



ISSN (O): 2320-5407
ISSN (P): 3107-4928

Journal Homepage: - www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/22877
DOI URL: <http://dx.doi.org/10.21474/IJAR01/22877>



RESEARCH ARTICLE

THE IMPACT OF ARTIFICIAL INTELLIGENCE IN STRATEGIC HUMAN RESOURCE MANAGEMENT IN LIGHT OF LITERATURE REVIEW

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Manuscript Info

Manuscript History

Received: 4 December 2025
Final Accepted: 8 January 2026
Published: February 2026

Key words:-

SHRM, AI, Industry 4.0, Opportunities
& Challenges, and Sustainability.

Abstract

Artificial Intelligence (AI) plays very vital role in Strategic Human Resource Management (SHRM). It transforms SHRM activities by creating automation of routine tasks along with managerial activities like problem-solving, decision-making, predictive analysis, etc. AI deals with operational activities like: recruitment, onboarding, performance measurement, compensation of employees, training and development. Basic tools of AI, like analytics platforms and chatbots, enhance efficiency, reduce bias and focus on strategic goals. The strategists plan to face environmental changes and challenges. The primary objective of the study is to emphasise the importance of AI in SHRM and sustainable business practices. It also focuses on challenges regarding AI and strategies to curb those challenges. The Methodology of the study is qualitative. Data is collected by secondary sources like published articles, research papers and the internet. This is a purely Review Paper. It concludes with the demand of AI for sustainable business and its utility by strategists in Strategic Human Resource Management.

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Introduction:-

Strategic Human Resource Management (SHRM) is a key topic of discussion in today's business scenario. Its main aim is to set the vision of the organisation and frame strategies to achieve the vision. It systematically aligns the performance of employees with the main objective of the organisation. The organisations try to run a diversified workforce efficiently to gain a competitive advantage, and SHRM designs plans with the help of Artificial Intelligence (AI). AI converts traditional human practices to dynamic and predictive practices within the limited manpower and time effective manner. The AI era brings innovativeness and creates an automation process of recruitment to development (Benabou et al. 2024). The Artificial Intelligence (AI) concept was first introduced in July 1956 at the Conference at Dartmouth College, Hanover, New Hampshire, and its main aim was to focus on the application of AI in different disciplines and the conversion of manual tasks into AI-specific tasks (Sakka et al. 2022).

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AI provides tools to gain a competitive advantage for the plans of SHRM. AI tools help in recruitment, selection, performance management, training and development, compensation management, and learning strategically. SHRM aims to build up a positive organisational culture by enhancing employee management skills, and AI helps in both activities. Strategic HRM, by incorporating AI, aims to enhance organisational productivity and employee satisfaction. AI tools help in problem-solving and decision-making, which pave the way for sustainable business. By using AI, the new patterns of working streamlines operational activities and the process of decision-making of management (Hayes & Downie, 2025).

Review of Literature:-

Samarasinghe and Medis (2020) discussed the importance of Artificial Intelligence (AI) in the field of Strategic Human Resource Management (SHRM). Both authors focused on the replacement of the labour market in Industry Revolution 4.0 and the introduction of Machines that can think like human beings. They have connected Artificial Intelligence with Strategic Human Resource Management (AISHRM). According to the authors, the value chain analysis in operations is best managed by robots with AI, which was previously performed by human beings. In the revolution of Industry 4.0, organisations are more focused on strategic human resource management as it creates a sustainable competitive advantage. The labour force based on AI provides more valuable fuel in Industry 4.0. Similarly, Zehir, Karaboga and Basar (2019) focused on the evolution of human resources from 1945 to the present scenario. Today's organisations are driven by digitalisation and the transformation of strategic human resource management enabled by artificial intelligence and big data management technology. AI plays a vital role in the functioning of SHRM and enhances the performance of employees and the organisation. The authors have concluded that in the near future digital transformation of human resources will easily support the overall production of organisations.

Malik, Budhwar, and Srikanth (2020) have critically examined the application of AI in strategic HRM. AI provides a better platform for both employees and management. Some examples have been discussed by authors to explain how platforms like Zomato, Swiggy, Ola, Uber, and Airbnb are providing their services in a well-organised manner by using different technological applications. The authors also highlight the broad-based future of the companies by properly utilising AI and technological disruption. Malik, Budhwar, and Kazim (2022) studied on importance of AI in the management of human resources and its impact on workers and the work environment. AI assists human resource managers in developing strategies to increase productivity, performance, and profit. The authors have reviewed sixty-seven peer-reviewed articles and concluded that artificial intelligence assists in building effective strategy formulation and implementation. According to Roy et al. (2025), artificial intelligence influences operational efficiency and organisational development.

It helps to build up innovative models of business and face environmental changes and challenges. The authors focus on the importance and adaptability of AI, which creates value for the organisation. Similarly, Sabil et al. (2023) studied on implementation of artificial intelligence in strategic human resource management. By applying AI, organisations streamline their policies and practices regarding recruitment, selection, performance management, employee training and development and employee compensation, and other activities. The authors conclude that AI is useful for modern human resource practices and economic development. Chowdhury, Budhwar, and Wood (2024) have studied on significance of Generative Artificial Intelligence (GAI), which has brought different opportunities and challenges for human resource management. The GAI influences the operations of organisations and workforce dynamics. They also prioritise on development of entrepreneurship for organisational sustainability. The authors conclude that Generative Artificial Intelligence provides a road map for organisational complexities and success.

The main objective of the study conducted by Alzeiby et al. (2025) is to focus on the importance of AI in strategic human resource management. AI helps in employee engagement and management practices. The authors collected data from 208 human resource professionals working in the United States. The study has developed a clear strategic intent for AI and its adaptability and practical guidance for human resource practitioners. With the application of AI, HR leaders can easily make rational decisions that improve employee performance. Bandara et al. (2025) have focused on the transformation of human resource management by artificial intelligence and machine learning. Both employers and employees gain benefits by utilising machine learning algorithms and AI. The authors collected data through a time-lagged survey of employees and human resource professionals in the Australian financial and insurance industries. The findings are based on three critical dimensions of human resource algorithms, such as bias in data, models, and deployment. The authors have also discussed on the threats of using algorithms, which

sometimes create failure to provide proper solutions and suggested strategies to overcome the problems that provide a competitive advantage.

Venugopal et al. (2024) have gone through the study of different functions of HRM, such as recruitment, selection, retention, performance appraisal, etc. They have conducted a comprehensive review by using the framework of PRISMA and the BER Topic model. By using AI tools, HRM professionals can easily streamline recruitment and selection, along with the analysis of interview sessions. As a result, the hiring efficiency will be improved, and accurate decisions can be made. Similarly, AI helps in performance management and organisational development. The authors have also discussed that the overreliance on AI can create algorithmic bias, data privacy issues and affect employee morale. They have suggested the implementation of a comprehensive framework to promote inclusivity, ethics and fairness and enhance workforce management. Benabou et al. (2024) have discussed on revolutionary impact of Artificial Intelligence in predictive talent management. It enhances organisational capabilities to control a diversified workforce and dynamic workplace. AI develops the strategic role of HRM, which is more developed than traditional practices. From recruitment to retaining employees, AI plays very vital role in organisations. This study also highlights the ethical challenges and necessary actions to be taken to curb those challenges.

Vohra et al. (2024) discussed strategic workforce planning done by AI as part of Human Resource Analytics. To retain efficient manpower and effective decision-making in a competitive era, organisations use data mining, predictive analysis and machine learning techniques. The authors conducted a survey questionnaire with 150 individuals to examine how AI, as part of HR analytics, helps enhance decision-making strategies. They concluded that organisations using AI enhance the skill of decision-making and remain competitive. Gupta (2024) strategically incorporated AI into HRM in the contemporary workplace. This study also deals with practical applications and challenges faced by organisations while applying AI. The author discusses the ethical and legal issues, anticipated consequences, and actionable strategies to overcome threats. This study also emphasised on transformation of roles and activities in modern trends. By addressing ethical and legal challenges like privacy concerns, data integrity, bias, etc. AI helps in quick decision-making and deals with the dynamics of the workplace.

Objectives of the Study:-

The main objective of the study is to focus on the importance of AI in SHRM and sustainable business practices. It also focuses on challenges regarding AI and strategies to curb those challenges.

Methodology:-

The Methodology of the study is qualitative. Data is collected by secondary sources through reviews of articles, publications of research papers and different websites on the internet. A thematic analysis approach is conducted to extract key themes from selected literatures.

Strategic HRM and Application of AI:-

Artificial Intelligence (AI) transforms traditional functions of Human Resource Management into modern and developed operations. The strategic human resource management focuses on a broad vision of the organisation and improvement of efficiency by properly utilising artificial intelligence. The activities like: screening of candidates, tracking of compliance, processing of payroll, etc., can be easily automated by artificial intelligence and HR professionals focus more on strategic activities. AI helps to measure employee productivity and provides data for performance appraisal. It also helps in decision-making across different functions of human resource management. Artificial Intelligence Chatbots provide instant support for employee queries of employees. AI also helps in performing training programs and improves work-life balance. At the same time, AI assists in workforce planning, job descriptions, evaluation of strategic alternatives like mergers and acquisitions, employee training and development, etc. AI tools integrate and empower employees by developing their competency of employees (<https://www.aihr.com/blog/ai-in-hr/>).

AI Tools Used in Strategic Human Resource Management:-

Various AI tools are used in Strategic HRM for different purposes. This study highlights the importance of AI tools used in workforce planning, talent acquisition and recruitment, performance management, employee development and engagement and administrative tasks (Madanchian, et al.2023). In the case of workforce planning and analytics, Visier, Workday and SAP's success tools of AI are very important. Similarly, for talent acquisition and recruitment, Beamery and Eightfold AI are used. To create a job description, Generative AI and for employee

development, BetterUp tools of AI, etc., are used by Human Resource professionals. As routine works are done by an automation system, HR managers can easily focus on strategic decisions to achieve the overall goal of the organisation. Let's have a brief discussion of the AI tools used in different operations of the organisation.

Workforce Planning and Analytics consists of three basic tools. These are Visier, Workday and SAP SuccessFactors. Visier is an AI platform that is based on advanced analytics for planning of workforce and different functions of Human Resource Management. Similarly, to streamline the HR process on the basis of the analysed data, Workday is used. Workforce planning consists of SAP Success Factor to analyse data to make effective strategic decisions. The Talent Acquisition and Recruitment function can be swiftly done by AI tools like: Eightfold AI, HireVue, Beamery, Fetcher, Seekout and Paradox. Eightfold AI is used as an intelligence bridge between management and sources of recruitment. Similarly, to identify skills, HireVue acts as an automation path. It also focuses on the hiring process and valuing the skills of candidates. Beamery is helpful to match the role of candidates based on skill data and online sources. Fetcher creates automation for searching for candidates and mailing them. Similarly, the recruiters, with the help of Seekout, easily identify candidates from different platforms and for screening and scheduling interviews with candidates, Paradox plays a leading role.

AI tools used in Employee Development and Engagement are BetterUp, Gloat, Pymetrics and Peakon. BetterUp is a basic application of AI that is used for providing coaching to employees for their well-being and skill development. For the career development of employees and internal mobility, Gloat provides a talent marketplace. To evaluate emotional and cognitive traits, AI uses Pymetrics (neuroscience-based) games, and Peakon is used for analysing employee feedback and controlling employee engagement. Automation and Administrative tasks can be easily performed with the AI-based tools like Generative AI tools, Chatbots, SAP, etc. Generative AI tools are used to create learning materials and draft job descriptions. Virtual Assistance/Chatbots provides answers to questions on HR topics like leave policies, employee benefits, etc. and provides support at all times. SAP, Workday and Brightmine platforms help in payroll processing, compliance tracking and updating employee data. ChatGPT is the most popular platform of AI, which is used for the creation of content, drafting of policies, support to the internal knowledge system and overall employee communication. Other AI tools like Perplexity, Gemini and Microsoft Copilot help HR professionals in drafting, summarising meetings and other related activities.

DRUID, the conversational AI which supports HR professionals in various perspectives like: recruitment, selection, onboarding, performance, compensation and benefits, along with all administrative tasks. The NOVOED, an AI application for learning and development, enables organisations to provide personalised learning to each employee and develop overall personality on the basis of need analysis. To make decisions and align people-related data with the goal of the organisation, Strategic HRM professionals utilise human resource analytics and data-driven decision-making. It is also helpful for predictive analysis, content creation, and the automatic creation of an intelligent tutoring system. Data-driven decision-making goes beyond guesswork and intuition and supports HRM professionals in adopting an evidence-based approach. As a result, by utilising employee surveys, performance metrics, and employee data, HR leaders improve strategies of talent acquisition and retention (<https://www.aihr.com/blog/ai-in-hr/>)

Opportunities of Using AI in SHRM:-

Strategic Human Resource Management professionals are applying Artificial Intelligence in various fields and gaining ample opportunities. These can be explained in the following manner.

Onboarding- Offboarding:-

AI is applied in Recruitment and Selection to help in hiring candidates through various improved sources. From Pre-Selection to interviewing candidates, all activities are smoothly organised by AI. The AI-driven Applicant Tracking System (ATS) are used to scan resumes of candidates to match the Job Description (JD) and Job Specification (JS). Similarly, onboarding enhances employee retention. AI-driven tools are helpful for onboarding platforms in scheduling training sessions, sharing relevant policies, and completing necessary forms. Most of the organisations have changed their onboarding process, which is based on friendly hiring and employee satisfaction, by using AI (Jasiak, 2025). The entire onboarding workflow process, as well as offboarding, can be automated with the help of AI. The AI power solution creates a leave for the employees and prepares documents related to the return of assets of the company, schedules an exit interview and cancels or revokes employee access in different systems by sending automatic emails. By introducing AI in SHRM organisations minimise the cost of production and employee

efficiency (Roy et al. 2025). To help the HR professionals, AI automates administrative tasks to optimise onboarding to offboarding and the entire workforce planning.

Workforce Planning & overall Development :-

AI analytics plays a very vital role in workforce planning by identifying potential skill gaps, focusing on training programmes and developing succession plans to meet future needs. It automatically identifies the needs of employees. With the help of data-driven decision-making, workforce planning can be done properly. It ensures unbiased decisions and proactive preparation of strategies that align with the strategic goals of the organisation (Nalla, 2024). Human resource analysts collect data, analyse it and interpret people-related data to make better decisions, which is helpful for effective recruitment, succession planning, training and development and compensation management and reducing employee turnover. AI helps in providing structured mentorship programs for career growth and development. It improves accuracy, enhances efficiency and employee satisfaction, creates better strategic planning and provides a competitive advantage. By making performance tracking, retention strategies, career growth and development and succession planning, AI improves the process of talent management. By integrating talent management with AI, the HR department develops career planning and identifies the next successor. To retain and manage the workforce properly, organisations use machine learning, predictive analysis and data mining and other AI-driven solutions (Vohra et al., 2024). AI-based coaching processes provide personalised feedback, support and guidance to employees. It makes the coaching process more scalable and accessible, coaches are more effective, and the coachees are more trained. Proper application of AI in SHRM is helpful for sustainability by developing employee commitment and competencies that align with organisational goals and environmental challenges. AI tools provide all-time assistance to improve the overall performance of the organisation. It prevails a culture of fostering sustainability in the mindset of both the employer and employees. (<https://www.aihr.com/blog/ai-in-hr/>).

Challenges of AI in SHRM:-

There is no doubt that AI provides ample opportunities towards the field of SHRM, but it is subject to different challenges. AI has its own risks if the data is not valid and biased (E.I. Ghoul et al. 2024). It creates an unfair decision in the process of hiring and selecting employees. Similarly, performance evaluation will be wrong and less inclusive. Sometimes, legal risk occurs if the AI system lacks transparency in decision-making. It creates a breach of trust between candidates and employees. AI, as a system of automation, can be the subject of unpredictability. Application-based risks are faced by HR professionals while using an AI system, because it depends on the way of use or applied. Sometimes AI hampers the value or ethics of the company and negatively affects the work culture (Bandara et al. 2025). The morale and trust of employees decrease if the application of AI is not properly handled. Compliance-related risk occurs around data protection and employment laws. The violation of data privacy hurts respondents from whom the data is being collected. It creates sensible issues and discrimination, along with data privacy and security issues. At the same time, lack of expertise, resistance to change, and highly expensive technologies are other barriers to using AI (Gupta, 2024).

Strategies to Curb the Challenges:-

By using artificial intelligence and machine learning algorithms, human resource professionals can gain a competitive advantage (Bandara et al. 2025). To minimise application-based risk, it is important to strike a balance with AI-powered tools and empathy with human insights. The organisation should focus on the legal aspects of the documentation of data and make decisions fairly to reduce compliance-related risk. It promotes ethics and fairness in the workplace (Venugopal et al., 2024). Any discrimination based on age, gender, colour, race, or religion should be prohibited because any disobedience leads to legal challenges and fines. The AI should not be a tool for replacing, but it is a tool of augmentation. The strategic role of human resource professionals is to integrate a diversified workforce and ensure the empowerment of employees. Providing training and developmental sessions to employees regarding the safety and security of data can reduce the chances of violation of data privacy. An AI risk management framework and data governance help to address both internal and external environmental risk by structuring policies, practices, philosophy and processes (<https://www.aihr.com/blog/ai-in-hr/>). The proper application of AI by trained HRM analysts helps predictive talent management and controls a diversified workforce smoothly. By using AI, leaders develop strategies to recruit and retain skilled manpower in a dynamic environment, which acts as a revolutionary weapon in talent management (Benabou et al. 2024).

Conclusion:-

HR professionals use AI primarily to successfully align strategic objectives with HR objectives. AI makes the automation of routine or repetitive human resource tasks and helps managers develop digital analytical skills to

integrate the business system and achieve the goal of the organisation. Effective application of AI shapes workforce strategies that are successfully run by human resource professionals. AI plays very vital role in automating different tasks and emphasises strategic decision-making. By using AI, organisations can improve both the efficiency and productivity of employees. It fosters a culture of continuous learning and improvement. With the help of proper application of AI, HR professionals achieve organisational goals and objectives smoothly in a competitive environment.

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