A Study about the Best practices of Human Resource Management embracing Artificial Intelligence Interventions-Supporting Talent Management and Retention.

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Abstract

The present eco-systems of Human Resource Management revolve around the perception of attaining sustainability and competitive advantage as it presumably considered for the upholding of the organisation across the global market by overcoming the challenges and effectively facilitating the technological upgradation on a timely basis. This paper investigates across the best practices implemented with the support of AI intervention in HR industry and the ways and means the process has been implemented successfully and created a status quo which inspires the debutants in the field of HR. This chapter investigates on AI intervention while adapting best practices for the overall well-being of organization's talent management and retention possibilities. Drawing from the literature review the study would extend to multiple possibilities of handling Talent management strategies and retention implementation, which consequentially results in Organisational Development as a whole.

Talent management remains dominant factor in organisation's success hence this chapter provides insight how organisations leverage on AI intervention for the enhancement of Talent Management and Retention Process. The countless availability of large-scale talent and reservoir of data provides unparalleled opportunities for business leaders to comprehend organizational behaviours and able to intensify the talent management and retention efforts within the organization reflects a relentless pursuit of excellence, where strategic planning, continuous engagement, and proactive development are critical to sustaining a competitive edge in a rapidly evolving talent landscape."

Introduction:

The history of Talent management dates to 1970s–1980s during the inception of Strategic Management the concept emerged from **performance management**, **succession planning**, and **career development** gained prominence. The seeds of Talent Management had been laid in **strategic workforce planning**. Moreover, during 1990's the Talent Management became a prominent terminology getting higher level of attention across the industry and was considered invaluable due to meagre ratio talents available in the market during that period. Organisation realised the necessity and importance of integrating strategies to attract, develop, and retain top performance in the organisation to attain the mission and vision.

Eventually during 2000's Talent Management got upgraded from mere HR function to a critical Strategical approach. Talent acquisition, Leadership Development, Succession planning, employee engagement, and retention strategies were considered as a compound of Talent Management strategy. In addition, technical intervention laid the foundation for Human Resource Information Systems, talents analytics helped in the transformation of Talent Management concept.

Talent Management in the digital age has a composition of AI, data analytics, and cloud platform updating talent needs and helps in the automation of the process. Nevertheless, focus on continuous learning, reskilling, and internal mobility and inclusive talent management considered as vital for the organisation. However few challenges came along with the existing condition such as remote and hybrid work models which are yet to be resolved.

Talent Management is hunting for high potential individuals or namely the "Players" and nurtured with the ambition of growing as future leaders. Moreover, retention of the skilled resources of the organisation is always irrefutable challenge that the HR department overcomes on a day-to-day basis. McKinsey & Company (1998) defines Talent Management as "A deliberate and strategic approach to attracting, developing, and retaining the best people to meet

current and future organizational needs." According to CIPD (Chartered Institute of Personnel and Development, UK) "Talent management is the systematic attraction, identification, development, engagement, retention, and deployment of those individuals with high potential who are of particular value to an organization." Such extensive view sees talent management in the Cenozoic Era not just about elite performers but about building a capable and engaged workforce at all levels.

Finding best talent in the labour market and acquiring it may be the first phase of the concept however it is even more tactful to ensure the stability of such resource will be questionable when there is always demand for such skill set across the industry and the competitors' counterparts are ready to suffice with showering financial advantages and other privileges to attract towards them. HR department faces the challenge of retention from the day of inception of hunting for the talent.

Artificial Intelligence plays a pivotal role when comes to Talent Acquisition however the question arises whether AI can also be quintessential part of retention program. AI (Artificial intelligence) has the potential to improve strategies to talent management by implementing advanced automated systems for workforce management. AI can make this improvement a reality. (Exploring the Risks and Options for Constructing a Theoretical Foundation Published Jan 4, 2023 · A. Fasiha, S. Miah). The future of Talent Management and retention lies in the hands of Artificial Intelligence as the dependency of the technology overpower human strategic plans. Moreover, considering AI as a co-traveller the mission can be attained at its best. Studies says that incorporation of AI and Human Strategical moves will generously take forward the context of Talent Management and Retention to a greater extent.

Literature Review

1. Human Resource Management and AI amalgamation first phase:

The integration of Artificial Intelligence (AI) in HRM has emerged as a benchmark evolution that set as task force restructuring traditional practices. AI augments HR efficiency, accuracy, and strategic alignment by automating routine tasks and assisting data-driven decision- making (Kaplan & Haenlein, 2019). AI technologies such as machine learning, natural language processing (NLP), and predictive analytics have redefined how talent is acquired, managed, and retained. Transformation has started from Recruitment process replaced by E- Recruitment through AI-powered applicant tracking systems (ATS) to screen resumes.

Chatbots for answering candidate queries and initial engagement and handling predictive analytics for shortlisting candidates based on job-fit. The first phase of HRM–AI amalgamation is about automation of repetitive HR processes such as recruitment, onboarding, payroll, administration and using AI to streamlined workflows and enhance efficiency. It establishes a data-driven HR foundation for more advanced AI applications in later phases like predictive analytics, employee engagement, and strategic HR planning.

2. Best Practices adapted for Talent Management using AI:

a. Talent Acquisition from the Labour Market:

AI-driven recruitment tools help in streamlining the hiring process by saving time through automated resume screening, chatbot interactions, and predictive algorithms. These practices increase hiring efficiency and reduce bias (Upadhyay & Khandelwal, 2018). Best practices include using AI to assess candidate fit using behavioural data and implementing chatbots for consistent engagement. However, the challenge lies in the technical upgradation of the HR alongside. Firms are shifting from traditional recruitment to proactive mode of "hunting" for talent, especially for highly challenging roles. Online platforms has grown significantly precisely among professionals who posses strong online profiles. In the current time, LinkedIn acts as central for accessing top talent, especially in competitive or skill-scarce markets. Organizations are leveraging AI to enhance efficiency, reduce bias, and make more data-driven decisions, but challenges around ethics, data quality, and implementation persists. AI augments talent management by analysing workforce data to identify high-potential employees, forecast career paths, and optimize succession

planning. Best practices include using AI to create "talent heatmaps" and aligning employee aspirations with business goals (Bersin, 2021). AI-based predictive analytics helps managers in proactive talent nurturing.

b. Training and Development Phase:

Artificial intelligence (AI) is rapidly reshaping the training and development (T&D) perspective across industries. The affluence of AI-driven tools are enabling more tailor made personalized, efficient, and adaptive learning experiences, all the more while also creating new challenges and ethical considerations for organizations and learners. Acquiring best talent stands to be challenge that every HR faces on a day-to-day basis, in addition to this training the new recruits and reframing their capabilities as per the organisation's requirement also seems to be strenuous however AI supports personalized learning paths and adaptive training modules customised and automated to support to fill in the individual skill gaps.

According to Deloitte's Global Human Capital Trends (2020), organizations leveraging AI for learning management experience higher employee engagement and skill retention. The fast pace of innovation and disruption in business processes and technology today requires employees of organizations to be continuously up-skilled and be able to adapt to changing practices. Training needs are becoming more personalized. Micro-learning and byte-sized training modules, easily accessible to employees, as and when required, are some of the major organizational needs. Training and development programs should be designed keeping in mind factors of employee engagement, involvement and extent of training transfer. The purpose of this paper is to explore whether artificial intelligence (AI) can lead training and development processes in organizations in the years to come.(Journal of Management Development- Published Sep 9, 2019 · S. Maity)

c. Strategic Human Resource Planning in Performance Management:

Artificial Intelligence intervention enables continuous performance monitoring through sentiment analysis, real-time feedback tools, and goal-tracking systems. IBM (2019) reported that AI-enabled performance systems contribute to greater objectivity and transparency in appraisals, which supports fair talent recognition and development. The various processes of Human resource functionality like recruitment, training, selections, performance and development and workforce planning and the extent to which Artificial Intelligence has revolutionized over the period by providing various insights and supporting in the decision- making process. Artificial intelligence has provided a bias free and advanced algorithms due to which the screening and scheduling of HR process has been done with accurate parameters and lightning-fast speed. In addition, AI helps in the prediction of turnover trends and aids in a well-informed succession planning, contributing to organizational productive and efficient life cycle. The research has infused a mixed-methods approach, which combines qualitative and quantitative data collection through surveys, interviews, and case studies, alongside statistical analysis of HR metrics pre- and post-AI implementation. T (A research paper on how Artificial Intelligence changes the Human Resource Activities inside the organization and provides the significant improvement in workforce working environment for various day to day decisions making along with their efficiency and their productivity, Published Sep 15, 2024 · N. Ganatra, Journal of Management Research and Analysis).

d. Employee Engagement and Experience

Artificial intelligence (AI) is rapidly transforming how organizations approach employee engagement and experience. Recent research highlights that AI-driven HR tools, chatbots, and analytics platforms are increasingly used to personalize employee interactions, streamline HR processes, and foster a more engaging workplace. AI is used to gauge employee satisfaction via pulse surveys, emotion detection, and NLP-based sentiment ana. These practices help in proactively addressing disengagement risks (Ghosh, 2020). Advancements in AI and machine learning have enabled organizations to find new uses for enhancing employee engagement, such as real-time monitoring of performance, sentiment analysis, and natural language processing. Creating a holistic work environment that promotes clarity, skill development, recognition, and wellness is essential to engage employees (A Review of The Role of Artificial Intelligence in Employee Engagement

Published Mar 17, 2023 · Prabhat Mittal, Rachna Bansal Jora, et al.)

3. AI and Employee Retention

AI is transforming employee retention by enabling predictive analytics, personalized HR strategies, and improved engagement, but also introduces challenges around ethics, bias, and employee well-being. AI is extensively reshaping how organizations approach employee retention, offering new tools to predicting turnover, personalize development, and enhance engagement. AI enables HR professionals to proactively address retention risks and create more supportive working environments. On the other side the integration of AI also raises important considerations around ethics, transparency, and the impact on employee identity and job satisfaction promising retention.

4. Challenges and Ethical Considerations

Ethical consideration starts right away from AI decision making process with transparency regularly audit AI algorithms to avoid discrimination and bias. Despite the benefits, AI implementation in HR raises concerns around data privacy, algorithmic bias, and transparency. Automate compliance training and track completion using AI. Binns et al. (2018) warn that reliance on AI can perpetuate existing biases if not carefully designed. Best practices involve establishing ethical AI frameworks and ensuring human oversight in AI- driven HR decisions.

6. Future Directions and Research Gaps

Like the two sides of the coin AI has its own pros and cons when it comes to comprehending the system. While current studies have shown the effectiveness of AI in HR functions, there is limited longitudinal research on the sustained impact of AI on employee retention and talent pipelines. However, there are spaces that AI cannot completely fit in where emotional connectivity plays major role in handling humans to a greater extent. AI can support the system to create an outline for the performance management system or Strategic Management system by reducing the duration of designing but cannot be implement without human support to be precise handling Emotional Intelligence with grace is remaining a challenge for the system relying on AI. There's also a need to explore AI's role in promoting inclusive talent management across diverse cultural and organizational contexts.

Conclusion

The reviewed literature highlights that Artificial Intelligence (AI) is transforming Human Resource Management (HRM), particularly in talent management and retention.
Organizations leveraging AI-driven practices—such as personalized learning, predictive models for employee retention, and data-informed succession planning—are better positioned to maintain a competitive edge. Nevertheless, ethical implementation, transparency, and human-centred approaches remain essential for sustainable success. AI is also reshaping strategic HR planning and performance management by driving greater efficiency, objectivity, and alignment with organizational goals. Despite these advantages, businesses must address challenges related to ethics, privacy, and change management to fully unlock AI's potential in HR. This study examines the AI capability framework in relation to talent management and employee retention within organizations. Moreover, the globalization of Human Resource concepts underscores its critical role in ensuring employee well-being and long-term organizational sustainability. The possibilities are extending up to the expectation of organisation by ensuring maximum AI intervention can uphold the retainability along side making strategic moves that substantiates the growth of the organisation. Extensive approach has to be entitled when it comes to multi vertical of HR operation practiced in different sectors. Technological Interventions are unavoidable from the age of introducing Steam Engine as the first step of privilege extended by our predecessor. So it is imbibed as a factor of co-existence that man and machine get along and has been proven successful for ages.
Hence for making life easier for human race man invented machines, accepting to embrace the inevitable connectivity to address human related issues to a greater extent and as a support system for making quick decision and predictions AI can be a co-traveller. On this note the research emphasises that the AI and human strategies can go hand in hand in

choosing and retaining talent possession in any circumstances.

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