Revolutionizing Human Resource Management: The Transformative Impact of Artificial Intelligence (AI) Applications

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Abstract

Globalization has increased technology worldwide, forcing organizations to stay competitive. HRM has become increasingly important, especially in attracting new talent with valuable skills and knowledge. Technological advances can optimize human-dependent tasks. Thus, evaluating and analyzing how technology may affect Human Resource Management (HRM), particularly recruitment, is crucial. This study examines how technology advances, particularly in AI, affect recruitment. This study examines how artificial intelligence (AI) could improve recruitment. This study also examines the possible effects of integrating artificial intelligence (AI) into recruitment and identifies suitable implementation areas. This qualitative study used semi-structured interviews to acquire data. Eight multinational firms from various regions participated in this study. This study uses interpretivism, an inductive research philosophy. According to the research, only a few companies have fully integrated AI into their recruitment processes. Pre-selection, candidate communication, and application feedback are the best aspects of traditional recruiting for AI integration. AI's main benefits were greater efficiency and quality of work, especially in eliminating repetitive and tedious tasks. The biggest challenge was organizations' readiness to adopt and integrate new technology.

Key words: Artificial Intelligence (AI), Human Resource Management (HRM), Recruitment

Introduction

Globalization poses obstacles to corporate practices. The advancement of technology has led to a reduction in the perceived size of the world. Hence, corporations must engage in global competition (Erixon, 2018). In order to maintain a competitive edge, firms must embrace and integrate emerging technology into their operations. Human Resource Management (HRM) encompasses several aspects: recruitment, training, employee relations, and organizational growth (Wall & Wood, 2005). Every business should utilize the knowledge and expertise of its people resources. Presently, engaging in recruiting and retaining these specialized professionals is imperative. Human resources (HR) plays a crucial role in the functioning of a firm, thus making the recruitment of HR professionals essential (Kaushal, et al., 2023). According to Tan and Alshaikhe (2023), internet recruitment is supplanting the laborious and paper-intensive recruitment process. The integration of HRM and technology has been the subject of numerous studies primarily focused on technological advancements. Numerous scholarly investigations have examined the potential of technology to enhance the recruitment process (Galanaki et al., 2019). The increasing prominence of automation and other technologies that cater to the needs of recruiters is being seen.

According to Bondarouk and Brewster (2016), there is a growing trend towards impersonal recruitment processes. Baxter provides a projection of anticipated recruiting patterns for 2019 based on data and analysis conducted in 2018. According to Sun (2020), using predictive analytics and artificial intelligence (AI) in applicant interviews mitigates uncertainties in the recruiting process. This thesis examines the field of artificial intelligence (AI), a novel technological advancement (Ahmed, Ahmed, & Buriro, 2023). Artificial intelligence (AI) in human resource management (HRM) emerged as one of the prominent recruitment trends in the year 2018, ranking among the top seven. The utilization of artificial intelligence (AI) in the field of human resource management (HRM) and recruiting has been regarded as a transformative development, often referred to as the "new age of HR." This is mostly due to its ability to automate and streamline various tasks traditionally performed by recruiters (Upadhyay & Khandelwal, 2018).

According to Vasantham (2021), artificial intelligence (AI) is an expansive and interdisciplinary domain that finds applications in computing, linguistics, and philosophy. Christian (2022) states

that artificial intelligence (AI) can encompass software, bots, or robots. Artificial intelligence (AI), which encompasses both technological and research aspects, has been the topic of investigation since the Second World War. The field of artificial intelligence was formally established in 1956, as documented by Stuart and Norvig (2016). Johansson and Herranen (2019) state that artificial intelligence (AI) encompasses computational techniques that enable computers to engage in human-like reasoning processes. According to Pereira et al., (2023), human-level artificial intelligence (AI) enables robots to perform tasks that people typically carry out. This research examined the utilization of artificial intelligence (AI) in recruitment software by firms, focusing on excluding the consideration of robots. Modern, flexible and accessible technology needs further empirical research (Van et al., 2019). Vrontis et al. (2022) found little study on technology-based recruitment. Recruiters are unaware of the pros and cons of new HR technologies (Stone et al., 2015; Bondarouk & Brewster, 2016). Given recruiters' regular use of novel recruitment strategies, a thorough literature review is necessary. This is crucial since literature issues differ from those encountered.

Objectives of the Study

1. To examine the current state of incorporating artificial intelligence (AI) into traditional recruitment procedures.
2. To investigate the potential effects of artificial intelligence on the conventional recruitment process

Questions of the Study

1. What is the present status of artificial intelligence (AI) implementation into the conventional recruitment process?
2. What potential effects can artificial intelligence have on the conventional recruitment process?

Literature Review

Many academics define HRM, but most agree that Schermerhorn (2001) defines HRM as acquiring and training skilled workers to achieve the company's goals, purpose, vision, and objectives. HRM uses cultural, structural, and people methods to retain talented and dedicated employees, giving the company a competitive edge (Kiet al., 2020). This study defines HRM as

applying management techniques to acquire and maintain new skills, talents, and competencies in an organization's workforce.

HRM covers acquiring, managing, and developing employees (Imran, 2021). Most of these practices try to keep new hires happy. A company must manage its ever-changing human resources (Bibi et al., 2016). Innovation and competitiveness depend on HRM management and retention in industrial organizations (Youndt et al., 1996). HRM now goes beyond controlling internal labor expenses (Trivedi & Srivastava, 2021). The importance of hiring and managing employees is highlighted in a new study on HRM as a strategic asset (Bhanot, 2022). HRM selection follows recruitment.

Selecting is the second hiring phase. It usually occurs after the organization has recruited qualified people and must choose the best (Stoilkovska et al., 2015). According to Newell (2005), selection is like a jigsaw puzzle where a company must pick the proper part among several erroneous ones. Interviews are the most common hiring method. Companies adopt non-traditional selection methods to improve reliability (Ghosh, Majumder, & Peng, 2023). Job selection requires equal opportunity for all candidates (Stoilkovska et al., 2015). Interviews, pre-selection, and assessment centers are used. Applicant selection approaches include reliability, validity, and usefulness. Validity ranks applicants on a scale with job performance on the y-axis and teamwork on the x-axis based on “false negatives” or “false positives” excellent but believed to be bad or good but performed poorly. Recruiters with job experience usually make the final pick and find the greatest fit. A panel of line managers and chairperson may choose in larger organizations. This reduces applicant prejudices and experience requirements.

Theoretical Framework

Technology Acceptance Model (TAM) in the Context of AI Applications in Human Resource Management

The incorporation of Artificial Intelligence (AI) applications in Human Resource Management (HRM) shows an organizational paradigm shift. The research uses the Technology Acceptance Model (TAM) as its theoretical foundation to understand how AI would transform HRM. The Technology Acceptance Paradigm (TAM), created by Davis in 1989, is a well-known paradigm

for comprehending and forecasting users' acceptance and uptake of technology in work environments.

Perceived Usefulness (PU)

Regarding artificial intelligence applications in human resource management, accepting AI tools and systems greatly influence employees' opinions regarding their usefulness. According to this TAM component, people are more willing to adopt technology if they think it improves their productivity, effectiveness, and job performance. This includes HR services.

Attitude Toward Using (ATU)

Employee attitudes and intentions regarding adopting AI apps in HRM are influenced by how simple they are used. According to TAM, employees are more likely to incorporate and use AI solutions in HR procedures if they believe them to be easier to use and more straightforward.

Behavioral Intention to Use (BI)

The willingness of individuals to utilize AI applications in HRM duties is shown in their behavioral intention to use them. According to TAM, a favorable attitude towards artificial intelligence (AI) and a perception of its utility and usability increase the intention to use technology.

Actual System Use

The actual use of AI applications in HRM is the last part of TAM. This important outcome metric, impacted by users' behavioral intentions, shows how well AI technologies have been integrated and accepted in the HR setting.

Application of TAM to HRM

TAM offers a theoretical framework through which to examine how HR professionals and staff view and use AI applications in the particular context of HRM. The model helps comprehend what aspects impact the use of AI tools in HR operations, such as training, performance management, hiring, and other areas.

The study titled "Revolutionizing Human Resource Management: The Transformative Impact of Artificial Intelligence (AI) Applications" utilizes Technology Acceptance Models (TAM) to

provide a systematic framework for investigating the behavioral and psychological aspects of technology acceptance. Through an analysis of attitudes, intents, perceived utility, and ease of use related to AI in HRM, the research seeks to provide insights that help firms transition to AI-driven HR practices.

The Old Recruitment Method

One of the issues that arises while attempting to describe the conventional recruitment approach is the existence of contradictory opinions among academics (Acikgoz, 2019). The conventional recruitment method, as described by Acikgoz (2019), considers the perspectives of both the organizations and the individuals looking for work. Only a few models do a good job of establishing linkages between different points of view. When evaluating the recruiting process, it is essential to take into account the perspective of the candidates (Imran et al., 2023). Certain models of recruitment are comprised of several steps that are sequential. In most cases, organizations first determine a requirement, assess the open position, develop a detailed profile, and finally choose an individual suitable to fill a certain post.

The third stage of the process involves the planning component, which includes selecting the type of staff, the source, the message, and the budget (Chilunjika et al., 2022). There are three different types of sources, as stated by Buitek et al. (2023): walk-in, internal, and external sources. In the third step, recruitment techniques, recruiters, and employment duration are all determined together. Breaugh gives an overview of the recruitment process from the perspective of the organization, encompassing the first three steps of the process. Conversely, the fourth stage considers the applicant's level of interest in the position. This stage considers various aspects, including the applicant's level of intrigue regarding the post, their expectations regarding the job offer, and prospective alternative opportunities. This involves the process of self-reflection and decision-making that applicants engage in during the examination process. The fifth and last phase, the recruitment process results, is tied to all of the activities that came before it. According to Breaugh (2008), the initial recruitment goals of an organization should serve as a guiding principle for both the strategic approach and the outcomes of recruitment attempts. According to Breaugh (2008), after an organization has completed the procedures described above, it has recruited a new staff member.

Breaugh (2008) proposed a model for recruiting that consists of five interconnected steps. An initial step in the recruitment process involves the establishment of recruitment objectives by the organization. These objectives include the openings and preferred selection criteria, which may include abilities, professional backgrounds, and educational qualifications.

Artificial Intelligence (AI) concept

Throughout a considerable amount of time, artificial intelligence (AI) has been utilized extensively for various objectives. On the other hand, it is noteworthy that the development and application of this technology within various enterprises has greatly accelerated over the past year (Bhanot, 2022). Understanding artificial intelligence is easier by breaking down linguistic units into their components. (Johansson & Herranen, 2019) Even though artificial intelligence (AI) has been around for a substantial amount of time, there is still insufficient consensus regarding its definition. As a result of the fact that the concept of the 'I' in artificial intelligence presents a greater issue, numerous definitions place a significant focus on this component. The concept of artificial intelligence (AI) has garnered a substantial amount of recognition in the academic world, and it is a concept that requires only a minimal amount of explanation (Bhanot 20, 2022). According to the Oxford Dictionary (2019), the term "artificial" refers to something developed or manufactured by people rather than occurring naturally. This is especially true when the object in question is designed to copy or replicate something found in nature. Individuals create artificial things to imitate the qualities and occurrences that are noticed in the natural world. The process of evaluating intelligence is a substantial obstacle. In the context of developing intelligent devices, such as robots, computers, and software applications, artificial intelligence (AI) refers to creating such machines (Kaplan, 2016).

Measuring human intelligence about computers or technology is a subject that provides several obstacles. This topic covers the measurement of human intelligence. According to Kaplan (2016), intelligence can be defined as the capacity to make timely generalizations based on a limited quantity of evidence (p.5) of the available information. According to Bhanot (2022), informal conceptualizations of intelligence include cognitive processes such as thinking, planning, acquiring knowledge, adapting to new situations, and retrieving information. It has been suggested by Ved, Kaundanya, and Panda (2016) that one of the potential skills is the ability to evaluate facts and make decisions that depend on the situation. It has been proved that

artificial intelligence (AI) can do various activities, including playing tic-tac-toe, recognizing faces, and producing music (Kaplan, 2016). According to the findings of this research, artificial intelligence gives robots the ability to acquire knowledge, assess information, and comprehend on their own, creating cognitive capabilities comparable to those of humans. There are a wide variety of applications and practical implementations that can be achieved through the use of artificial intelligence (AI). The following examples illustrate the point: machinery, robotics, computer programs, and software (Johansson & Herranen, 2019).

The field of artificial intelligence (AI) has broadened its scope to include a variety of subfields, including robotics, natural language processing (NLP), expert systems, and automated reasoning (Ved et al., 2016). Language interpretation, machine perceptions, problem-solving, robotics, and gaming are some of the areas that can be impacted by using artificial intelligence (AI), as stated by Ved et al. (2016). According to Johansson and Herranen (2019), some of the most important applications of artificial intelligence (AI) include robots, natural language processing, and knowledge acquisition.

Online Recruitment

Incorporating technology, namely Artificial intelligence (AI), has led to significant changes in human resource management (HRM) during the current era. There has been a significant increase in the utilization of online recruitment tactics within human resource management (Dragusha & Ukaj, 2021). The concept of online recruiting entails the utilization of automated solutions to optimize the effectiveness of recruitment procedures, comprising the management of administrative duties associated with human resources, such as assessment and incentive allocation. Hafeez, Iqbal, and Imran (2021) assert that using the Internet as a means of recruitment has engendered a surge in job applications, posing challenges in efficiently managing those applications. Johansson and Herranen (2019) have observed that many organizations have incorporated technology into their recruitment processes.

The study by Dragusha and Ukaj (2021) emphasizes the extensive acknowledgment of internet recruitment as a prominent non-traditional approach for discovering and attracting persons seeking career opportunities. Numerous organizations have seen that using the Internet in their recruiting strategies has yielded advantages in streamlining the process of identifying highly

compatible applicants with certain job requirements, reducing expenses, and enhancing overall operational effectiveness. Bhanot (2022) posits that online recruitment platforms may engender biased outcomes for individuals lacking Internet access. Evaluating the benefits associated with online recruitment holds significant significance in light of the extensive integration of technical improvements within human resource management (HRM). The online candidate recruitment process encompasses various elements, including disseminating job advertisements, managing application data, and utilizing electronic resources to achieve recruitment goals. Kaplan (2016) asserts that computerized technologies are employed in assessing online applications and recruitment procedures for candidates in financial institutions.

Utilization of Artificial intelligence (AI) in Recruitment

According to Upadhyay and Khandelwal (2018), one of the biggest developments in 2018 was the general recognition of the incorporation of artificial intelligence (AI) into the field of human resource management (HRM). Dhamija (2012) defines information extraction as the systematic analysis of textual data to extract relevant knowledge. Pandey and Bahukhandi (2022) posit that the potential for enhancing the effectiveness of resume screening and extraction throughout the recruitment process exists using artificial intelligence (AI) algorithms for information extraction. To expedite the hiring process, automated candidate ranking algorithms have been implemented in response to the increasing volume of job applications and the ensuing strain on human resources personnel. Incorporating artificial intelligence (AI)--based candidate rating systems can improve the effectiveness of human resources' hiring application evaluation procedures, claim Faliagka et al. (2012). Recruiters' training data is integrated into the applicant rating system to assist the use of artificial intelligence algorithms and to enable the building of application score functions (Faliagka et al., 2012).

According to Upadhyay and Khandelwal (2018), using Chabot, an AI-powered recruiting assistant, improves candidate engagement by facilitating communication via email, text messaging, and dialogue boxes, among other channels. Several computer-assisted job matching services are offered to reduce recruiters' workload. Montuschi et al. (2014) examined applying machine learning techniques to resume classification. An encouraging development in this area is the potential for applying AI-powered rating systems to gather comprehensive personality traits from job candidates. These tendencies usually come to light during job interviews, even if

internet searches may provide basic information. According to Faliagka et al. (2012), bloggers and LinkedIn users can express their personalities, emotions, and sentiments through language choices. Businesses use video interviews as a recruitment tool. Artificial intelligence (AI)-based video interviews have been generated effectively by HireVue. The present application utilizes artificial intelligence techniques to analyze the speech traits, facial expressions, and physical gestures of the subjects being assessed. HiringVue (2018) claims that the interviewing platform assesses applications and compares them with experienced corporate employees to provide recruiters suggestions for the most qualified applicants. According to Hilton's study, the hiring process took less time when video interviews were included. In a study published in 2012, Dhamija found that using artificial intelligence (AI)-based video interviews significantly shortened the time required for the Hilton hotel hiring process. To be more exact, the period was shortened from an average of 42 days to a far shorter period of just five days.

The Advantages of Utilizing Artificial Intelligence (AI) in The Context of Recruitment

Shukla, Mishra, and Agnihotri (2023) claim that because installing recruitment systems modernizes processes, there may be cost savings associated with their adoption by businesses. The rationalization of procedures could be the source of the cost reductions. Recruiting systems are used to complete pre-screening, categorizing, and matching potential candidates with available openings. The goal of doing this is to expedite the hiring process. It is feasible for managers to locate qualified individuals more efficiently and effectively, claims Dhamija (2012). This is something that must be taken into account. In their research, Shukla, Mishra, and Agnihotri (2023) remarked that adopting AI recruitment methods has the potential to broaden the pool of candidates and simplify the procedures involved in bureaucratic procedures. One of the conclusions they made after doing their inquiry was this. Upadhyay and Khandelwal (2018) believe that artificial intelligence (AI) can potentially evaluate data derived from social media platforms to uncover personal characteristics such as values and attitudes. These are the same attributes that have historically been taken into account during job interviews, according to Faliagka et al. (2012). According to Faliagka et al. (2012), recruiters use artificial intelligence (AI) to assess the personalities of potential candidates before conducting interviews with them. The purpose of this is to enable better recruiting decisions. According to Upadhyay and Khandelwal (2018), artificial intelligence (AI) can evaluate resumes impartially, guaranteeing

that every applicant receives the same opportunity. The authors' suggestion that AI may be used to assess resumes indicates this. Upadhyay and Khandelwal (2018) state that artificial intelligence (AI) systems can offer rejected job applicants feedback about their abilities and skills to support their future growth. The purpose of providing this feedback could be to help with future progress.

People looking for work usually attend traditional in-person interviews, and managers and supervisors must be present throughout these conversations. According to 2016 Stuart and Norvig research, an organization can spend more time reviewing and selecting candidates with superior qualifications when it relies less on manual hiring procedures. Artificial intelligence (AI) has the potential to revolutionize personnel management by enabling recruiters to engage with highly qualified prospects efficiently. This eliminates the need for human resume scanning and reading. This is what Leong (2018) says. Artificial intelligence is being used to rank and choose people who have demonstrated exceptional performance in talent selection processes. This is done to reduce the number of potential applicants. Leong (2018) asserts that using Resume Scorer has successfully decreased the amount of time recruiters spend performing different tasks. The fact that less time was spent on these chores proved this.

Artificial intelligence (AI) has advanced, so recruiters can now get assistance scheduling interviews and sending customized emails to potential candidates. Recruiters are now able to get advice in these areas thanks to this. It has been proposed that artificial intelligence (AI) could take the role of some human hiring practices, according to Upadhyay and Khandelwal (2018). The authors supplied this information. This is consistent with the discoveries made by the researchers previously mentioned. Upadhyay and Khandelwal (2018) claim that recruiters can give artificial intelligence (AI) systems routine tasks to perform. This helps them better understand and manage such concerns by enabling them to allocate resources to essential challenges more efficiently. According to Upadhyay and Khandelwal (2018), companies can engage with candidates more easily when they use artificial intelligence (AI) across many online channels. These platforms include social media sites, mobile applications, and the internet.

Methodology

A deductive methodology utilized to comprehensively examine the transformative impact of artificial intelligence (AI) in Human Resource Management (HRM). The study used qualitative

research design, primarily focusing on employing in-depth interviews as the primary data-gathering technique. The participants of this study consist of human resource professionals and organizational executives who are actively engaged in implementing artificial intelligence (AI) applications within the human resource management (HRM) field. Using a deductive approach would facilitate the construction of a conceptual framework by drawing upon established theories and extant literature about the application of artificial intelligence in human resource management. This study was collected qualitative data through interviews to gain a deeper knowledge of the practical consequences, problems, and advantages of artificial intelligence (AI) applications in human resource management (HRM). The findings of this research endeavor contributed to a more nuanced and thorough comprehension of this transformational phenomenon.

The empirical findings

Traditional recruitment advantages:

All eight experts acknowledged the importance of human interaction in traditional recruiting. Recruiters and applicants form a unique bond through interpersonal touch. Conventional methods improve communication, reducing misinterpretations. Recruiters valued comfort and pleasant reception during routine procedures.

Six of eight experts surveyed said traditional recruitment methods including formal interviews have proven beneficial over time. Established ideas and empirical facts support these practices' efficacy. Due to their success, professionals are typically reluctant to change their methods.

Traditional recruitment approaches are time-consuming. Experts cited cumbersome recruitment procedures as the main impediment. Candidates and recruiters face lengthy and complicated processes, resulting in long wait times. The cumbersome recruitment method is considered outdated and inefficient.

Six interviewees worried that existing recruitment procedures limit recruiters' time to make good judgements. The lengthy process hinders recruiters' ability to communicate with applicants and update them on their applications.

Professionals worry about CV fabrication. This makes it hard for companies to verify candidates' claims, which might lead to mismatches between declared and actual qualifications. Two professionals remarked that passive candidate identification is challenging since it is difficult to choose the best candidate from those who are not actively seeking job. The traditional method to recruitment prioritizes new talent, making it harder to find viable candidates who may not be actively job-seeking.

Biases and discrimination are prominent shortcomings in traditional recruitment practises. Age, gender, heritage, and organizational preferences are among these prejudices. Professionals have voiced worries about selection biases that could exclude persons from diverse backgrounds. Such exclusion may hurt team and company performance.

Some experts now see the benefits of traditional recruitment approaches, while others see their drawbacks. The lack of consensus among individuals suggests disagreements on the effectiveness or issues of traditional recruiting methods.

Findings on Application of AI in Recruitment

- The prevailing viewpoint among the interviewees was that AI holds significant potential as a technology. However, its integration within businesses is now in its nascent stages.
- It is well acknowledged among experts that the integration of artificial intelligence (AI) entails a significant and challenging process of acquiring knowledge and skills.
- The process of prescreening or pre-selection Utilising Artificial Intelligence:
- Six of eight recruiters employ artificial intelligence (AI) tools for prescreening and pre-selection.
- AI prescreening involves utilizing job descriptions, keywords, language, and various other attributes to assess and evaluate potential candidates.
- Several professionals use social media platforms such as LinkedIn or Facebook to prescreen, but others opt for the traditional method of submitting direct applications.
- Certain software applications utilize personality tests to conduct preliminary evaluations of candidates' job-related competencies and characteristics.

- Artificial intelligence (AI) produces an extensive roster of candidates evaluated based on their suitability for a position during the pre-selection process, thereby providing businesses with valuable insights for the selection process.
- According to experts, it is recommended that organizations proactively select individuals rather than relying solely on artificial intelligence.
- It is important to acknowledge that AI software acquires knowledge by analyzing the company's selection patterns to generate recommendations.
- All eight professionals employ the utilization of AI software for job seeker communication. Various professionals utilize artificial intelligence (AI) software that encompasses diverse capabilities.
- Certain organizations utilize chatbots to gather candidate information and generate curriculum vitae and job applications for screening.
- The applicant and organization can engage in communication through the utilization of artificial intelligence software, which serves the purpose of providing updates and responding to inquiries. Using AI technologies enhances the candidate experience by implementing personalized communication strategies.
- Artificial intelligence (AI) software can provide candidates with accurate feedback regarding their strengths and deficiencies after the recruiting procedure. This facilitates transparency and enables candidates to pose inquiries.
- Artificial intelligence (AI) is increasingly employed in recruiting, encompassing various stages such as prescreening and communication. This trend underscores the rising importance of AI in enhancing organizational procedures and improving the experiences of job applicants.

Utilization of AI in Recruitment

Information technology has a major impact on human resource management (HRM). However, AI in recruitment is limited. Researchers say AI is used in recruitment strategically, not widely. Professionals stress the relevance of assessing AI's perceived efficacy and necessity in recruitment.

- The effectiveness of artificial intelligence (AI) in recruitment has been questioned, necessitating a larger look beyond operational efficiency. Strategic impact and top talent acquisition are prioritized.
- Different Views on Effectiveness: Multilingual CV analysis and time savings are benefits of AI-based recruiting.
- Professionals stressed the importance of defining organizational effectiveness.
- Since each firm is unique, the sensible evaluation of HRM services must carefully consider the areas within an organization that can benefit from AI integration.
- Matching artificial intelligence (AI) with an organization's goals and having the technical skills to use it were stressed.
- Research suggests new technologies like artificial intelligence (AI) in human resource management (HRM) may lose efficacy if not integrated into organizational decision-making processes.
- To ensure the long-term use of artificial intelligence, humans and machines must be adaptable and trained.
- Organizations need enough training tools to train humans and machines to maximize the benefits of AI-driven recruitment.
- The organization recognized the importance of training in identifying potential and promoting long-term success.
- The subjectivity and adaptability of artificial intelligence (AI) showed that its usefulness depends on individual viewpoints and might vary across businesses.
- Experts stressed that a uniform method is useless and that adapting to variety is essential for AI integration.
- The above findings demonstrate the complexity of artificial intelligence (AI) integration in recruiting and the importance of organizational goals, flexibility, and constant training for long-term success.

Conclusion

In brief, this study offers valuable insights into the increasing importance of Artificial Intelligence (AI) within the realm of recruitment processes in Human Resource Management (HRM). The findings underscore the importance of using a refined and intentional approach

when integrating artificial intelligence (AI), underscoring that while AI is becoming increasingly prominent, its incorporation should be customized to suit specific needs and organizational contexts. The fundamental objective of this research study is to examine two key research questions that collectively enhance our comprehensive understanding of the implications and impact of artificial intelligence (AI) in the recruitment domain.

The current state of artificial intelligence (AI) in the domain of recruitment:

This study, grounded in Breaugh's (2008) recruiting process model, highlights that artificial intelligence (AI) is currently most effectively employed in three distinct phases of the recruitment process. Artificial intelligence (AI) has the potential to greatly enhance efficiency and outcomes in various domains, such as administrative tasks, job application processes, and recruitment outcomes. It is well recognized that certain stages, particularly those requiring human skills and a customized approach, remain less amenable to incorporating artificial intelligence. The extensive understanding of this matter allows businesses to tailor their strategy for integrating artificial intelligence, thereby optimizing its benefits in areas most relevant to their specific challenges in recruitment.

The Impact of Artificial Intelligence on Traditional Recruitment Practices:

The primary objective of this research is to investigate further the impact of artificial intelligence (AI) on the traditional recruitment process. This is achieved by extensively examining empirical interview data and pertinent academic sources. The benefits of artificial intelligence (AI), including the expedited execution of tasks and the elimination of monotonous responsibilities, are underscored. However, it has been acknowledged that other challenges need to be addressed, including the extent of technology readiness and the need for adequate training. The study focuses on the initial stages of artificial intelligence (AI) development and emphasizes recognizing potential challenges in its widespread acceptance. These challenges encompass concerns over the credibility of AI and the necessity for companies to evaluate their preparedness prior to implementation thoroughly. The importance of appropriately assessing the genuine need for artificial intelligence (AI) in the recruitment process is underscored, acknowledging the significant investment of time and money required for effective integration.

In summary, this research offers valuable insights to organizations about the complex integration of artificial intelligence inside the recruitment procedure. The primary objective of this study is to address a notable gap in the existing scholarly works by conducting a thorough analysis of the particular aspects of the recruitment process that are most suitable for using artificial intelligence (AI), utilizing Breaugh's model as a theoretical framework. Organizations are recommended to evaluate their unique challenges, and the potential benefits of using artificial intelligence (AI) and make informed decisions based on their needs. This is enhancing the advancement of a more strategic and efficient recruitment strategy within the dynamic domain of human resource management (HRM).

Implication of the Study and Future Research Direction

This research endeavor has the potential to assist organizations in effectively leveraging artificial intelligence (AI) within the context of their recruitment processes, thereby enabling them to make informed strategic decisions. Gaining comprehension of the particular phases in which artificial intelligence (AI) exhibits optimal efficacy facilitates the focused implementation of AI systems and seamless assimilation with established protocols. Implementing artificial intelligence (AI) can potentially enhance outcomes in recruitment. Artificial intelligence (AI) has the potential to enhance applicant engagement, broaden the pool of potential candidates, identify overlooked skills, and enhance recruitment outcomes. These advantages could enhance the efficiency of talent acquisition processes within businesses.

According to the paper, it is recommended that organizations perform a cost-benefit analysis before implementing AI technology in their recruitment processes. The factors above encompass temporal evaluation, resource allocation, and training, facilitating a pragmatic approach toward implementing artificial intelligence that aligns with the organization's requirements. In response to the inherent constraints of artificial intelligence (AI) inside certain recruitment procedures, organizations are actively exploring collaborative frameworks that integrate the proficiencies of humans and AI. The utilization of this hybrid approach has the potential to enhance the efficacy of tactics, hence resulting in a more comprehensive and efficient recruitment strategy.

Potential Areas for Future Research: This section addressed potential avenues for future research. Subsequent investigations may explore the enduring ramifications of artificial

intelligence implementation within recruitment. It is crucial to gain insight into the chronological progression of firms' adoption of artificial intelligence (AI) and its subsequent long-term advantages or disadvantages. The cultural and ethical implications surrounding integrating artificial intelligence (AI) in the recruitment process are paramount. Subsequent research endeavors may delve into the potential impact of diverse organizational cultures and ethical frameworks on the reception and effectiveness of artificial intelligence within the context of the recruitment process.

The present study focuses on the training and acceptance of users in the context of artificial intelligence. Potential areas of future research could encompass investigating efficacious training methodologies and assessing user satisfaction with recruitment artificial intelligence (AI) tools. Future academic studies must investigate the impact of artificial intelligence on the diversity of employment practices. To ensure ethical and equitable recruitment practices, it is imperative to possess a comprehensive understanding of the potential impact of artificial intelligence (AI) on issues such as discrimination, fairness, and inclusivity. The effectiveness of AI recruitment differs across different industries, necessitating additional investigation on the acceptance and performance of AI systems. This may involve evaluating the specific hiring requirements and difficulties within the industry.

References

Acikgoz, Y. (2019). “Employee recruitment and job search: Towards a multi-level integration”. *Human resource management review*, *29*, 1-13

Ahmed, S., Ahmed, S., & Buriro, A. (2023). Strategies and Best Practices for Managing Cost Overruns in the Construction Industry of Pakistan. *Propel Journal of Academic Research, 3(1)*, 28-55.

Alwi, S. K. K., & Shaiq, M. (2021). Role Of Human Resource Practices and Staff Satisfaction On Organizational Performance. Journal of Contemporary Issues in Business and Government Vol, 27(6)

Bibi, P., Pangil, F., & Johari, J. (2016). HRM practices and employees’ retention: the perspective of job embeddedness theory. *Asian Journal of multidisciplinary study, 4(5)*, 41-47

Bondarouk, T., & Brewster, C. (2016). Conceptualizing the future of HRM and technology research. *The International Journal of Human Resource Management, 27(21)*, 2652–2671.

Bhanot, A. (2022). A novel review on the adaptation of artificial intelligence in human resources management by organizations in Gulf countries. *In Handbook of Research on Innovative Management Using AI in Industry 5.0* (pp. 19-38). IGI Global.

Baron, I.S., Mustafa., & Agustina, H. (2018). The challenges of recruitment and selection systems in Indonesia. *Journal of management and marketing review. 3(4)*, 185-192.

Buitek, E. K., Kaliyeva, S. A., Turginbayeva, A. N., Meldakhanova, M. K., & Shaikh, A. A. (2023). How much does an employer's attractiveness matter to youth employment? Evidence from a developing country. *Asia-Pacific Journal of Business Administration.*

Breaugh, A.J. (2008). Employee recruitment: Current knowledge and important areas for future research. *Human Resource Management Review*, *18*, 103-118

Christian, C. C. (2022). Artificial intelligence in human resources management and human resource accounting in Nigerian public sector. *Management and Human Resource Research Journal*, *11*(01).

Chilunjika, A., Intauno, K., & Chilunjika, S. R. (2022). Artificial intelligence and public sector human resource management in South Africa: Opportunities, challenges and prospects. *SA Journal of Human Resource Management*, *20*, 12.

Dragusha, B., & Ukaj, M. (2021). Theoretical Framework on Effectiveness of E-Recruitment on human Resource Management. *Sochi Journal of Economy, 15(2)*, 140-145.

Dhamija, P. (2012). E-recruitment: a roadmap towards e-human resource management. *Researchers World*, *3(3)*, 33.

Erixon, F. (2018). The economic benefits of globalization for business and consumers. *European Centre for International Political Economy*.

Faliagka, E., Ramantas, K., Tsakalidis, A., & Tzimas, G. (2012). Application of machine learning algorithms to an online recruitment system. In Proc. *International Conference on Internet and Web Applications and Services*.

Galanaki, E., Lazazzara, A., & Parry, E. (2019). A Cross-national analysis of e-HRM configurations: integrating the information technology and HRM perspectives. *Organizing for digital innovation. 27*, 261-276

Ghosh, S., Majumder, S., & Peng, S. L. (2023). An Empirical Study on Adoption of Artificial Intelligence in Human Resource Management. In Artificial Intelligence Techniques in Human Resource Management (pp. 29-85). *Apple Academic Press*.

Hafeez, A., Iqbal, S., & Imran, M. (2021). Impact of Devolution of Power on School Education Performance in Sindh after 18th Constitutional Amendment; *Journal of Development and Social Sciences*, 2(4), 273-285.

Imran, R. (2021). Re-Inventing Human Resource Management through Artificial Intelligence. Fourth Industrial Revolution and Business Dynamics: Issues and Implications, 243-258.

Imran, M., Kazmi, H. H., Rauf, M. B., Hafeez, A., Iqbal, S., & Solangi, S. U. R. (2022). Internationalization Education Leadership of Public Universities of Karachi. *Journal of Positive School Psychology*, *6(11)*, 1175-1188.

Johansson, J., & Herranen, S. (2019). *The application of artificial intelligence (AI) in human resource management: Current state of AI and its impact on the traditional recruitment process.*

Kaushal, N., Kaurav, R. P. S., Sivathanu, B., & Kaushik, N. (2023). Artificial intelligence and HRM: identifying future research Agenda using systematic literature review and bibliometric analysis. *Management Review Quarterly, 73(2),* 455-493.

Kaplan, J. (2016). Artificial Intelligence: What everyone needs to know: *Oxford university press*

Kim, J. H., Seok, B. I., Choi, H. J., Jung, S. H., & Yu, J. P. (2020). Sustainable management activities: A study on the relations between technology commercialization capabilities, sustainable competitive advantage, and business performance. *Sustainability, 12(19),* 7913.

Leong, C. (2018). Technology & Recruiting 101: how it works and where it's going. Strategic *HR Review, 17(1),* 50-52

McRobert, C.J., Hill J.C., Smale, T., Hay E.M., & Van der Windt D.A. (2018). A multi-modal recruitment strategy using social media and internet-mediated methods to recruit a multidisciplinary, international sample of clinicians to an online research study. *PLoS ONE, 13(7)*

Montuschi, P., Gatteschi, V., Lamberti, F., Sanna, A., & Demartini, C. (2014). Job recruitment and job seeking processes: how technology can help IT. *IT professional, 16,* 41-49

O'Donovan, D. (2019). HRM in the organization: An overview. Management Science. *Management and industrial engineering*. 75-110.

Pandey, S., & Bahukhandi, M. (2022). *Applicants' Perception Towards the Application of AI in Recruitment Process*. In 2022 Interdisciplinary Research in Technology and Management (IRTM) (pp. 1-6). *IEEE*.

Pereira, V., Hadjielias, E., Christofi, M., & Vrontis, D. (2023). A systematic literature review on the impact of artificial intelligence on workplace outcomes: A multi-process perspective. *Human Resource Management Review, 33(1),* 100857.

Sehar, S., & Alwi, S. K. K. (2019). Impact of head teacher's leadership style on teacher's job satisfaction and work motivation. *Journal of Business Strategies, 13*(1), 1-18

Sun, Z. (2020). *Business Analytics Intelligence: An Emerging Frontier for Innovation and Productivity*.

Schemerhorn J.R (2001). *Management Updated*. New York: John Wiley and Sons. Inc.

Stoilkovska, A., IIieva, J. & Gjakovski, S. (2015). Equal employment opportunities in the recruitment and selection process of human resources. *UTMS Journal of Economics, 6(2),* 281-292

Shukla, A., Mishra, L., & Agnihotri, A. (2023). A Comprehensive Review of the Effects of Digital Technology on Human Resource Management. Technology, *Management and Business, 31*, 7-19.

Stuart, R., & Norvig, P. (2016). *Artificial Intelligence: A Modern Approach*. Third Edition. Prentice Hall Press Upper Saddle River.

Stone, D. L., Deadrick, D. L., Lukaszewski, K. M., & Johnson, R. (2015). The influence of technology on the future of human resource management. *Human Resource Management review, 25*, 216–231.

Trivedi, K., & Srivastava, K. B. L. (2021). A framework for integrating strategic HR and knowledge management for innovation performance. *Strategic HR Review, 20(1),* 11-16.

Tan, F. Z., & Alshaikhe, A. (2023). *Importance of Employing Artificial Intelligence in Improving Human Resources Functions*.

Upadhyay A, K. & Khandelwal., K (2018). Ashwani Kumar Upadhyay; Komal Khandelwal, (2018)"Applying artificial intelligence: implications for recruitment", *Strategic HR Review, 17*(5), 255-258

Vasantham, S. T. (2021). The Role of Artificial Intelligence in Human Resource Management. Engineering and *Scientific International Journal, 8*(2).

Van Esch, P., Black, J. S., & Ferolie, J. (2019). Marketing AI recruitment: The next phase in job application and selection. *Computers in Human Behavior, 90,* 215-222.

Vrontis, D., Christofi, M., Pereira, V., Tarba, S., Makrides, A., & Trichina, E. (2022). Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review. *The International Journal of Human Resource Management*, *33*(6), 1237-1266.

Ved, S., Kaundanya, N.S. & Panda, O.P. (2016). Applications and Current Achievements in the field of Artificial Intelligence. *Imperial Journal of Interdisciplinary research, 2(11),* 932-936

Wall T.D. & Wood S.J. (2005). The romance of human resource management and business performance, and the case for big science. *Human Relations, 58(4),* 429-462