THE STUDY ON IMPACT OF ARTIFICIAL INTELLIGENCE IN HUMAN RESOURCE MANAGEMENT PRACTICES

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ABSTRACT- In the present era of innovation, Artificial Intelligence (AI) has opened up tremendous opportunities in the workplace through robotics innovation, which envelops AI. Precision, Efficiency, and Flexibility are considered the potential benefits of Industry. The implementation of Industry requires a lot of changes, including the Human Resource (HR) function. In Industry, the HR capability is more critical and gives an upper hand to the organization. The HR capability should be more cautious and adaptable to adjust to the difficulties and requirements. This thesis study the contributions of AI in HR digitalization and practices in Industry. HR experts working in Information Technology (IT), Manufacturing, and administration are selected to participate in this review focusing on five AI applications in HR capability and three elements of HR readiness. The information collected was examined utilizing the different Microsoft word tools, excel formulas, and other mathematical formulas. The results uncovered that hierarchical organization examination is a fundamental part of acquiring sustainable development. Adaptability and human asset capability are upheld by each of the five components of AI application areas of HR. Well-being and Safety improvement were viewed as vital components under the AI application in HR.

Detailed analysis of the need of artificial intelligence in human resource. The various AI tools to be used by this sector to enhance the organization, and finally check the improvement and growth in the organization with the introduction of AI in human resource management.

Keywords- artificial intelligence, human resource management, healthcare industry

1. INTRODUCTION

ARTIFICIAL INTELLIGENCE-
Artificial Intelligence (AI) is a rapidly evolving technology, made possible by the Internet, that will soon have major impacts on our daily lives. The name of Artificial Intelligence was verified in 1956 . AI traditionally refers to an artificial creation of human-like intelligence that can learn, reason, plan, perceive, or process natural language. Such traits allow AI to bring immense socioeconomic opportunities, and socio-economic challenges.

What is Human Resources Management?
Human resource management is a separate and specialized function which all managers need to perform. It is that branch of management which is concerned with the recruitment, selection, development and the best use of employees. Thus, human resource management ensures that every employee makes his maximum contribution to the achievement of organizational goals. The human resource management that we find today is the result of a number of significant inter-related developments since the era of industrial revolution.

In the era of Innovation, the Human Resource (HR) function plays a critical role in bridging the gap between technology and human resources. Although technology is taking over most of the tasks traditionally performed by human resources, there is still a growing need for flexible HR functions to address the challenges of managing people. To achieve this flexibility, technology can help bring agility to the HR process. Agility, which is the ability to move quickly and smoothly, is not a new concept and has been adopted by major companies such as Google, Apple, Facebook, Amazon, and Microsoft. In the context of HR, agility means the ability to adapt and develop individuals and processes in response to rapid and unpredictable changes, to support people, key strategies, and organizational adaptability. As an HR or Learning and Development professional, being agile means being able to drive employee engagement and retention in alignment with the company's overall objectives. HR Agility is particularly suitable for volatile HR functions where standardization of functions is difficult.
In order for organizations to become agile, their workforce must focus on customer satisfaction and deliver value to them. However, since the HR function is not typically designed to provide direct incentives to the customer, it is often criticized for being slow to respond, which leads to dissatisfaction among employees. Therefore, organizations must encourage and empower HR to be more attentive and responsive to changing technologies and business needs in order to remain competitive and attract top talent. In an agile organization, HR continues to provide recruitment, development, performance management, and other HR functions, but using agile methodologies. There are three aspects of HR agility: the ability to quickly and efficiently identify issues that need to be addressed, the ability to reduce the time it takes to develop and implement a response, and the integration of analysis and design thinking to anticipate, plan, and target programs with the highest likelihood of success.

IMPACT OF AI IN HRM PRACTICES

In today's rapidly evolving technological landscape, the integration of artificial intelligence (AI) into various industries has become a significant driving force for innovation. One area that is experiencing a profound impact from AI is human resources (HR). By leveraging AI technologies, organizations can enhance their HR practices, improve decision-making processes, and drive productivity. In this article, we will explore the role of AI in HR and its implications for the future of work.

Understanding Human Resources (HR)

Before delving into the impact of AI on HR, it is essential to understand what HR entails. Human capital management refers to the strategic approach organizations take to manage and optimize their workforce effectively. It encompasses various processes, including recruitment, onboarding, training and development, performance management, compensation and benefits, employee relations, and workforce planning. The primary goal of HR is to maximize the value of employees as valuable assets to drive organizational productivity and competitiveness.

The Rise of Artificial Intelligence (AI) in HR

In recent years, AI has gained significant attention for its potential to revolutionize HR practices. AI systems can analyze vast amounts of data, identify patterns, and make predictions, enabling HR teams to make more informed and data-driven decisions. By integrating AI into HR, organizations can streamline processes, enhance efficiency, and improve the overall employee experience.

AI Skills in Demand

The demand for AI skills has seen a resurgence, with organizations recognizing the value of professionals proficient in AI technologies. According to a LinkedIn report, there has been an increase in demand for AI skills, indicating the growing importance of AI in the job market. This demand reflects the need for individuals who can leverage AI technologies to drive innovation and transform HR practices.

Adoption of AI in HR

The adoption of AI in HR has witnessed a significant surge, especially during the COVID-19 pandemic. Many companies have realized the potential of AI to navigate the challenges brought about by the pandemic. According to the 2020 RELX Emerging Tech Executive Report, 68% of companies increased their AI investment during the pandemic, and 81% of companies now report using AI technologies. This indicates a growing recognition of the benefits AI can bring to HR.

The People Dimension of AI in HR

While AI offers immense potential in transforming HR, it is crucial to consider the people dimension of AI strategic plan fulfillment. AI development relies on both technological advancements and the availability of human capital. Factors such as skill penetration, AI hiring index, and the number of STEM graduates (a degree in the fields of science, technology, engineering, or mathematics) play a crucial role in determining a country's positioning in the AI and HR landscape.

Research Questions

1. Do the software used for hiring process in your organization is based on application of AI or latest technologies?

2. Are AI - based software helping to find the best talent for the job?

3. Is AI - based software future of HR practices?

4. Is AI easing HR operations?

5. Implementing AI in HR practices will lead to the loss of Human Jobs?

6. Are organizations interested in seeing AI-based software for HR practices?

Objectives of the Study-

The objectives of the study are as follow:

• The objective of this study is to know the impact of Artificial Intelligence on Human Resource Management

• To identify the role of AI based software in hiring the best talent from industry

• To evaluate the function of AI based software specifically towards the screening process which is the primary process of hiring and cost of using such systems

• To understand the effect of AI based software on recruiters' job

2. LITERATURE REVIEW

Biswabhusan Behera (Gail India Limited) (October 2023), This research paper endeavors in understanding the impact of Artificial Intelligence in Human Resource Management and the way forward. The study is exploratory research based on secondary data and the research design employed for the study is of descriptive type. Literature review has been done with reference to Artificial Intelligence and Human Resource Management practices and the research gaps have been identified. Every establishment depends on constant expansion and growth for which they need human capital. This human capital helps a company grow in value, get more market share, and prolong its existence. Artificial Intelligence (AI) has the potential to alter the way we live and work, whether it is through the automation of tedious and time-consuming jobs or the augmentation and amplification of human skills. AI is assisting in the facilitation of complex HRM processes like talent management, staff development, employee assessments, employee benefits allocation, employee selection, employee engagement, tracking employee performance and feedback.

I Buzko, Yuriy Dyachenko, Mariana Petrova, Nayden Valkov Nenkov (July 2016)**,** An essential part of modern management is computing, particularly, Artificial Intelligence technologies. The Artificial Intelligence technologies which are based on reproduction of principles of human intelligence functioning. The Rising of General Artificial Intelligence is impossible without the acquisition of elements of self-consciousness and self-cultivation. But for the solution of applied problems we need applied Artificial Intelligence which performs particular tasks particularly in management. The most difficult task in Human Resource Development is to determine the effectiveness of training costs due to its branching and sophisticated feedback given by improved production results of staff who was involved in the process. To determine the impact of the performance of the company (labour costs, labour costs per person, income, profit, profit per person) based on indicators, characterizing the personnel training on the example of ALC "Severodonetsk factory of chemical non-standard equipment" we use cognitive system IBM Watson Analytics. Found that the main factor influencing the amount of training in the company is the net income of the company for the previous year. Considering this analysis, it could be argued that decisions on financing of Human Resource Development are carried out on the basis of income of the enterprise from the past period.

Impact of AI in HRMP- Human Resources play a crucial role in the positive culture of an organization or company. The body is responsible for recruiting, managing, and training employees. Human Resource Department (HR) also leads the workforce's wellness and personal development. It's vital for HR to ensure that employees feel safe and get the support they need and provide the opportunity for creativity, career, and personal growth.

Artificial Intelligence is the ability of computer-controlled robots or machines to perform human tasks such as interpreting speech, identifying basic patterns, and processing essential functions. These machines learn by studying patterns to model their decision-making skills. AI has been a massive help in completing repetitive tasks and is increasingly becoming part of our everyday lives. Because of the advancement in technology, new AIs are designed to learn without human supervision, thus, creating more benefits and could also pose a severe threat to the human workforce at the same time.

AI has helped improve a lot of processes in HR (human resources). Many HR managers are delegating simple, repetitive, and time-consuming tasks to HR, such as automation and processing data, to focus on more strategic and comprehensive cognitive assignments

3. METHODOLOGY

RESEARCH DESIGN- Generally, the research design is viewed from two perspectives, quantitative research design or qualitative research design. They can both be used or applied distinctively or together. A quantitative research design is used to examine the relationship between variable by using numbers and statistics to explain and analyze its findings. Descriptive research is used to describe characteristics of a population or phenomenon being studied. It does not answer questions about how/when/why the characteristics occurred. Rather it addresses the "what" question (what are the characteristics of the population or situation being studied?). The characteristics used to describe the situation or population are usually some kind of categorical scheme also known as descriptive categories. In our topic there is need for data collection which will include population. So, we would be selecting this design for research.

The research methodology used in my study include data from-

- Primary data-
  - ❖ Questionnaire
- Secondary data

Several tools and techniques-

- Microsoft excel
- Microsoft word

In statistical analysis, collection of data plays a significant part. The method of collecting information is divided into two different sections, namely primary data and secondary data. In this process, the primary data is assembling data or information for the first time, whereas the secondary data is the data that has already been gathered or collected by others.

The most important characteristics of the primary data is that it is original and first-hand, whereas the secondary data is the interpretation and analysis of the primary data.

Secondary Data Definition

Secondary data is a second-hand data that is already collected and recorded by some researchers for their purpose, and not for the current research problem. It is accessible in the form of data collected from different sources such as government publications, censuses, internal records of the organisation, books, journal articles, websites and reports, etc.
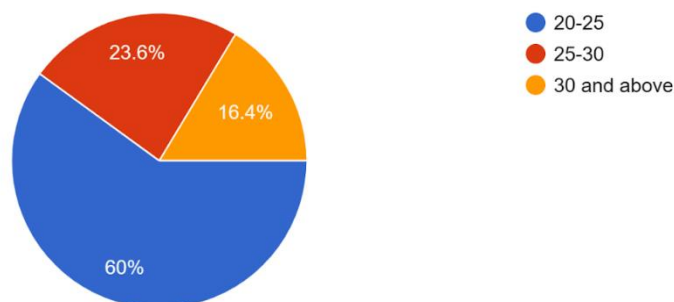
This method of gathering data is affordable, readily available, and saves cost and time. However, the one disadvantage is that the information assembled is for some other purpose and may not meet the present research purpose or may not be accurate.

Sample Size Definition

The sample size is defined as the number of observations used for determining the estimations of a given population. The size of the sample has been drawn from the population. Sampling is the process of selection of a subset of individuals from the population to estimate the characteristics of the whole population. The sample size is 55.
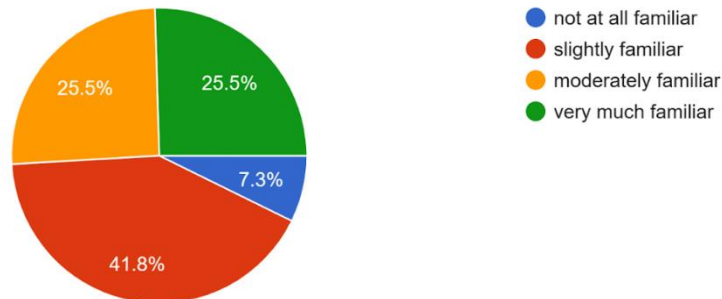
4. DATA ANALYSIS

Age
55 responses

- 20-25
- 25-30
- 30 and above
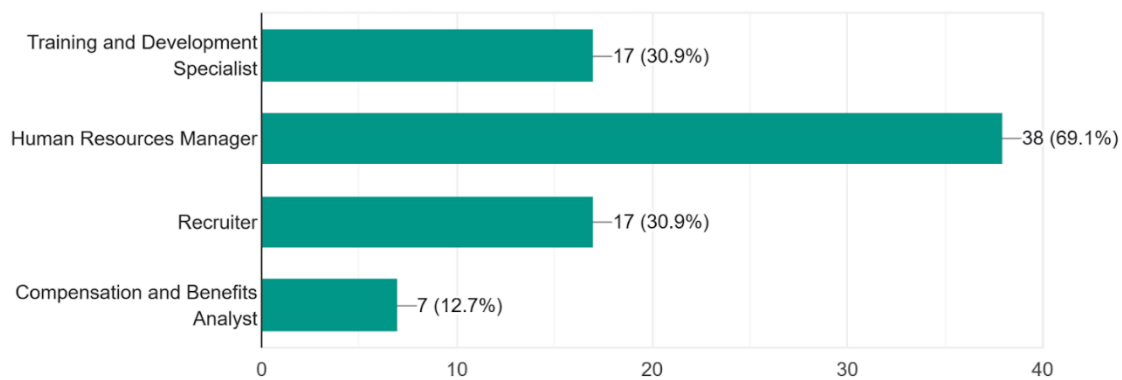
23.6%
16.4%
60%

How familiar are you with Artificial Intelligence (AI)?
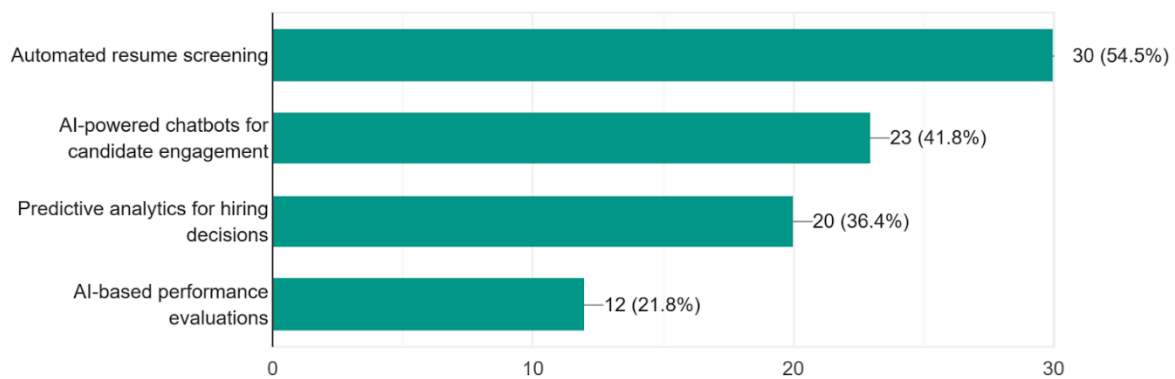
55 responses

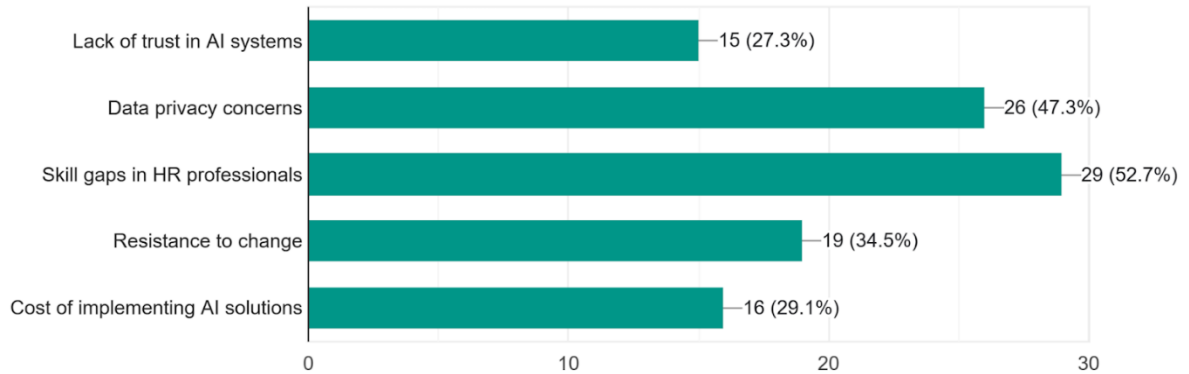Which of the following best describes your job role? (Select all that apply)

55 responses

Which AI applications do you think can have an impact on HRM? (Select all that apply)
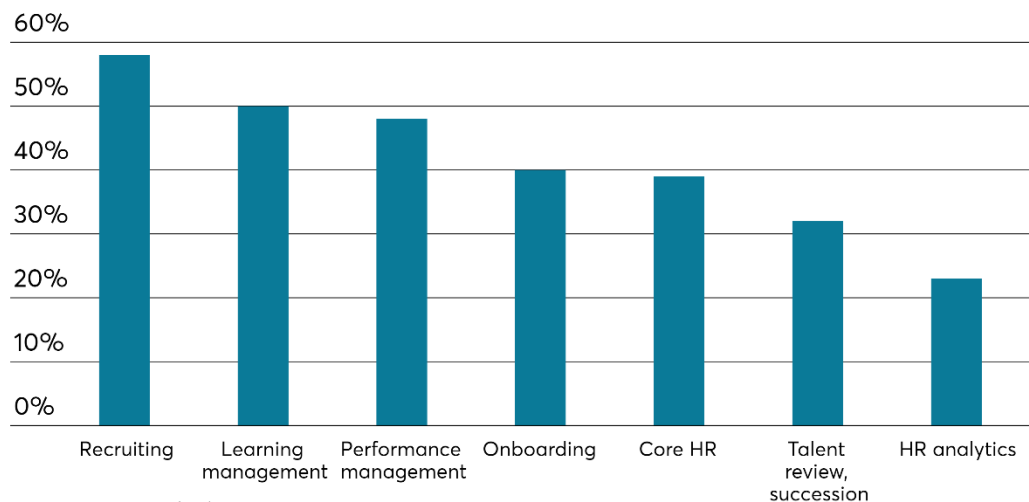
55 responses

Which potential challenges do you foresee in integrating AI into HRM? (Select all that apply)
55 responses

HR finds a home in the cloud
Percentage of employers who say the following applications are hosted by third parties.

Source: PwC's HR Technology Survey

5. FINDINGS

- As per the findings of the thesis and data collected most of the respondents are youth ie, belong to age group of 20-25 years (60%), 25-30 years (23.6%) respectively.

- Nearly about 25.5% people are extremely and moderately aware about artificial intelligence, 41.8% are slightly familiar and 7.3% not at all familiar to artificial intelligence.

➤ About 69.1% people are human resource managers, 30.9% respondents are either recruiters or talent and development specialist.

➤ The data shows that 54.5% impact of AI is in automated resume screening, 41.8% AI powered chatbots.

6. LIMITATIONS AND CONCLUSION

Harvard Business school performed a survey and found that 88 percent of HR executives learned that their tools reject qualified candidates. The job descriptions have too many qualifications, which created a long list of requirements for algorithms to check for in resumes. As a result, the algorithm rejected many qualified job seekers who may be missing just a few skills from the list. Another factor was a work gap in candidates' resumes for more than six months. These gaps may represent legitimate life events, like pregnancy, military deployment or illness. AI on its own cannot give the complete picture of the situation. HR professionals should   dive deeper into the reasons behind the data to correctly understand and interpret outcomes. Use your intuition and experience to make the right business decisions. Consider data privacy and cybersecurity risks.With a growing number of organizations using AI to store business information, data security is critical now more than ever. HR must be able to reassure employees that their personal information, like Social Security numbers and bank details, is secure. Organizations must establish robust cybersecurity guidelines to gain employees' confidence and avoid data breaches that could result in lawsuits or hefty fines and damage company reputation.

Using Artificial intelligence provides numerous benefits to the HR department and employees. However, those advantages accompany a few network safety dangers and lawful concerns. Assembling more worker information implies expanded protection concerns, and more gadgets accompany more noteworthy prospects of network safety assaults. Before executing AI for HR the board, organizations need to ensure that their workers' information is not undermined. Associations likewise need to fabricate information-driven security to screen information itself and not simply organization to limit network protection dangers.

The study has addressed the application of AI concepts in various possible areas of HRM. These areas may not be there in the regular stream of activities. Still, it is trying to impose the importance of addressing the same—the dimensions measured under that showcase human aspects enhancement with the help of AI. The result revealed the way these aspects influence the agile capability of HRM.

There are not many businesses using AI in their HRM or creating AI based HR software because it is still a very new and low-use field, particularly in India. As a result, it is challenging to compile a thorough study because the majority of businesses only use AI to a limited degree in the HR process. Even though AI as a subject has received extensive research, the ability to examine the true effectiveness and ramifications that AI involves is limited in the absence of a sufficient number of organizations who employ AI in their HR practices. The number of interviews may be larger to make this study more relevant. The responses of the interviewees, however, may be compared and contrasted.

7. ANNEXURE

Questionnaire –

1. Age

   - 20-25

   - 25-30

   - 30 and above

2. How familiar are you with artificial intelligence?

   - Not at all familiar

   - Slightly familiar

   - Moderately familiar

   - Very much familiar

3. Which of the following best describes your job role (select all that apply)?

   - Training and development specialist

   - Human resource manager

   - Recruiter

   - Compensation and benefits analyst

4. Which AI application do you think can have an impact on HRM? (select all that apply)

   - Automated resume screening

   - AI powered chatbots for candidate engagement

   - Predictive analytics for for hiring decisions

   - AI based performance evaluation

5. Do you think AI will significantly change the role of hr professionals?

   - Yes

   - No

6. How concerned are you about AI taking over jobs in HR?

- Very concerned

- Somewhat concerned

- Neutral

- Not very concerned

- Not concerned at all

- Not concerned at all

7. Which HR task do you think can be most effectively automated by AI?(select all that apply)

- Resume screening

- Interview scheduling

- Performance evaluation

- Payroll management

8. Do you believe AI can enhance the hiring process by reducing bias in decision making?

- Yes

- No

9. Which potential challenges do you foresee in integrating AI into HRM? (select all that apply)

- Lack of trust in AI systems

- Data privacy concerns

- Skill gap in hr professionals

- Resistance to change

- Cost of implementing AI

10. Are you currently using any AI tools or technologies for HRM?

- Yes

- No

11. How likely are you recommend AI solutions for HRM to your organisation?

- Highly likely

- Somewhat likely

- Neutral

- Not very likely

- Not likely at all

12. Have you received any training or education on using AI in HRM?

- Yes
- No

8. REFRENCES

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