

INCORPORATING ARTIFICIAL INTELLIGENCE IN HUMAN RESOURCE PRACTICES: CHALLENGES AND PROSPECTS

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ABSTRACT

Innovation has altered the pace of every business in our fast-paced, serious environment. One technological advancement that helps businesses grow more quickly and efficiently is artificial intelligence. The finance office, the human resources division, the advertising department, the creation department, and other divisions have all incorporated this invention. The association's ability to enhance its present exhibition and effectively perform its daily tasks has been made possible by the AI framework. Individuals working at various managerial levels are at present constrained to work under tension and perceive the requirement for artificial intelligence in the work environment because of the dynamic and cutthroat environment. The information has been investigated using relapse procedures and quantitative analysis, which was led by the creators. AI is an innovation that contributes to various HR tasks, starting with the acquisition of skills and continuing to the evaluation of employees' displays in the workplace. The connection between artificial intelligence and HR capabilities, as well as the different tasks carried out by the HR division, will be the focus of this investigation. The objective is to understand variables such as creativity and the way in which HR activities are utilised. HR professionals from several IT companies were considered to spearhead the evaluation. Convenience and inventiveness are two examples of criteria that the investigation's results positively correlated, indicating that AI has an impact on both. This research study aims to provide comprehensive information regarding artificial intelligence, which is now causing significant disruption in the sector.

Keywords: Machine learning, deep learning, chatbots, artificial intelligence (AI), and human resource management (HRM) are all examples of technologies.

INTRODUCTION

One of the most significant and convincing parts of an industry is development. Delegates in the continuous division have been supplanted by robots since the nineteenth 100 years. The third change started in the last part of the 1970s, when PCs and the web entered the working environment and supplanted human work. Nowadays, mechanical headways like artificial intelligence (AI) and machine learning (ML) are penetrating the work environment and will change business as far as we might be concerned. "Artificial intelligence is portrayed as "an ideal shrewd" machine that is versatile expert that sees environment and takes actions enhance its probability of ending up as the winner at some goal." Not at all like the customary intelligence performed by humans, artificial intelligence will be intelligence shown by a PC. In 1956, artificial intelligence was produced without precedent for quite a while. Artificial intelligence has a few applications in business, including diminishing representative pressure and responsibility by aiding reps in the working environment. Business advancements rapidly require quick reactions.

AI framework association is prepared to shed light on the present state of affairs and daily functioning. Directors have been increasingly aware of the importance of artificial intelligence in the workplace due to mounting pressure in business. These days, artificial intelligence is permeating every aspect of an organization's overall structure. In the human resource division, for example, human resources have been replaced by AI frameworks, which convey all of the division's capabilities, including enrollment, up-and-comer screening, scheduling human resource acts, and execution management.

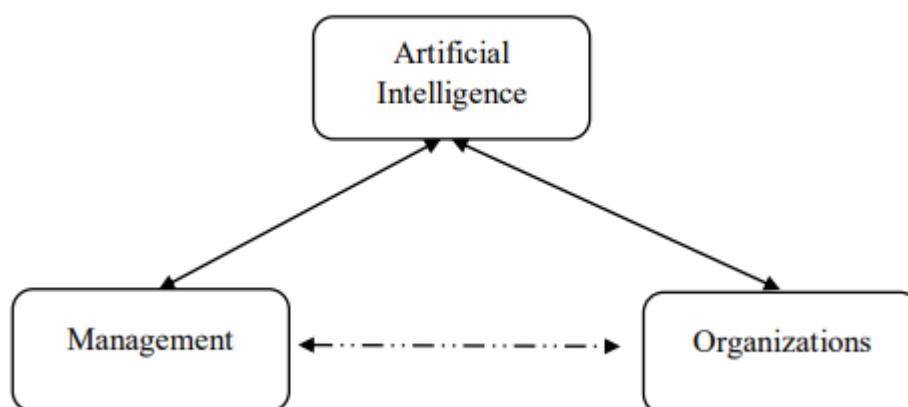


Figure1: Association Between Artificial Intelligence and Management in Organisations

The connection between artificial intelligence and management and affiliation is reflected in the above figure. It infers that artificial intelligence is connected to numerous parts of management and gives a lift to daily exercises.

LITERATURE REVIEW

Tambe et.al (2019) examine the difficulties that businesses encounter when integrating AI technology into HRM procedures. They point out important obstacles include employee resistance, algorithmic prejudice, and data privacy. Nevertheless, they also suggest a course of action, stressing the necessity for HR professionals to have a deeper comprehension of AI's potential and constraints while encouraging cooperation between HR and IT divisions.

Budhwar et.al (2022). They emphasise how crucial it is to take ethical, legal, and cultural considerations into account when implementing AI solutions worldwide. They also present a research agenda that will direct future investigations in this field, highlighting the necessity of empirical research to support theoretical frameworks.

Vrontis et.al (2022) investigate how AI, robotics, and other cutting-edge technology affect HRM practices using a methodical methodology. Key issues including automation, talent development, and organisational agility are identified, and the revolutionary potential and potential hazards of AI adoption in HRM are highlighted.

Vishwakarma and Singh (2023) pay particular attention to the difficulties that companies have while integrating AI into HRM operations. They identify key adoption challenges, including organisational culture, lack of technical skills, and reluctance from HR professionals, through a review of case studies and empirical data. They do, however, also offer suggestions for how to get beyond these obstacles, highlighting the need of change management and staff development.

Jia et.al (2018) provide a conceptual framework that outlines important elements like hiring, performance management, and employee engagement for the application of AI in HRM. They contend that by strengthening decision-making, expediting procedures, and boosting employee experiences, artificial intelligence (AI) has the ability to completely transform conventional HRM approaches.

ARTIFICIAL INTELLIGENCE

Artificial Intelligence is a tremendous field that envelops a few thoughts in Information Development. The term artificial intelligence (AI) alludes to the replication of human intelligence in PCs that might be customized to act like individuals and copy their progressions.

The phrase can also be used to describe any device that learns and addresses problems while also identifying improvements related to human concerns. Generally speaking, artificial intelligence incorporates key ideas. First, it involves studying human brains and how their cognitive processes work. It also includes such methods through the use of devices for thinking.

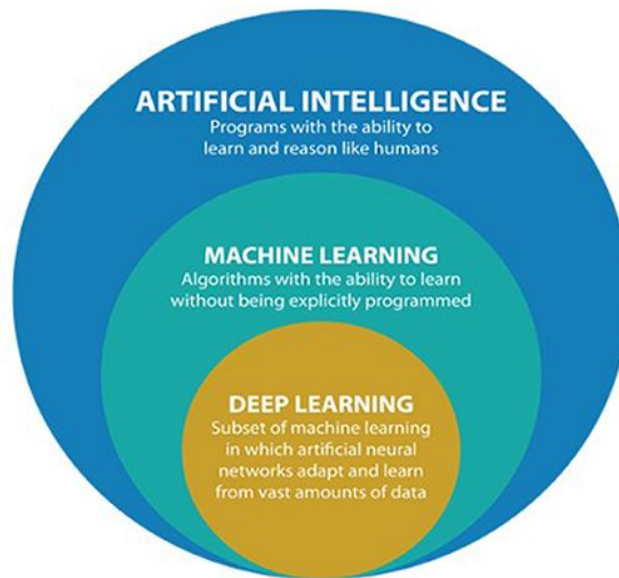


Figure 2: Artificial Intelligence

THE HUMAN RESOURCE SYSTEM NEEDS ARTIFICIAL INTELLIGENCE

The establishment for AI applications in the new Phony Human Resource Data Framework (HRIS) has been laid out. Improving management proficiency utilizing AI-made Human-PC cooperation capacity assists with fostering the serviceable framework for obtaining, protecting, and endorsing data expected by an affiliation. The automated development as AI replaces repetitive tasks with the least amount of human interference. Artificial Intelligence is helping with several aspects of the enrolment process, such as reference verification, robotized message sending, and CV screening. It has been observed that these devices outperform HR groups by slowing down the rate of deterioration and also advancing representative maintenance. While it is evident that AI can successfully perform HR's basic tasks, it is still necessary to verify in more complicated situations. There are several justifications for using AI since it offers the organisation significant benefits in a shorter timeframe and with greater accuracy.

Reasons for adopting AI

Why is your organization interested in AI?

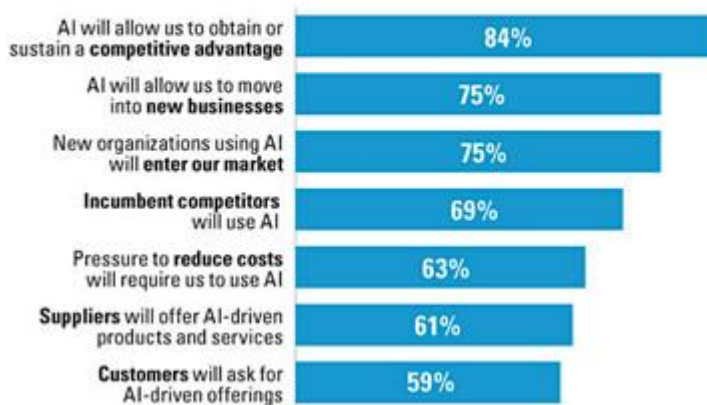


Figure 3: Percentage Of Respondents

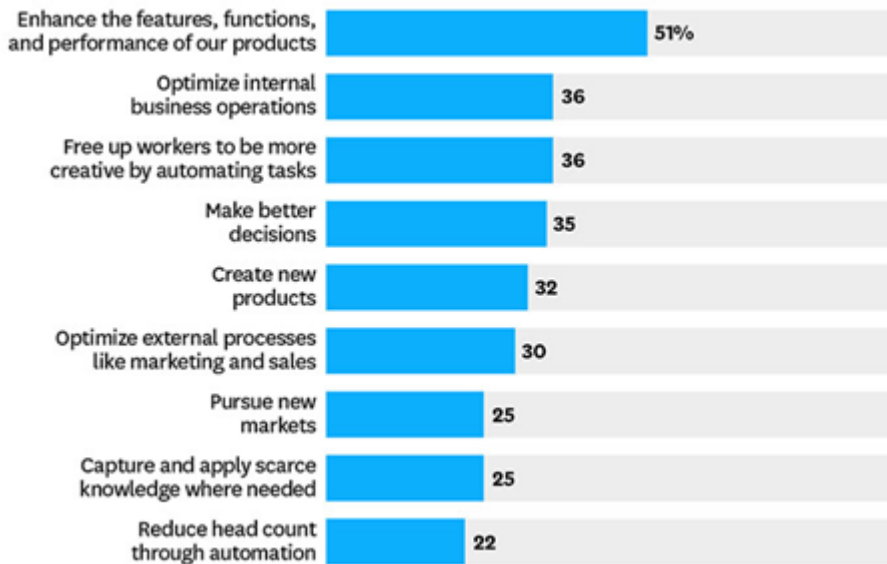


Figure 4: Percentage Of Executives Who Cite the Following as Benefits Of AI

ARTIFICIAL INTELLIGENCE APPLICATION IN THE HUMAN RESOURCE SYSTEM

Artificial intelligence is a bleeding edge, cutting edge progress innovation that can detect, reason, plan, and finish undertakings that humans would see as hard to finish without slowing down their work. Voice Affirmation, BOTS, and Computation are the three essential AI system structures that are worried about the HR system-based AI capacities are reasonable for gathering data information in the HR domain, for example, checking information and handling applicable backend challenges.

➤ **Voice Recognition**

This AI application converts data into comprehensible language, records, and searches online locations. It then broadcasts the data to scientific devices and, upon request, arranges it in the proper discourse or text layout. AI colleagues of HR directors typically work on this innovation in associations. This advancement's essential capability is to empower voice-enacted errands, including overseeing individual and business-related gadgets, getting to data sets and sites, and other straightforward request related capabilities.

➤ **Bots**

Significant web-based lists utilize the BOTS application to scan the web for watchword words. This gadget is valuable for expanding visiting, addressing, talking, giving guidance and heading, and other advantageous capabilities. With a few tweaks, the current AI system ought to be getting better at handling confusing and difficult problems. In fact, even the most straightforward decisions and problems have a great deal of nuance and consideration. AI may prove to be faster at searching for and finishing repetitive tasks.

➤ **AI Algorithm**

AI computations are codes and instructions that must be followed piecemeal in order to drive AI capabilities. Contemporary computing aids in the automation of several HR tasks, such as gathering corporate intelligence, sharing data with partners, providing critical execution guidance, and supervising exercises through virtual entertainment for representatives and potential future hires.

ARTIFICIAL INTELLIGENCE IMPLEMENTATION IN HUMAN RESOURCE SYSTEM

➤ **Recruitment and Selection**

The most challenging task for HR directors is finding a suitable candidate for the position by quickly posting the job and reviewing resumes from a large pool of applicants. AI applications will review, evaluate, and reject resumes that are unfit for the position. Artificial intelligence programming is prepared to review resumes and waitlist the best opportunity to make it happen. The Chabot application helps to continuously update the requirements and recommendations while also enhancing competitor experience. Through sound video mode, AI programming will truly seek to assess emerging speakers' word choice, discourse, and nonverbal communication.

It can also analyse candidates' qualities to suit the job.

➤ **Training and Development**

The abilities we really want for work are evolving. AI needs an application that can propose recordings or instructive materials connected with gig assignments and encounters. These programmes read instructional materials and create corresponding mini-learning initiatives as a result. Programming using AI will greatly improve private learning-based applications, such as converting written reports into visuals. AI learning initiatives could be employed more effectively in representative commitment, leading to some innovative learning among employees.

➤ **Performance Management**

Because of workplace bias, the association finds it extremely difficult to evaluate individual performance. With input, AI applications will reduce and rectify bias. AI-driven surveys examine the employees' cooperative efforts and tenacious, impartial checking. AI is used in the organisation to manage labour force and do better work. By gathering data from multiple points of view, such as employee commitment levels, performance data, and representative turnover causes. AI might calculate the performance ratings of exceptional employees as well as those reps who need to switch roles.

➤ **Retention**

On the one hand, hiring qualified workers is the hardest task, while on the other, it's challenging to retain talent inside the team. According to 57% of associations, maintaining employees is the hardest and most important task. AI has the potential to blur this line and, when applied, anticipate each representative's needs and actions. This invention enables HR professionals to take preventative measures and essential actions prior to the occurrence of an incident.

HYPOTHESIS DEVELOPMENT

Table 1: Formation Of a Hypothesis

Hypothesis	Description	Path
H1	AI significantly and favourably influences HR innovation (F)	AI -> HR(F)
H2	AI significantly enhances entrepreneurial orientation (EOU) in a good way.	AI -> EOU
H3	Artificial Intelligence significantly enhances IS innovation.	AI -> IS

RESEARCH METHODOLOGY AND DATA COLLECTION

The evaluation is a quantitative investigation zeroed in on two main areas: artificial intelligence and HR capacities. Extra material from this study is likewise used to supplement the discoveries and finish of this examination. Utilizing a questionnaire, all elements are assessed according to the viewpoint of a HR expert working in the HR domain of development. The model is intended to assess different tests directed in the past connected with HR skill and AI work in the HR domain, and it is supported for the ongoing assessment. This examination utilizes backslide and association with frame the relationship and profitable impacts on AI's HR limit with the directing work of IS and EOU.

RESULTS DESCRIPTIVE STATISTICS

The table below shows the interesting findings and relationships between workers' artificial intelligence and HRM capabilities.

Table 2: Correlations and Statistics

Variable	Mean	SD	1	2	3	4	5
Recruitment and Selection	3.42	580	1				
Training and Development	4.35	490	0.290	1			

Performance Management	4.55	545	0.322	.012	1		
Retention	4.02	625	0.358	0.065	0.033	1	
Ease of use	4.23	755	0.669	0.022	0.55	0.429	1

Table 3: Testing of Hypotheses and Results

PATH	Model I Std Coef	Model II Std Coef	Model III Std Coef	Model IV	Conclusion
INS > HRM	.33	.35	.63	13	Partial Mediation
EOU > HRM	.24	.48	.63	14	Partial Mediation
I > HRM(F)	.9	.9	.63	28	Partial Mediation

ANALYSIS AND DISCUSSION

Three models are used to test research theories, as shown in table 3. The main conjecture is on the relationship between AI and HR competencies. The results have demonstrated the complete influence of AI on all HR components within the suggested model. AI framework's inventiveness permeates the entire conventional technique, and creativity gains a portion of HR capability, which manifests with moderate and significant impact on HR capabilities ($\beta = .20$), while a somewhat advantageous outcome was perceived as effortlessly serving HR capability ($\beta = .33$) with the use of AI. As a result, the model's outcomes have satisfied the cycle's main requirement. The second hypothesis attempted to establish a connection between inventiveness and HR capabilities, with inventiveness influencing HR capabilities. Creativity ($\beta = .29$). Furthermore, it was discovered that Convenience ($\beta = .46$) had a crucial correlation with HR capabilities. These results have validated all conjectures.



CONCLUSION

According to the above analysis, AI is present and important in many HR-related tasks. AI is predicted to replace regular HR roles with minimal human intervention. Artificial intelligence is observed to outperform humans in terms of ability maintenance and turnover rate. The AI system proposed in this study falls within the category of HR capabilities. Many organisations in the human resource division have used artificial intelligence and machine language. AI plays a key role in enrolment, selection, recruiting, analysing performance, obtaining information about employees, providing continuous data, and providing accurate data.

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