

# **To Identify the Fundamental Causes of the Indian IT Sector's AI-Driven HRM Practices**

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## **ABSTRACT**

The study also discovers the flow of impact of Artificial Intelligence (AI) in recruitment processes and functions of human resource management with artificial intelligence in top multinational IT companies in India by referring to several case studies and work on existing artificial intelligence systems and inferring the future of human resource management in artificial intelligence. The existing literature has provided very little superiority in the field of human resource with artificial intelligence in the information technology-enabled sector. In this context, there is a keen need to explore artificial intelligence implementations in human capital management in the Indian information technology industry. The study's goal was to undertake a thorough analysis of artificial intelligence's application in human resource management, including opportunities and challenges related to work simplicity, training, hiring, performance evaluation, and AI prospects in human resource management in light of the field's future. A closed-ended questionnaire survey was administered to participants in the research who were employed in human resource management within the Indian IT industry throughout India. The present study attempts to explore the underlying factors of AI driven HRM practices of the Indian IT sector. This study also attempts to explore the challenges and opportunities of AI driven HRM practices of the Indian IT sector. The study also attempts to measure the impact of AI driven recruitment on the future adoption of AI and its opportunities and the impact of AI driven training on the future adoption of AI and its opportunities.

**Keyword:** *Technology, Challenges, Opportunities, Artificial Intelligence, Training, Hiring*

## **INTRODUCTION**

Today, companies rely heavily on the human factor as their primary resource. Managing human factors has become crucial, since other techniques that once contributed to organizational performance have become less effective. This chapter presents a theoretical assessment of several subjects related to artificial intelligence and human resource management that have the potential to improve the Indian IT sector. This chapter covers the relevance of human resource management, the definition of HRM, its functions, and the use of artificial intelligence in HRM. This study examines the usefulness of artificial intelligence in human capital due to changes in the Indian IT market's period. Nearly every significant agency in the IT sector is using artificial intelligence to improve the productivity of human resources. Employee performance reviews are the next step in the initiative's automated hiring process. Executives in charge of human resources and organizational leaders concur that combining artificial intelligence with HR competencies like onboarding and pay administration would improve the whole employee experience. The development of artificial intelligence has made it possible for computers to remember and learn from experiences that depend on previously acquired information. Artificial intelligence may be useful in human capital management from a variety of angles to streamline procedures and boost productivity. Artificial intelligence is being incorporated into human resources procedures by businesses at different speeds, but as the technology gains traction, it will have a significant impact on the industry. Human resource specialists need to prepare for these shifts by learning how technology is applied in a variety of contexts. The goal of human resource specialists is to maximize the combination of technology and human labor to provide a simple, seamless, and informal work environment. It gives time for creativity, skill, and response to move an improved applicant and staff engagement. Artificial intelligence is being more and more applied to human resource management. It started off changing from the employment method to the worker leave method, which includes records, training, engagement, benefits, and other things.

Investigate Recruitment, training and development, performance evaluation, remuneration, and working for the organization's bright future are all included in the field of human resource management (HRM). In India, businesses continue to use the antiquated HR method, which involves employees doing all tasks by hand. This includes screening resumes for employment, keeping track of employees, enforcing training requirements, conducting performance reviews, managing leaves, and terminating employees. Humans are unable to complete all necessary activities by hand, thus each

individual recruiter must typically put in a great deal of timely effort and concentrate. Human attempts may not always be correct as individuals often have biases and preconceived notions about other people and organizations. This poses a challenge because HRM's role is more important in ensuring that workers have the skills they need and that they adhere to them while automating job-related redundancies, such as resistance to change, support from leadership, finding the right talent, and realizing the importance of employee education. Artificial intelligence (AI) has the ability to carry out basic HRM tasks; nevertheless, there are still many particular aspects of HR management that need to be explored in relation to AI involvement and HRM. Reduction in employee turnover and improvement in talent maintenance are two areas where machines outperform human resource management (HRM) staff. Give attention to artificial intelligence (AI) tools that enhance employee engagement and experience, and gradually upskill or reskill staff to help them adjust to automation.

Upon doing an extensive analysis of the literature, the researcher discovered that while artificial intelligence is being used by businesses globally, not many of them are doing so in India. Furthermore, less research on artificial intelligence (AI) has been conducted in India. In the future, it will be necessary to do more thorough experimental research on new technology that makes things easier to access. Moreover, employees are still unsure about how new technologies will affect human resources management (HRM) and if hiring managers will have more chances or challenges as a result of these efficient and sophisticated tools. Since the existing literature is unable to adequately address this issue, a deeper comprehension of the subject matter needs to be supplied by incorporating new innovations into the overall administration of human resource management (HRM). The many facets of artificial intelligence-based human resource management that the current thesis proposed have not been further explored in earlier studies. It is crucial to conduct more study on the key elements that define the Indian information technology industry.

## **REVIEW OF LITERATURE**

Karhunen (2017) investigates the potential applications of an onboarding method in a global corporation. Examining how on-boarding is really planned and carried out in the company as well as how employees see it was the aim of the study. The objective was also to select the theme for the first upgrade project to be carried out, as well as to identify the essential planning components and their significance, in order to comprehend the emphasis and aims. The research's conclusions came to the conclusion that onboarding procedures were inconsistent. The investigation also revealed that, despite the issue, the organization was effective in integrating new employees into society. Together with self-usefulness and role definition, they will have affected excessive employee retention and sporadic turnover rates.

Rajani & Associates (2016) The report highlights the efficiency with which the IT industry handles hiring and selection processes and, if any, monitors discrepancies between Indian and multinational corporations. investigating hiring practices in IT companies and contrasting hiring practices in Indian and multinational IT companies. The survey found that most businesses are attracted and retained. as observed by the Society for Human Capital Management. The report acknowledges that there have been challenges with talent acquisition, training, identification, and development.

The survey revealed that a dearth of suitable job candidates was causing firms to struggle with filling positions at different levels. Poor skills for job searchers include creativity and inventiveness, transitional adjustment, interpersonal and teamwork. It also came to the conclusion that since hiring has been difficult, businesses are concerned. Using methods that are judged effective, companies use policy-strategy approaches to organize hiring. However, because there is a dearth of talent, selecting the finest is difficult. Businesses prioritize hiring and retraining.

Sudhakar (2016) looked at the various methods and sources of applicants used by Indian IT companies. It also covered the topic of how Indian IT companies are actively hiring in the US. The study came to the conclusion that there is pressure on HR executives working in the Indian IT sector due to the industry's increasing need for labor.

et al. Balaishwarya (2015) In addition to focusing on gaining a clear understanding of the recruitment and selection process, this study aims to assist associations in identifying problem areas and ways to improve the process. This will enable the selection and recruitment process to be budgeted for manpower, which will aid in estimating the time constraints for the recruitment process. Employee satisfaction was found to be high, however given the changing circumstances and the substantial impact the procurement process has on the organization's operations, adjustments are required.

According to Kamran et al. (2015), there are problems with the references and hiring and selection procedures that organizations utilize in different ways. The researcher discovers that small businesses are not the only ones affected by the recruiting and selection process; huge organizations do not experience the same effects since large-scale recruitment and selection takes a very long period. According to this survey, the company's executives and line managers were somewhat

satisfied with the recruitment and hiring process, but they are unaware of the amount of work that still has to be done to provide line managers and employees with a future worth of work. It is also stated that there are no significant ways to hire new people since large corporations usually look within their own labor community to fill open positions rather than hiring outside of it because they already have enough personnel to meet their demands. After hiring, line managers frequently have a significant responsibility to train the new workers. Because HR managers are not as involved in this process, it becomes more challenging.

### **Objectives of the Study**

1. To assess how AI-driven training would affect the possibilities and future uptake of AI.
2. To assess how AI-driven performance evaluation would affect the possibilities and future uptake of AI.

### **RESEARCH METHODOLOGY**

To gather data on the characteristics of the sample and the opinions of the sample regarding the research model, a survey technique was used. The study looks at how AI is used in HRM with regard to hiring, training, performance reviews, possibilities and difficulties, and AI's future. utilizing a designed questionnaire with a five-point Likert type measure to gather the opinions of HR IT personnel in order to ascertain the link between the deployment of AI in HRM in the Indian IT industry.

The researcher has compiled secondary sources from journals, research papers, theses, and reports from various IT businesses about AI in HR. On the other side, individuals who work in IT businesses' HR departments provided firsthand knowledge. Primarily, two methods have been used to gather data: first, in-depth online interviews with HR professionals and experts were used to gather qualitative data; second, structured, closed-ended questionnaires with LIKERT 5-point scale questions were used to gather quantitative data from employees in the HR department of the Indian IT industry.

### **RESULT AND DATA ANALYSIS**

**Table 5.1: Qualitative Features of the Sample**

Qualification	Frequency	Percentage	Valid Percent	Cumulative Percent
Bachelor	30	30	30	30
Post Graduate	68	68	68	70
Doctorate	2	2	2	100
Total	100	100	100	

Table 5.1 is noteworthy as it indicates that around 40% of the respondents held a master's degree, while the remaining 40% were graduates with just a PhD.

**Table 5.2 Summary of Experience-Based Sample Features**

Experience	Frequency	Percentage	Valid Percent	Cumulative Percent
0 - 3 Years	35	35	35	35
3 - 6 Years	15	15	15	35
6 - 9 Years	20	20	20	30
Above 9 Years	30	30	30	100
Total	100	100	100	

It is important to note that Table 5.2 shows that the individual has over nine years of job experience. Next, there were those who had been employed for three to six years. Respondents with three to six years of job experience come in last, followed by those with six to nine years.

**Table 5.3: Operational Performance Descriptive Statistics**

Mean	Median	Mode	Std. Deviation	Skewness	Kurtosis
5.12	3.00	3.00	0.622	-0.3966	0.030
4.688	3.00	3.00	0.388	-0.42	0.566
0.4922	3.00	3.00	0.56	-0.432	0.036
5.77	3.00	3.00	0.766	-0.347	0.0688
4.89	3.00	3.00	0.588	0.399	0.062

Table 5.3 presented the descriptive statistics. The aforementioned results make it evident that the sample data is non-normal as the Mean, Median, and Mode values do not equal one another numerically. We have used dispersion metrics to determine the amount of divergence. There is less volatility in the data when the numbers in the preceding table, which show the standard deviation of the ON\_1 to ON\_7 variables, are less than 1. Kurtosis values are found to be less than three, while skewness values are less than one, suggesting a modest level of asymmetry. As a result, the data for the operational performance factors have a slightly non-normal distribution.

**Table 5.4: Normality Test of Usability and Advantages**

Statistic	Df	Sign.	Statistic	Df	Sign.
0.274	100	.000	0.831	100	.000
0.324	100	.000	0.824	100	.000
0.237	100	.000	0.832	100	.000
0.285	100	.000	0.843	100	.000
0.243	100	.000	0.866	100	.000

Table 5.4 displayed the results of the normality test for the variables that are part of the Ease of Use & Benefits factor. The Shapiro-Wilk and Kolmogorov-Smirnov tests were used to test the hypothesis. Since the EBE\_1, EUB\_2, EUB\_4, EUB\_5, and EUB\_7 variables have significance values of 0.000, less than 0.05, we are unable to reject the null hypothesis that the data are distributed normally for ease of use and benefits. As a result, the findings show that the data has a non-normal distribution. Even yet, it is evident from the observed values that the sample data for the relevant variables do not follow the symmetry. However, it doesn't show how much the sample data deviates from the mean.

**Table 5.5: Detailed Statistics on Benefits and Ease Of Use**

Mean	Median	Mode	Std. Deviation	Skewness	Kurtosis
4.12	3.00	3.00	0.422	-0.3466	0.031
3.688	3.00	3.00	0.288	-0.44	0.536
0.5922	3.00	3.00	0.36	-0.422	0.035
4.77	3.00	3.00	0.866	-0.357	0.0668
3.89	3.00	3.00	0.288	0.369	0.063

Table 5.5 presented the descriptive statistics. The aforementioned results make it evident that the sample data is non-normal as the Mean, Median, and Mode values do not equal one another numerically. We have used dispersion metrics to determine the amount of divergence. There is less volatility in the data when the numbers in the above table, which show the standard deviation of the EUB\_1 to EUB\_7 variables, are less than 1. Kurtosis values are found to be less than three, while skewness values are less than one, suggesting a modest level of asymmetry. As a result, the data for the variables Benefits and Ease of Use have a somewhat non-normal distribution.

**Table 5.6: Assessing The Normality Of Difficulties And Possibilities**

Statistic	Df	Sign.	Statistic	Df	Sign.
0.284	100	.000	0.841	100	.000
0.334	100	.000	0.854	100	.000
0.267	100	.000	0.862	100	.000
0.275	100	.000	0.873	100	.000
0.293	100	.000	0.886	100	.000

Table 5.6 displayed the normalcy test results for the variables that make up the Opportunities and Challenges factor. Utilizing the Kolmogorov-Smirnov and Shapiro-Wilk tests, the hypothesis was investigated. The null hypothesis, "Data are distributed normally for Challenges and Opportunities," cannot be rejected since the significance values of the CAO\_1, CAO\_2, CAO\_3, CAO\_4, and CAO\_5 variables are 0.000, which is less than 0.05.

## CONCLUSION

The data indicates that few organizations are using artificial intelligence in their HRM processes, and that artificial intelligence in recruitment is still a relatively new concept. Artificial intelligence can be applied most effectively to the recruitment, preparation, learning, and improvement, success evaluation procedures, and recruiting practices such as preselection and follow-up with recruits. It can also be applied to the delivery of recruiting results to applicants. The elimination of repetitive tasks and pace quality were deemed to be the two main benefits of artificial intelligence, while the businesses' overall readiness for new technologies was found to be the biggest barrier.

It is imperative, according to a number of specialists, that businesses acknowledge the general adaptability of modern HRM technology in their operations. To fully profit from the use of AI in recruitment, one of the experts recommended that organizations modify the application monitoring system used in their hiring process. This indicates that conducting interviews is a rather simple process. Additionally, several noted that the Applicant Monitoring System improves the preliminary screening of applicants.

The adoption of new technology in AI and employee mistrust are two well-known issues with the field. It is imperative that AI be accepted and that appropriate tools be made available for its implementation; hence, the organization must decide how to deploy AI.

The question of whether artificial intelligence (AI) is really necessary and advantageous for managing human capital was raised by two experts. Therefore, it is essential for companies to accurately portray the productivity that artificial intelligence (AI) offers to organizations and to comprehend the impact that using AI to manage human resources has on a company's overall efficiency. Not many HR specialists are aware that AI makes managing the paperwork process incredibly simple and safe.

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