention was positioned on this topic and the research problem under the topic is as follows: Overviewing the opportunities and challenges of using Artificial Intelligence in Human Resource Management practices”

Objectives of the Study

- ✓ To understand the relationship between Artificial Intelligence and Human Resource Management
- ✓ To explore the opportunities and challenges of using Artificial Intelligence in Human Resource Management practices

Literature Analysis

Artificial Intelligence (AI)

Artificial intelligence (AI), which is a rapidly evolving technology that has been made possible by the internet, could soon have a substantial impact on how we live our daily lives, claims Tecuci (2012). According to Nilsson (2005), "human-level AI" refers to the idea that machines should be able to carry out most of the tasks that human intellect requires.

Although AI has been present for a longer period of time, the concept still lacks an one accepted definition (Legg & Hutter, 2007). According to the Oxford Dictionary (2019), an artificial is a substance that is "produced or manufactured by humans neither happening naturally, especially as a duplicate of something natural."

Human Resource Management (HRM)

Schemerhorn (2001) defined HRM as the process of obtaining and developing a qualified workforce to support the organization in attaining its objectives, including its mission, vision, and numerous present ones. Another definition of human resource management (HRM) states that it is a method of managing staff that attempts to keep a workforce that is capable and committed by utilizing a variety of tactics, such as cultural, structural, and personnel ones, to provide the company a competitive advantage (Storey, 2004).

Artificial Intelligence and Human Resource Management (AI and HRM)

According to 2019 research report, infographic and visual design software provider Venngage stated that 61% of organizations were utilizing AI to improve HRM (Rykun, 2019). The huge time-needed and labor-intensive practices in recruiting, such as reviewing numerous CVs, sorting them, and quickly selecting the top prospects, and determining which employees require what kind of training are some of the main HRM sectors that have already been altered by AI (Rykun, 2019). The time-consuming and labor-intensive processes in recruiting, such as reviewing numerous CVs, sorting them, and quickly selecting the top prospects, and deciding which employees need what kind of training are some of the main HRM sectors that have already been altered by AI (Rykun, 2019).

Developed countries, and in the Global South (GS), particularly in developing economies are seeing the potential value of AI as an important tool to enhance HRM strategy and workers' performance (Ghosh and Rajan, 2019).

Kapoor (2010) looks at the purpose of business intelligence and how it relates to human resource management. A researcher examined the business intelligence and data analytics components present in human resource management modules by examining the leading provider of business intelligence for this study report.

The role of artificial intelligence in human resource management. The majority of firms, according to Jain (2018), use modern technology for various HR operations, such as hiring, performance reviews, and cloud-based HR solutions.

Buzko et al, (2016) consider the limitations of AI in the side of human resources, where they observe that AI is difficult to determine the effectiveness of training expenses. The authors of the research report emphasized that artificial intelligence technologies make it easier for humans to quickly analyse data.

The title of Jarrahi's(2018) research paper is Artificial Intelligence and the Future of Work: Human-AI Symbiosis in Business Decision Making. The study papers covered the benefits of AI for people. Organizations have benefited from the use of artificial intelligence in decision-making, ambiguity management, and notably equivocal judgments. However, humans remain an essential component of an enterprise, and technologies must rely on them to assess and facilitate the results of judgments made subconsciously.

Merlin and Jayam (2018) The functional role of AI in human resources is discussed in the research paper, Artificial Intelligence in Human Resource Management. An author has concluded that AI is useful in the organization and helps HR professionals in comprehending their duty and forecasting problems and trends.

According to Nilsson (2005), "human-level AI" refers to the idea that machines should be able to carry out most of the tasks that human intellect requires.

Humans and learning robots are producing an increasing amount of HR data in the cloud, and the use of artificial intelligence analytics improves understanding of how to execute and function. The success of any organization depends on its capacity to strategically combine people, processes, and technology in order to provide revolutionary value at a competitive price.

Many of back-office work tasks can be successfully automated with AI to confirm dependable HR transactions and service providing. This article focuses on idiomatic AI capabilities for HR transactions and offers information on intelligent automation using a chatbot that is not dependent on any particular technology. The use of AI in HRM and hiring is known as "the new age of HR," as it changes the recruitment sector by taking over every day duties previously performed by human recruiters (Upadhyay & Khandelwal, 2018).

It is plainly clear from Scott W. O'Connor's article Artificial Intelligence in Human Resource Management (2020) that artificial intelligence will continue to have a positive impact on the field of human resources management in the years to come. Furthermore, HR professionals need to be more aware of the challenges they can face. Therefore, professionals should make the necessary efforts to learn about the most recent advances in the business and to form a strong foundation of HR knowledge upon which they may build in order to be prepared for the future of human resource management.

Prasanna Vatsa and Kusuma Gullamji (2019) The integration of HR procedures with AI-based applications would undoubtedly have a better impact on boosting organizational performance, it is said in the study "To Study the Impact of Artificial Intelligence on Human Resource Management."

The study shows that AI is used extensively in HR, including in hiring, training, onboarding, performance analysis, retention, and other areas. However, due to the high cost of incorporating AI into HR operations, many firms are still lagging behind. The use of AI in HRM and recruiting is known as "the new age of HR," as it transforms the recruitment sector by taking over routine duties previously performed by human recruiters (Upadhyay & Khandelwal, 2018).

Methodology

The goal of the authors' study technique is to provide a comprehensive evaluation of the opportunities and challenges associated with utilizing artificial intelligence in human resource management practices. To this end, they have adopted a systematic literature review strategy. Inspired by the aforementioned study objectives, the authors included studies that looked at how artificial intelligence (AI) affects HRM practices both nationally and internationally.

Based on the focus, several targeted keywords about robots, artificial intelligence, and HRM techniques were added to the search string using the Boolean operators "OR" and "AND." This evaluation was conducted using the following keyword search algorithm: ("robotics" OR "artificial intelligence" OR "AI" AND ("human resource practices" OR "human resource management" OR "human resource management functions" OR "HRM Practices").

The authors refined the preliminary research findings and used the search algorithm on all search engines (including Base, Google Scholar, Research Gate, Semantic Scholar, SCOPUS, and others) to locate full-text, peer-reviewed English-language publications within the 2015–2022 timeframe.

Given that the research involves conceptual literature review analysis, out of the 100 papers that were downloaded, 80 could be screened out because 20 of them were deemed irrelevant. The screened papers state that the authors carefully consider each of the 80 and provide a summary of the advantages and disadvantages of utilizing AI in HRM.

In this research paper, Artificial Intelligence is abbreviated as AI and Human Resource Management is abbreviated as HRM.

Discussions and Findings

Opportunities

Despite the lack of research on AI-HRM, contemporary breakthroughs in automation technologies offer significant advantages for HRM (Bersin & Chamorro-Premuzic, 2019; Maedche et al., 2019; Prikshat et

al., 2021). Organizations from both local and multinational corporations (MNEs) have acknowledged the benefits of AI-based tools and tactics to enhance employee satisfaction, commitment, and job engagement (Castellacci & Vias-Bardolet, 2019).

According to a study of the use of automation technologies in HRM (Castellacci & Vias-Bardolet, 2019), there is still insufficient understanding of how AI-enabled HRM activities affect individuals, their job outcomes, and overall organizational outcomes. It is also vital to show how these AI-focused HR solutions maximize positive outcomes while minimize negative ones. As a result, we argue that the social-technological framework can be enhanced even more to produce positive outcomes. Examples include adaptable organizational design, suitable training, anxiety and change management, and staff upskilling. We further argue that it is crucial to include unique personnel traits like personality and emotional intelligence since they have an impact on business outcomes (Huang et al., 2019).

The most crucial benefit of these AI-focused HRM is that they improve employee outcomes including job happiness, commitment, employee engagement, and involvement, which in turn boosts employee performance (Aouadni & Rebai, 2017; Azadeh et al., 2018; Castellacci & Vias-Bardolet, 2019).

According to Castellacci and Vias-Bardolet (2019), workers can utilize the internet to develop practical life expectations and impressions of their working environment as well as to advance their skills and training. AI applications can also provide relax to human resources and time for a number of forecastable and daily tasks (Maedche et al., 2019).

However, the literature also highlights how these automated technologies may have a negative impact on workers. An organization must deal with negative employee effects such as job insecurity, high employee turnover intentions, higher stress, and negative attitudes and behaviors toward newly adopted technologies. Additionally, difficulties related to employees' well-being at work are brought up by how they engage with internet use (Castellacci & Vias-Bardolet, 2019).

According to research on the implementation of AI-enabled HRM, it increases productivity, lowers costs, improves operational efficiency (such as flexibility, scalability, safety, and dependability), and fosters customer engagement and loyalty (Botha, 2019; Lu et al., 2020; Prentice & Nguyen, 2020; Ransbotham et al., 2017; Tarafdar et al., 2019). Additionally, AI can increase returns on investment by making the company more cost-effective (Torres & Mejia, 2017).

The other business-productivity outcome of AI technology is cost-effective service excellence (CESE), which refers to firms that are simultaneously among the best performers in their competitive market regarding customer satisfaction and productivity. Examples of companies that have achieved the CESE milestones include Singapore Airlines and Amazon, one of the biggest online merchants in the world. Emerging technologies like artificial intelligence (AI), big data, machine learning, mobile technology, the Internet of Things, geotagging, virtual reality, speech recognition, and biometrics offer a wealth of opportunities for

significant service innovations that could simultaneously enhance customer experience, service quality, and productivity (Wirtz, 2019).

The other two examples, service robots and AI, are likewise anticipated to offer remarkable economics of scale and scope because they only incur significant costs during their development phases. Robots deployed at information counters, however, come at a low cost, while fully virtual robots (such voice-based chatbots in an app or on a website) cost almost nothing more. Robots are capable of gathering data from a wide range of sources, including the internet, cameras, microphones, sensors, and CRM and organizational knowledgebase systems. The robot can deliver highly customized and individualized service on a large scale at a low marginal cost by using biometrics (facial and voice recognition technologies) to identify a customer (Wirtz, 2019).

Challenges

Although the 4IR changes how major operations are carried out in organizations, it is yet unclear how well it will affect the people, processes, systems, and structures of those organizations. More research examines the negative effects of implementing automation-based technology at work. For instance, Dwivedi et al. (2021) predict that 70% of commercial activities will have incorporated AI technology into their production or business processes by the year 2030.

Furthermore, according to academics, AI, robots, and algorithms might replace 57% of current occupations in the OECD. As a result, most organizations are under pressure to make progress in developing AI data analytics skills (Brougham & Haar, 2020).

Brougham and Haar (2020) discovered in their research that the possibility of technology disruptions increases employee job insecurity and, as a result, increases intents to leave their jobs. Additionally, they contend that when there are fewer choices for career mobility, employees experience less technology interruptions. This study also claims that although workers quit companies, turnover has negative consequences, such as low employee job satisfaction.

Therefore, according to a number of studies, employees become more afraid of technology improvements in the workplace because they may negatively affect their responsibilities and occupations. Another major obstacle to properly incorporating modern technology in the workplace is employees' negative attitudes about technological advancements (Brougham & Haar, 2020). Therefore, the question of how to allay employee anxiety around the adoption of new technologies in HRM tasks must be addressed.

Conclusion

This research study makes it abundantly clear that AI has a significant impact on HRM practices in both positive and challenging ways. AI must cooperate with HRM practices in order to prosper in the new

environment. As a result, AI's difficulties must be addressed and its opportunities must be properly tapped.

According to this study, literature analysis gives HR practitioners the right understanding of how AI interacts with HRM practices and aids in the creation of comprehensive HR plans that will improve HR administration across the board.

Future Research Direction

- ✓ Researchers can be able to be extended conceptual literature review to qualitative and quantitative methods to analyze the impact of AI on HRM practices.
- ✓ Researchers focus on specific HRM practices or HRM functions and how it influenced by AI.
- ✓ Researchers put more concentration on different AI tools and techniques and how it individually benefited towards the HRM practices.

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