

## Barriers and Enablers in Integrating AI into Human Resource Management Strategies: Maximizing Human Capital

Dr. U. Amaleshwari<sup>1</sup>, R. Shanmugapriya<sup>2\*</sup>

<sup>1</sup>Director, School of Management Studies, D.D.G.D Vaishnav College,

<sup>2</sup>Research Scholar, School of Management Studies, D.D.G.D Vaishnav College. [amalaumapathi@gmail.com](mailto:amalaumapathi@gmail.com),  
[seldol82@gmail.com](mailto:seldol82@gmail.com)

(Affiliated to the University of Madras, Chennai)

### Abstract

Artificial intelligence (AI) has shaken the foundation of modern workplaces like never before and has induced digitized workstyles within the organisation. These furtherance in technology are generating significant interest among stakeholders to embrace AI in human resource management (HRM). Research and Development teams, analysts and practitioners are keen to investigate the sequel of AI in HR and their collaboration with gadget applications involving machine language, Data-science, Blockchain and Big Data. This study investigates HRM specific factors that are imbibed towards adoption of AI in extended HR based digital platform adopting a qualitative research design with an abductive approach. This research also investigates key enablers like optimistic, enthusiastic, and collaborative employees, strong digital enabled leadership, reliable HR meta-data, specialized HR partners, and well-rounded accountable AI ethics. The study also examines barriers towards awareness in AI adoption: the inability to have a timely internal audit pulse check of employees, their ability of emotional decision making, ineffective agile digital experts as well as external HR partners. On summarising, this study also contributes theory by providing a model that influences AI adoption and proposes ascending in welcoming unified theory of acceptance and use of innovative technology in the context of AI adoption in HR upskilling and reskilling ecosystems eventually. The study also contributes the anecdotes of best-in-class industrial HR practices with secured digital policy formulation to reimagine cybermated workplaces cubical. Maximising the human capital in the digital era be obliged in harmonious conglomerative human-AI enterprise making workplaces an eminent future-ready in the wake of productive and massive successful digital disruptions with efficacy.

**Keywords:** Artificial Intelligence (AI), AI Adoption, Human Capital, Enablers, Barriers, Industrial HR Practices, Digitised workplace, Cybermated cubical.

### Introduction

AI is the acknowledging future, when wielded by HR leaders from the corporates, AI-powered tools can streamline HR processes, enhance employee engagement, and assist in key business decision making. Most of the industrial sectors are being ascending towards AI, and ML based innovative technologies along with the supportive tools. Conversation like us will be unavoidable and can be incorporated in the collaborative technology involved enterprise. As we are being informed, upcoming digital innovation keep ascending to fuel business transformation and integration at various level. Various organisation has realigned their strategic direction on enhanced adoption of digital technologies collaborating with the new age technologies, especially Artificial Intelligence (AI) and (ML). Enterprise can prefer strategic adaptive measures in Talent-key differentiator-by adopting Artificial Intelligence in Human Resource Management. More than ever now regarded as a trusted advisor, the research provides insights on how Human Resource function has evolved as a strategic partner by deployment of AI related technological advancements as it contributes to building organizational capabilities and making organization competitive. Thus, creating organizations that win in the market. The human resource trying to deploy AI at various level of task involved in the work force- work place strategies. Artificial Intelligence have been raised to various sectors and services. Ranging from Virtual Reality (VR), Augmented Reality (AR), algorithmic coding at Machine Language (ML), Block Chain, Meta- analysis through Big Data Process, Gamification and robotics were part of Artificial Intelligence (AI). This can be handled through implementing the data analysis and their functionality through AI and its supporting systems. Ashutosh Samadhiya, et al (2023) have shared their views that” post pandemic involvements

and the challenges faced in implementing AI in the organisation. Summarising the research study, Utilizing the AI technology in the corporate world will make the employee grow their career path in every aspect of the developing

## Objectives

This study helps us in understanding

- The barriers and enablers in Integrating AI into Human Resource Management Strategies.
- Maximizing Human Capital within the organisation for overall development.
- Suggestions are made to enhance integration of AI.

## Research Methodology

A quantitative and qualitative approach with a mixed methodology was incorporated to answer the research questions, specifically a qualitative content analysis. Firstly, literature on the topic of implementation barriers to artificial intelligence was researched on the basis of a literature search respective available data. The search for papers was carried out in the scientific database Scopus, Research gate, semantic scholar and other open source. The search was conducted at the beginning of March 2023.

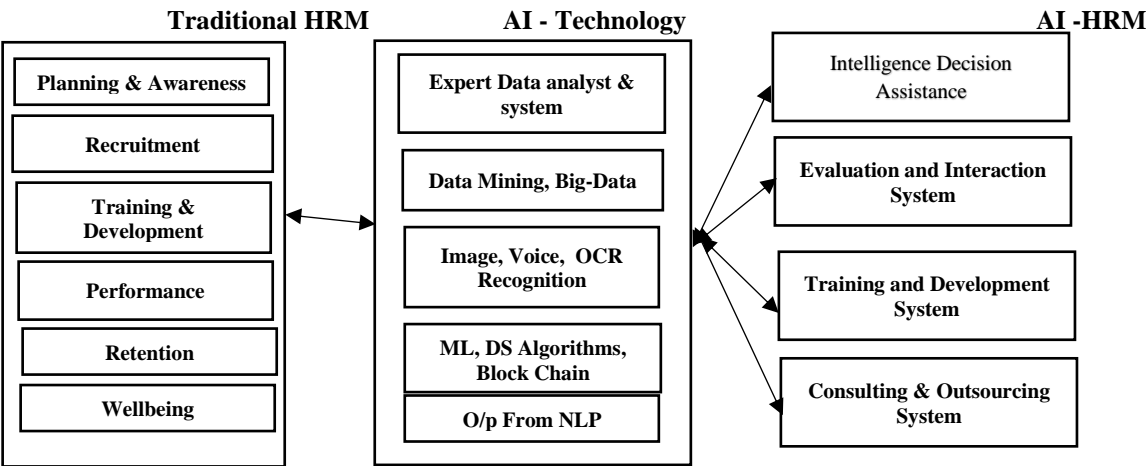
## Significance of AI in HRM

Fundamentally, the essence of Artificial Intelligence (AI), necessitate larger data sets were combined with various other sectors and relative services to resolve issues involved through the assistance in routine business-related tasks regimes. Precisely, AI presume developing machines through organised algorithmic coding (machines, devices, interpretation, applications) on the foundations of the that have the capability to react like humans and learn in the same way as humans do. Consequently, predictive analysis and data mining are possible with AI and ML that are incorporated with the Organisational system, which analyses past trends and enables businesses for better and more informed decision-making balancing the emotional intelligence and workspace demanding concerns. AI can be defined as a form of technology that can perform human-like tasks in cognitive capabilities by replicating a certain degree of human intelligence, through understanding, learning from and implementing inputs to realize the specified outcomes. It requires cognitive capabilities of human along with a decision-making process that is adaptive (Tambe et al., 2018). AI machine can emulate human intelligence when fed with tons of data and trained by machine learning models to act intelligently as humans in the role of “intelligent agent” (Russel and Norvig, 2010).

Future, predicts that AI will support HR in a variety of strategies, includes employee tracking engagement, assists professional growth, matching with their skills, policies, conducting background checks, regulating job fit and many more to say. Vast Data interprets that discovering relevant talent is literally like finding a needle in a pile of haystack; there are over 1 million sample profiles, 9000 skill-based libraries, out of 200,000 job descriptions approximately 14,000 are genuine positions, and there are acknowledgeable 2000 Job Clusters. The workforce within the upcoming digital work place of the future will be relatively low. Major percentile of workforce will be preferring majority of them will prefer either work from home or as virtual workers (working on a project basis or contracts). Among this, an US based statistic shows, 77% of the sample population utilises internet effectively, and that 62% of internet users have Instagram, Facebook or LinkedIn and other social platform profiles, which enable individuals to contact with employers directly or indirectly and facilitate the acquisition of on or offline jobs. Right from hiring and onboarding through HR services that includes career graph though out the whole employee life cycle customizing accountable employee experience.

The AI in current industrial sectors can be valued by this innovative technology.

Practices and opportunities in AI in HRM

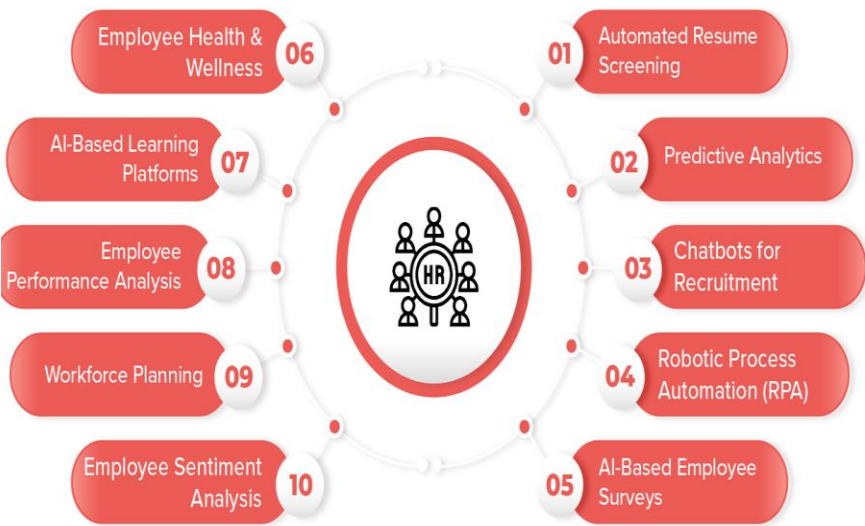


Source - Self

Artificial Intelligence in HRM sector in and organization

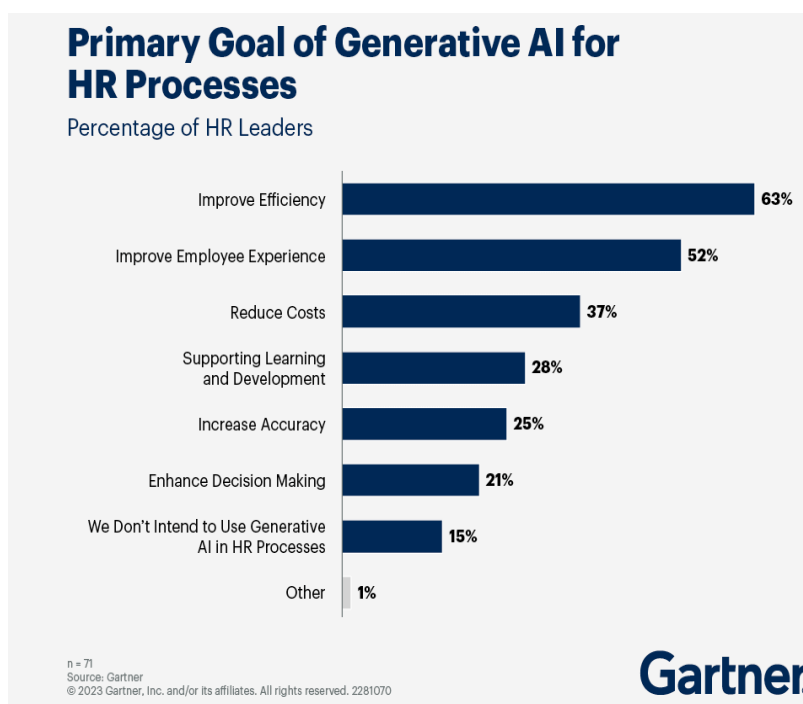
This research provides insights on how Human Resources function has evolved as a strategic partner by deployment of AI related technological advancements related, as it contributes to building organizational capabilities and making organization competitive, thus creating organizations that win in the market. There are considerable challenges faced in Human Resource Management by deployment of Artificial Intelligence (AI). Further Insights are shared on future directions of potential research that can be conducted in this field. The present research has certain implications, such as increasing the HR team's proficiency, addressing the problem of job loss and how to fix it, improving working conditions and improving decision-making in HR.

AI in HR Examples: Top 10 Game-changing Effects



Reference Source Picture1: AI in HR – Traditional HR and AI

The Reference Taken in source picture1 is from the Article Digital Information World -working with AI- by Regus - A survey has been done by them among 2200 people approximately and described that many of the industrial sectors across variety of firms consider Automated Resume Screening at initial stage if recruitment process if HR, Predictive analytics, Chatbot for recruitment, Robotic Process Automation (RPA) and AI- Based Employee Surveys at regular intervals without any bias. Even Employee Health and Wellness, customized Training and Development Program, Performance assessment based on overall career growth, advisable wellness program required at right time including healthcare advices and suggestions, Fitness advisors, Emotional Intelligence and balance are possibly considered with authenticity and implemented at various level of conglomerate environment. Reference Source Picture2 gives a detail analysis of Gartner's research view from his original space of discussion.



Reference Source2: Taken from Gartner – Generative AI and HRM

## Why AI and Why Not AI

Artificial intelligence (AI) makes every seems possible for machines and algorithmic code functioning applications to learn from skill, experience, adjusting with new inputs and perform human-like tasks. Most AI examples and applications that have been presently taken in consideration from on line gamification, robotics, to monitoring and assisting self-driving cars, The Tesla – rely heavily on Data science (DS), Deep learning (DL) and natural language processing (NLP). All this correlates with the Machine Language algorithms (ML) sequentially.

While AI can perform every allotted specific task with remarkable precision, it cannot fully replicate human intelligence, IQ, and creativity. Every AL and ML based algorithm needs human assistance to evaluate, organise and perform. We are aware that AI lacks consciousness and emotions, limiting its ability to understand complex human experiences and produce truly creative works, can handle it if has been programmed accordingly.

#### LAWYERS



#### HR MANAGERS



#### MARKETERS



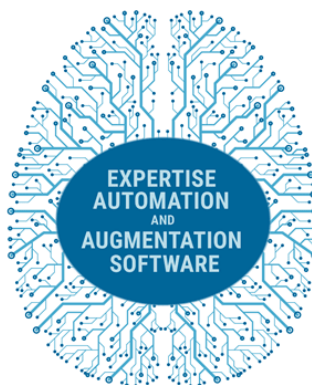
#### TEACHING ASSISTANTS



#### REPORTERS & EDITORS



#### TRADERS



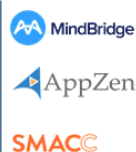
#### CRM & SALES CLERKS



#### RESEARCHERS & CONSULTANTS



#### ACCOUNTANTS & AUDITORS



#### COMPLIANCE OFFICERS



#### INVESTMENT MANAGERS



#### SOFTWARE DEVELOPERS



Reference Source Picture3: Reaesrch Assests from CBinsights.com

This reference source picture3, is being taken from CBinsights , where EAAS software that uses machine intelligence with human assistance to replicate and augment human cognition in this Virtual entity. The EAAS supportive tool in the present market mentioned and mapped above highlights some of the 40+ insurgent startup technology leaders and stakeholders building expert automation & augmentation software across any number of industrial sectors and domains they are considering. Ranging from lawyers stream to journalists to wealth managers to traders to consulting, to healthcare to IT and ITES for their recruitment, screening, HR process, Investment advisors, Teaching professionals, traders and outsourcing agencies across the enterprises and more to say where AI is being proactively implemented and their protocols are being analysed..

#### Barries in AI Implication

Although there are wide spread of data and knowledge sharing taking place across the globe regarding the opportunities for AI in industry in this digital era, there are significant challenges to be considered. Any new technology must be handled diplomatically to overcome any threat as a primary function in every sector. To name a few,

- Lack of Trust in using AI based technology and adaptive tools compatibility
- Data privacy and Security
- Expectation of Strong Firewall and Cyber security at the foundation level itself
- Capital investing Stakeholder and ROI
- Using right expertise at right algorithmic level

- Lack of Ability and agility in adapting technology

These are few of Barriers pipelined, which are definitely acceptable features to be meticulously considered and acknowledged. This can be overcome through proper awareness, training, diplomatic handling of information sharing and performance of the application ascending eventually in this digitized workforce environment.

## Literature Review

Most of the organisation were taken the aid of AI and generative AI in their corporative digital workspace. Various sectors involving AI in their digital enterprise have started training and adopting the AI. Leveraging the strategy **Franco Gandolfi<sup>1</sup>, et al, (2023)** in his research article have clearly stated that. “This research provides insights on Human Resources function and how it has evolved as a strategic partner by deployment of AI related technological advancements related, as it contributes to building organizational capabilities and making organization competitive, thus creating organizations that win in the market.” Similarly, **Gayatri Panda<sup>2</sup>, et al, (2023)** in his article shares the views that “The authors found that AI or AI-associated techniques help deliver various HRR-oriented outcomes, such as enhancing employee competency, performance management and risk management; enhancing leadership competencies and employee well-being measures; and developing effective compensation and reward management”. Likewise, **Azra Ahmić<sup>3</sup>, et al, (2023)**, “Their findings convey a nuanced perspective among HR professionals in an organisation, with a spectrum of attitudes ranging from enthusiasm for AI's potential to concerns about its impact on traditional HR functions”. Meanwhile, **Sarah Bankins<sup>4</sup>, et al, (2023)**, “outlining the meaningful work on philosophical and accountable business ethics its ethical importance in exploring the impacts of three paths of AI deployment helping in replacement of task there by amplifying human skills in implementing the ethical implications. On the other hand, **Sylvain Sénécal<sup>5</sup>, et al, Jul 2023**, “they had found that, more of an umbrella term that covers three of our identified principles, namely bias, discrimination in HR-focused AI, and trust of decisions and outcomes, and privacy concerns related to AI use”. **Kelechi Ekuma<sup>6</sup>, et al, Dec (2023)** “Their study explores how AI automation affects HRD strategies, highlighting how specific HRD processes affected and their influence over the outcomes. A wide lateral comprehensive search was conducted across available academic secondary databases, HRD journals and its information, and conference proceedings, and published data resulting in a selection of relevant resource filled research studies”.

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