E-ISSN: Volume I Issue I January 2024

The Role of Artificial Intelligence (Ai) In Human Resource Management in Today's Context.

Manikandan. S, Asst.Professor,JPM Arts and Science College Kanchiyar.

E-mail:manikandans@jpmcollege.ac.in

ABSTRACT

A new era in human resource management can be ushered in with the aid of artificial intelligence (AI), where automation, machine learning, and data analytics can all work together to save time and promote higher-quality results. Companies might be considering how AI technologies can improve the work of human resources (HR) for both employees and job seekers as the field of AI technology advances from automation to augmentation. Not only is time savings important, but near real-time information, insights, and recommendations are also provided. And that's just the beginning for AI in HR. The workforce is going through a significant transition at the time these discussions are taking place. Executives polled for a global study by the IBM Institute for Business Value (IBV) predict that using AI and automation over the next three years will need reskilling 40% of their staff. One way to look at this change is as more employment opportunities. Rather than being replaced, 87% of respondents think generative AI would augment employee functions; the impact will vary based on the job function. HR departments will be directly impacted by this shift as employers search for candidates to fill positions that require additional responsibilities and employees hunt for new positions as their own roles evolve. Adopting AI into HR technologies could help HR departments in this evolving environment. New AI technologies are quickly moving past efficiency to become innovative tools, which frees up team members to consider HR from a more strategic perspective while maintaining a human touch.

KEY WORDS: HRM, AI TOOLS, MACHINE LEARNING, E-HRM

INTRODUCTION.

According to the various studies, implementing AI in HRM improves organizational performance and lowers costs and attrition intentions. As a result, AI in HRM gives businesses a competitive edge by raising employee performance. With the use of artificial intelligence (AI), human resource management may enter a new era where automation, machine learning, and data analytics may all work together to save time and promote higher-quality results. Companies may be considering how AI technologies might improve the work of human resources (HR) for both employees and job seekers as the field of AI technology advances from automation to augmentation. Not only can it save time, but it can also deliver data, analysis, and suggestions almost instantly. And that's only the beginning for AI in HR. Artificial intelligence has the potential to be used by businesses in HR operations and processes to help with decision-making, facilitate employee interaction with HR, free up time for better hiring decisions, and invest in employee satisfaction and retention. This is a vast understatement to say that artificial intelligence is a word that covers a variety of technological applications. Human resource management is also covered by this. Human resource decisions involving hiring, retention, and employee development are increasingly being guided by AI. Automation of payroll and benefits administration is another activity that AI can be used for, but it's being utilised for so much more. New policies, contracts, job descriptions, interview questions, and so on can all be created quickly using AI. Using machine learning and predictive analytics, you may also foresee and prepare for consequences.

One such sophisticated AI robot, Sophia, joined the panel and fielded questions during the UN convention on sustainable development, demonstrating the worrying rate at which artificial intelligence is revolutionising a wide range of industries. Hiring managers have a variety of options thanks to artificial intelligence.
Featuring entry-level hiring instruments, sophisticated AI solutions, and intermediate apps. With the help of these technologies, human resources can now more accurately forecast a candidate's likelihood of success with the organisation in the future, either in combination or alone. The entire subject of human resources is changing due to artificial intelligence (AI).

REVIEW OF LITERATURE

Purva Grover Et al (2022).Artificial intelligence (AI) is the new electricity in this digital age, and data is the new oil. These technologies are essential to many aspects of operations management (OM), including supply chain management, product development,

manufacturing, and services. By mining the collective intelligence of experts on Twitter and through academic literature, this study investigates the viability of AI utilization within an organization on six factors: job-fit, complexity, long-term consequences and affect towards use, social factors, and facilitating conditions for different elements of OM. The study finishes by outlining the study's shortcomings and suggesting further research avenues. It also offers managers advice for using AI technologies in various OM components.

Naomi Haefner (2021).Conventional, human-centered approaches to innovation management are limited mainly by their incapacity to handle complexity and completely fulfil information needs. Based on information processing limitations as described in the behavioral theory of the business, we created a framework. From there, we were able to determine the AI information processing capability levels required to create digital organizations. We have finally outlined the obstacles innovation management encounters when putting AI systems into practice, taking into account the technology itself, the people who must use it, and the relationship between technology and humans. In summary, AI can be beneficial in situations where the proven advantages of innovation management resources are outweighed, become impractical due to digitization, or become the clear choice.

Oliver Gassmann (2021).It seems that incorporating AI into businesses who are pursuing innovation will enable them to take a more methodical approach, which is where AI clearly has potential. By illuminating the application of AI and machine learning algorithms in the organisation of innovation going forward, our research contributes to the body of literature on innovation management. Our results identify domains in which AI systems are already successfully used in organisational innovation, i.e., situations in which information processing limitations are the primary impediment to the creation of new inventions. For example, anomaly detection-based AI systems can be useful when businesses are trying to find new prospects but are having trouble with information processing limitations. Lastly, we showcase recent developments in AI algorithms that demonstrate the technology's capacity to tackle the trickier problems.

OBJECTIVES OF THE STUDY

- To know the importance of AI in HRM
- To know the various AI tools in HRM
- To measure the effectiveness of AI in HRM

RESEARCH METHODOLOGY.

The research paper mainly used by the secondary data.The study at the nexus of AI applications in HRM and various business and employee-related studies published between 2020 and 2023.The analysis of the 30 peer-reviewed articles is presented in this section. Firm-centric results, employee-centric outcomes, and multilevel outcomes (individual-organizational/managerial or team-level) make up its three main categories. The main themes of productivity, innovation, socio-technological aspects, and decision-making are arranged within these categories, which represent the breadth of theoretical and empirical study on AI and HRM at the corporate level.

In a recent study of the subject, Malik, Nguyen, and Budhwar (2022) revealed that research at the confluence of AI and HRM has not been very active over the last three decades, with most of the focus being on company and employee-centric outcomes (e.g., 14 publications for the 1986–2009, and 35 papers in a post–2010 period) and 10 articles in (2023).

HOW HR DEPARTMENT USING AI

The application of machine learning (ML), Natural Language Processing (NLP), and other AI technologies to human resources duties and decision-making is known as AI use in HR. It makes possible a data-driven strategy for hiring, promoting, and retaining people that aims to reduce bias and improve the experiences of both job searchers and workers.

- Employee records management
- Recruitment and hiring processes
- Payroll processing
- Performance management and assessments
- Benefits administration
- Onboarding new employees
- HR support or service desks

IMPORTANCE OF AI IN HRM

1. **Professional learning and development:**

In five years, where do employees envision themselves? AI may be able to help with career mobility recommendations for tailored training programmes. AI might customize training for employees based on their individual goals by evaluating individual employee data, including

talents and preferences. AI may also be able to assist HR managers in finding underutilized talent or workers who are ready for advancement.

2. **Candidate sourcing and hiring**

One prevalent grievance regarding the employment process is its slowness. AI can quicken the pace by enabling managers to automatically screen and evaluate each candidate, as well as by notifying them when a candidate applies for a position that is open.

3. **Procurement of short-term workers**

AI in HR can assist businesses in promptly filling unfilled positions, including temporary and contract roles. AI technologies for HR may automate routine procurement operations by utilizing natural language processing (NLP) capabilities. This frees up HR staff' valuable time to plan strategic initiatives and attend to client demands. In order to locate possible contractors and set up interviews with hiring managers, for instance, managers can use AI technologies to gather needs from stakeholders and then work within a vendor management system (VMS) system to create a request with suppliers.

4. **Onboarding:**

Artificial Intelligence has the potential to streamline and enhance the process of gathering data. AI-driven chatbots can streamline time-consuming procedures and improve the onboarding experience for new hires by answering queries, supplying information, and reminding new hires about important papers.

5. **Automating HR service**

Meeting the requirements of employees is essential to raising productivity and engagement levels, but employees may find it difficult to navigate the many company regulations, HR, and IT support procedures, which can lead to dissatisfaction and wasted time. AI-driven HR chatbots can empower staff members by providing them with quick responses and self-service assistance.

6. Employee engagement initiatives.

Employee sentiment is a difficult concept for HR departments to effectively assess. This procedure can be automated with a survey tool driven by AI. An AI tool can be used to analyses the results of a brief, interesting survey that asks employees for anonymous, sincere feedback. The survey can be automated.

7. Workforce planning

Executives such as Alexandra, the department head described earlier who is reviewing performance assessments, will be searching their team for openings and gaps in order to

develop her hiring strategy for the upcoming year. An AI tool can forecast the positions she might need to fill in the upcoming year by examining data such as industry trends, company growth plans, and skills already possessed by the workforce. Because of this, Alexandra is able to plan ahead and strategize, guaranteeing that the business always has the correct expertise. The same reasoning holds true for the rest of the organization, so even a global C-suiter might benefit from these resources to broaden their viewpoint.

8. Efficiency and Accuracy:

AI frees up human resources workers to engage on more important projects by automating monotonous processes like interview scheduling and resume screening.

9. **Employee self-service:**

Tools like Paradox, Talkpush, and ChatGPT automate routine interactions and provide instant information access. They increase efficiency, support HR teams, and improve employee autonomy and satisfaction.

10. **Optimizing AI in HR:**

AI automation shifts HR's attention from routine duties to strategic roles, improving output, effectiveness, and communication. Establishing employee trust, putting AI training programmes into place to increase literacy, and assessing AI tools to guarantee accuracy and fairness in use are all necessary for effective AI integration.

AI SOFTWARE TOOLS IN HRM

1. AI Tools for Hiring & Recruitment

- Beamery
- Eightfold AI
- SeekOut

2. AI Tools for Workforce Planning

- Anodot
- ObviouslyAI
- HR Signal

3. AI Tools for Training & Development

- TalentGuard Workforce GPT
- Docebo’s Learning Suite
- Totara

4. AI Tools for Employee Self-Service

- Paradox
- Talkpush
- ChatGPT

DISCUSSION

Artificial Intelligence is a vast array of algorithms and machine learning technologies that can quickly analyse data, spot patterns, optimize systems, and forecast trends. It is not some sort of mystical computerized persona. The systems have the ability to recognize images, comprehend speech, and even detect signals related to personality, honesty, and even mood by matching patterns. Although these algorithms lack human-like "intuition," their speed allows them to swiftly correlate millions of data points against patterns and analyse them in a matter of seconds.

Although these applications are intriguing, there are certain concerns to be aware of, as they are all relatively new. The main one is that "Training data" is necessary for AI to function. Stated differently, the algorithms include historical data. Your current management style may end up institutionalizing everything you detest if it is biased, discriminatory, punitive, or unduly hierarchical. Transparent and "tunable" AI is necessary so that we can check the algorithms to make sure they are operating correctly. Similar to how early cars weren't always reliable, our early algorithms will require "tuning knobs" and "bumpers" while we figure out how to improve their accuracy.

CONCLUSION

Global labour shortages, a widening skills gap, and changing employee expectations are just a few of the difficulties HR directors face. With the help of generative AI, HR directors can now reinvent and modernize the HR department, develop and maintain a workforce prepared for the future, and encourage the creativity required to support the company in achieving its overarching strategic goals. The vast skill change that artificial intelligence (AI) will bring about is frequently beyond the capabilities of current tools and procedures. IBM Watsonx and IBM Consulting provide businesses with a special blend of personnel knowledge and AI technology to assist them up skill their workforce and future-ready operational models.

Our approaches and solutions maintain confidence and adhere to the strictest ethical, privacy, and legal requirements while seamlessly integrating data into AI-powered workflows and reimagining work and employee responsibilities. With a focus on transparent and ethical AI, human-centric business design, and a wealth of industry experience, we collaborate with our

global clients and a network of partners to help employees reach their full potential and give their companies a competitive edge that makes them stand out.

REFERENCES

1.Grover, P. S., Kar, A. K., & Dwivedi, Y. K. (2020). Understanding artificial intelligence adoption in operations management: insights from the review of academic literature and social media discussions. *Annals of Operation Research/Annals of Operations Research*, *308*(1–2), 177–213. https://doi.org/10.1007/s10479-020-03683-9.

2.Haefner, N., Wincent, J., Parida, V., & Gassmann, O. (2021). Artificial intelligence and innovation management: A review, framework, and research agenda☆. *Technological Forecasting & Social Change/Technological Forecasting and Social Change*, *162*, 120392. https://doi.org/10.1016/j.techfore.2020.120392.

3. *ORCID*. (n.d.). http://orcid.org/0000-0001-6175-4947

4. Aboytes-Ojeda, M., Castillo-Villar, K. K., & Eksioglu, S. D. (2019). Modeling and optimization of biomass quality variability for decision support systems in biomass supply chains. *Annals of Operations ResEarch, 314*(2).

5. Alavi, M., Marakas, G. M., & Yoo, Y. (2002). A comparative study of distributed learning environments on learning outcomes. *Information Systems Research, 13*,

6. https://doi.org/10.1016/j.dajour.2023.100249.

7. Dr. Owais Ahmed, ARTIFICIAL INTELLIGENCE IN HR, 2018 IJRAR December 2018, Volume 5, Issue 4 ,www.ijrar.org (E-ISSN 2348-1269, P- ISSN 2349-5138).

8. Dr, P. (2021). Role of artificial intelligence in human resources management. *ResearchGate*. https://www.researchgate.net/publication/367654666_Role_of_Artificial_Intelligence_in_Human_Resources_Management

9. Fenwick, A., Molnár, G., & Frangos, P. (2024). Revisiting the role of HR in the age of AI: bringing humans and machines closer together in the workplace. *Frontiers in Artificial Intelligence*, *6*. https://doi.org/10.3389/frai.2023.1272823

10. E. Felix Maria, D. R. B. . (2021). Artificial Intelligence and Hrm: An Empirical Study on Decision-Making Skills of Hr through Ai in Hrm Practices. *Annals of the Romanian Society for Cell Biology*, *25*(6), 11568–11578.