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Evaluating AI driven HRM practices in Indian Organisation: Efficiency Retention and Fairness Perspectives

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ABSTRACT
The integration of Artificial Intelligence (AI) in Human Resource Management (HRM) has transformed organisational practices by enhancing efficiency, strengthening employee retention strategies, and promoting fairness in decision-making processes. This study evaluates AI-driven HRM practices in Indian organisations from the perspectives of efficiency, retention, and fairness. The primary objectives of the study are to examine the level of AI-driven HRM practices across demographic variables, to analyse the relationship between age and experience with perceived AI practices, and to determine whether significant associations exist between these variables. A total of 200 respondents were selected using convenience sampling from various Indian organisations. Data were analysed using percentage analysis and Chi-square tests to assess associations between demographic variables and levels of AI-driven HRM practices. The findings reveal moderate to high levels of AI adoption in HR functions; however, statistical results indicate no significant association between demographic factors such as age and experience and perceptions of AI-driven HRM practices. The study concludes that AI adoption in HR is increasingly standardised across employee groups, though continuous improvements in transparency and digital inclusivity are necessary to maximise organisational effectiveness..
Keywords: Artificial Intelligence, Human Resource Management, Employee Retention, Organisational Efficiency, Fairness, Indian Organisations, and Digital HRM

INTRODUCTION:

The high rate of digital technology development has greatly transformed the organisational structure and management practices worldwide. One of these technological advances is the Artificial Intelligence (AI) that has become a revolutionary one in Human Resource Management (HRM). Intelligent Systems, machine learning algorithms, predictive analytics and automation tools are the components of AI-driven HRM practices, an approach to handling HR tasks like recruiting, performance assessments, employee engagement, workforce planning and decision-making. With the growing adoption of digital transformation in the Indian organisational setting, where companies are becoming more and more digital, AI has started to transform the conventional HR functions by enhancing productivity, precision, and strategic orientation. The HRM efficiency can be defined as the capacity to simplify operations, decrease administrative overheads, and increase productivity with the assistance of automation and data-based decision-making. Recruitment systems with AI capabilities are able to filter resumes, find qualified candidates, and cut the time to hire. Likewise, performance management systems powered by AI will enable the continual monitoring and feedback mechanism, which helps organisations to streamline the workforce output. The capabilities of these technologies make them work towards operational excellence and cost reduction. Another very important aspect that is affected by AI-driven HRM practices is employee retention. Predictive analytics technology can be used to detect employees who are at risk of departure so that timely remedies can be made. On-the-job enrichment services and career development plans and tools for employee sentiment analysis help to improve job satisfaction and commitment. Through AI, organisations can work out the specialised retention plans according to the real-time information. Equity and openness in HR decision making is also a major consideration. The properly created AI systems will

help to decrease the level of human prejudices in the recruitment, promotions, and evaluations process relying on the objective information. Nonetheless, the issues of algorithmic bias, ethical and privacy of data are as well brought up. Thus, the fairness perspective of the AI-driven HRM practices should be studied to make sure that the employees are treated fairly.

Theoretical Background

The AI-driven HRM practices are based on a number of management and technology adoption theories. The Technology Acceptance Model (TAM) can be considered one of the most applicable frameworks because it clarifies the way users accept and utilize new technologies depending on their perceived usefulness and perceived ease of use. Regarding the context of AI-based HRM, the willingness of employees to accept AI systems will be based on their attitudes to these technologies as a method to make their work processes more efficient and simplify the HR processes. Resource-Based View (RBV) theory is another theoretical perspective of importance because it argues that organisations can achieve competitive advantage when they successfully employ valuable, rare, inimitable and non-substitutable resources. HR analytics based on AI may be viewed as a strategic organisational productivity that helps to improve the workforce planning, talent acquisition, and performance optimisation. Using AI, organisations are able to make better decisions and remain competitive. The Equity Theory is also an important factor in the consideration of fairness in AI-based HRM. This theory states that employees will judge fairness based on their input and outputs as compared to others. When viewed as objective and unbiased, even an AI-based decision system can transform the perceptions of distributive and procedural justice. Nonetheless, when opaque and biased algorithms are used, employees will develop a sense of injustice, which will diminish trust and organisational commitment. The Human Capital Theory also provides the relevance of AI in HRM. This theory also puts emphasis on the fact that knowledge, skills and competencies of employees are very important organisational assets. AI-based learning and development systems make it possible to offer personalised training, skills gap analysis, and career path advice, which facilitates the development of human capital. However, Digital Transformation Theory describes how organisations combine digital technologies to enhance processes, culture, and experiences of customers. The HRM driven by AI is an element of this wider change that focuses on balancing HR activities with business strategies using data. Taken together these theories can give us a relatively complete perspective on AI and its impact on efficiency, retention, and fairness in organisations. They emphasize the impact of technological acceptance, strategic resources use, perceived equity and enhancement of human capital on the success of AI adoption in HRM practices.

Research Gap

Despite the fact that the use of AI in HRM has attracted a great amount of attention worldwide, there are few empirical research studies specifically about Indian organisations, especially in the integrated perspectives of efficiency, retention, and fairness. The current literature mainly focuses on the implementation of technology or the results of organisational performance without properly exploring the perceptions of the employees based on the demographic factors like their ages and experience. In addition, not many studies statistically examine the hypothesis of whether demographic differences are important in perceptions about AI-driven HRM practices. Also, the lack of combined analysis of descriptive and inferential statistics that will evaluate the correlation between demographic characteristics and the level of AI adoption exists. Thus, this article aims to fill this gap by empirically investigating the AI-based HRM practices within Indian organisations by applying a structured survey and statistical testing.

Importance of the Study

The research is significant because AI is still transforming the HR operations in Indian organisations. Knowledge of employee perceptions of AI-based HRM practices can assist organisations in determining whether technological investments yield desired results or not. The findings about efficiency enhancement can be used to optimise the processes, whereas the findings linked to retentions can be used to facilitate the workforce stability. The study of perception of fairness provides fairness practice and trust in AI as well. Moreover, the definition of the role of demographic variables in perceptions assists organisations in developing digital transformation strategies that are inclusive. Another impact of the findings to academic literature is that they offer empirical data on the use of AI in HRM in the Indian context. The findings of the study can be used by policymakers and HR specialists to develop instructions that would encourage the responsible use of AI in the context of human resources.

Statement of the Problem

Although the use of AI in HRM functions is on the rise, it is still unclear how the employees see such practices in relation to efficiency, retention, and fairness. The organisational cost of AI-based recruitment systems, performance management systems, and analytics is high but the effectiveness of these systems is highly influenced by the employee acceptance and trust. The age and experience disparities are likely to have a difference in attitudes toward the adoption of AI, which can also impact organisational harmony and productivity. The lack of empirical research results on whether demographic factors have any significant influence on perceptions poses a research problem. Thus, the article will attempt to consider the extent of AI-driven HRM practices and identify the presence of any meaningful relation between demographic factors and employee perceptions.

METHODOLOGY

The article assesses the AI-based HRM practices in Indian organisations through the lenses of efficiency, retention, and fairness. The main questions of the research are to test the degree of AI practices regarding HRM practices demographics, to test the connection between demographic variables and perceived AI practices and to test whether there are some significant associations

between demographic variables and perceived AI practices. Convenience sampling was applied to select 200 respondents of different Indian organisations. Percentage analysis and Chi-square tests were used to analyse the data to determine the relationship between demographic variables and the level of AI-driven HRM practices.

Analysis and Results

The assessment of the AI-based Human Resource Management (HRM) practices in the Indian organisations has become of utmost importance over the past few years, especially in the areas of increasing the efficiency of organisations, improving their employee retention rates, and making their HR practices fair. As the workplaces are becoming digitalized at a fast pace, artificial intelligence is being incorporated in recruitment, performance appraisal, workforce analytics, workforce engagement, and decision-making systems. These technological developments are transforming the conventional HR functions and determining the way employees experience organisational policies and practices. It is important to know how employees perceive the AI-based HRM practices as in many cases these systems are not accepted or effective by all demographic groups. In specific, age has a great influence on attitudes towards the use of technology, their digital flexibility, and the sense of fairness and openness to automated systems. Various age groups can have different reactions to AI-facilitated HR processes according to their digital fluency, work experience, and role in strategic decision-making processes.

Thus, the discussion of AI-related HRM practices through the lens of efficiency, retention, and fairness among the different age groups will be useful to understand the extent to which the technologies are implemented in the Indian organisations. This kind of analysis can be used to establish the differences between generations on the perception level and areas where organisations might have to reinforce communication, training, or alignment of policies to make the digital transformation in HR management inclusive and equitable.

TABLE 1

Age and Level of Practices

Age	Level of Practices			Total
	Less	Moderate	High	
Below 25 years	12	3	0	15
	80.0%	20.0%	0.0%	100.0%
25–34 years	26	32	18	76
	34.2%	42.1%	23.7%	100.0%
35–44 years	14	13	11	38
	36.8%	34.2%	28.9%	100.0%
45–54 years	3	2	13	18
	16.7%	11.1%	72.2%	100.0%
55 years and above	12	22	19	53
	22.6%	41.5%	35.8%	100.0%
Total	67	72	61	200
	33.5%	36.0%	30.5%	100.0%

The age-based examination of AI-based HRM practices within the Indian organisations indicates that there is a significant difference in perception across age groups. A large proportion of employees aged below 25 years (80% of them) believe that AI-driven HRM practices are low whereas 20% of them believe that they are moderate and no one of them thinks they are high. This implies that young workers, specifically new recruits, might not be well exposed to sophisticated AI-driven HR systems, or they might not be ready to fully realize their effectiveness, retention, and equity.

The age group of 25-34 years is more balanced with 34.2% of perceptions being low, 42.1% moderate and 23.7% high practices being driven by AI. This implies that the professionals in the early career stages are getting more exposed to AI-driven HR practices like recruitment analytics, performance management systems, and digital employee engagement platforms. Their moderate to high responses indicate that this demographic is getting more integrated in HR functions involving AI usage.

The perception of the employees between the ages of 35-44 years is relatively uniform with 36.8% having low, 34.2% moderate and 28.9% high levels. This equal distribution implies ambivalent experiences, which may indicate organisational dissimilarities in AI adoption or diverse degrees of digital adaptability in this demographic.

There is an opposite tendency in the case of the 45-54 years age group, as the vast majority (72.2) of respondents recognizes the HRM practices driven by AI as high, with only 16.7% of the respondents noting the level of low and moderate. It means that older and seasoned workers can be directly engaged in the strategic human resources decisions or change of the organisation where AI tools are actively introduced, in this way having more efficiency and structured operations.

On the one hand, the proportion of AI-driven HRM practices is low (22.6%), moderate (41.5%), and high (35.8%). This implies a rather high perception of AI integration, albeit a little less intensive than in the age group of 4554 years. It can be an indication of the slow transition to digital HR practices with traditional management views.

The results as a whole show that the perceptions of the AI-based HRM practices differ considerably among the different age groups, though more mature ones, including representatives of the age bracket of 45-54 years, report higher levels of implementation. This indicates that AI implementation in Indian organisations could be more observable at the managerial and strategic tiers, and it would affect the sense of efficiency, employee retention,

and fairness as perceived by the representatives of different generational groups.

TABLE 2

CHI-SQUARE TEST

Test	χ^2	df	CC	Sig.
Result	4.009	8	0.071	0.325

The table 2 shows the outcomes of the Chi-square test that was done to determine whether there is any relationship between the age and the level of AI-driven HRM practices within Indian organisations. The obtained value of Chi-square (2) is 4.009 (8 df). The standard level of significance (p = 0.325) exceeds the conventional level of 0.05. Thus, the finding is not statistically significant.

This means that age and perceived level of AI-driven HRM practices are not significantly related. Stated differently, the differences that can be seen between age groups regarding the perceptions of efficiency, retention, and fairness are not statistically high to draw the conclusion that age is a decisive factor that can affect these perceptions.

The value of contingency coefficient (CC) 0.071 also indicates that the relationship between the variables is very weak. In general, the results suggest that the attitude to AI-based HRM practices is relatively stable among various age groups, and the age of employees does not influence the evaluation of HRM practices significantly in the Indian organisations.

Figure: 1

Age and Level of Practices

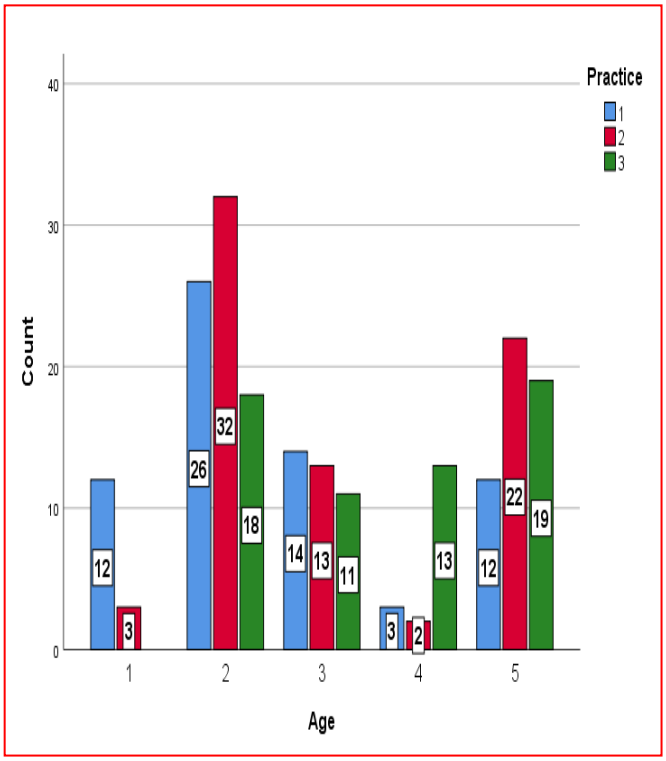


TABLE 3

Level of Experience and Level of Practices

Level of experience	Level of Practices			Total
	Less	Moderate	High	
Upto 5 years	19	12	27	58
	32.8%	20.7%	46.6%	100.0%
More than 5 years	48	60	34	142
	33.8%	42.3%	23.9%	100.0%
Total	67	72	61	200
	33.5%	36.0%	30.5%	100.0%

The table shows the correlation between the degree of experience and how employees perceive AI-based HRM practices in the Indian organisations in the context of efficiency, retention, and fairness.

In employees with up to 5 years of experience, there is more people who have a high perception of AI-based HRM practices (46.6%), then 32.8% at a low level and 20.7% at moderate level. This implies that the comparatively less experienced workers are more likely to report high exposure or acceptance of AI-based HR systems. As more digitally flexible and technologically comfortable, they might consider AI-driven recruitment, performance monitoring, and engagement systems to be more productive and clear.

However, the pattern is different when employees with over five years experience are considered. Most (42.3%) of them view the application of AI-driven HRM practices as medium with 33.8% of them registering low levels and only 23.9% registering high levels. This implies that the more seasoned employees might consider the implementation of AI as a partial or a developing but not complete adoption. Comparisons with traditional HR could affect their perceptions or the differences in the degree of engagement with AI-enabled processes.

On the whole, although the total distribution demonstrates a comparatively equal consideration of low (33.5%), moderate (36.0%), and high (30.5%) perceptions of AI-influenced HRM practices, experience seems to have an impact on the perception of the practices. The less experienced employees are more likely to evaluate AI-driven practices as more positive on higher levels but as moderate on higher levels the more experienced they are. This implies that the level of generational digital familiarity and flexibility can influence how employees perceive AI in HR functions.

TABLE 4

CHI-SQUARE TEST

Test	χ^2	df	CC	Sig.
Result	3.169	2	0.065	0.230

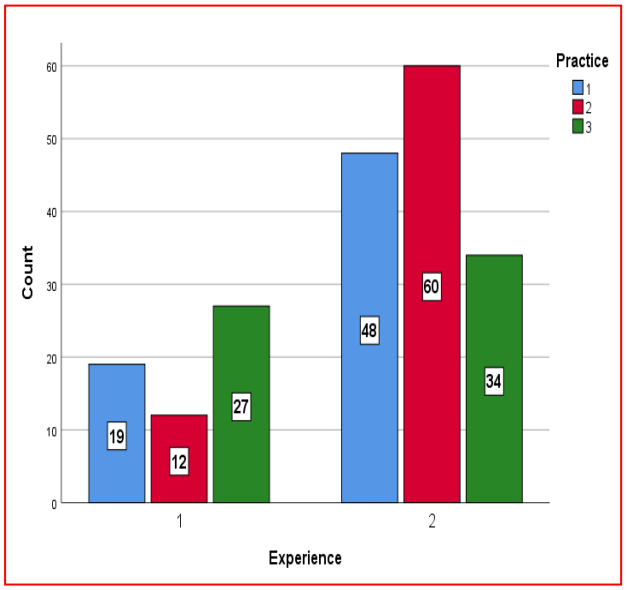
The findings of the Chi-square test analyzing the relationship between level of experience and AI-driven HRM practices perception in Indian organisations are represented in Table 4.

The Chi-square (2-df 3.169) value calculated is 3.169. The level of significance (p = 0.230) is higher than the usual level of 0.05. Hence, the outcome is statistically insignificant. This shows that the level of experience by employees does not have a significant impact on their perception of HRM practices facilitated by AI in terms of efficiency, retention and fairness.

As much as the descriptive analysis indicates that there is some difference between the employee experiences that are up to 5 years of experience and those who have experience that is above 5 years, the differences are not strong enough to draw a conclusion that experience is a significant aspect of perceptions. The coefficients of contingency (CC) =0.065 also shows that there exists a very weak relationship between the two variables. Altogether, the results indicate that the use of AI-based HRM practices is viewed comparably irrespective of the amount of experience employees have in organisations in India.

Figure: 2

Level of Experience and Level of Practices



Implications for the Study

The results of the current research have both practical and theoretical implications. In practice, the findings can assist organisations to assess the efficiency of the AI-based HRM systems and see areas that need to be improved. When the perception of fairness or efficiency is moderate, instead of high, organisations can increase the transparency, training, and communication concerning AI processes. The theoretical impact of the study on the literature of technology adoption and HRM practices is that the relationship between demographic variables and AI-driven practices is proven. It also offers an insight on digital transformation in the newer economy as experienced in a country such as India. The findings can assist HR managers to develop inclusive AI strategies that will address the concerns of the employees and foster trust in the organisation.

Recommendations and Suggestions

The usage of AI in HRM in India is uneven in terms of industry and size of organisations. Whereas major organizations along with technology-driven businesses are quickly adopting AI solutions, smaller organizations might continue using the conventional HR practices. Moreover, the impressions of AI-based HRM practices will vary among employees depending on demographic characteristics like age and experience, which will affect their acceptance and effectiveness. To enhance the level of employee awareness on AI-driven HRM systems, the organisations need to reinforce awareness and training programmes. Open communication about the operations of AI algorithms can potentially improve the perception of trust and equity. AI systems should also be audited regularly in order to reduce the bias of the algorithms and ethical adherence. The mechanism of employee feedback should also be implemented to gauge satisfaction with AI-based HR practices by companies. To be efficient and applicable, the AI tools should be continuously monitored and updated. Also, organisations need to take a middle ground as automation of AI should be used with the human touch to avoid loss of empathy and situational decision-making in HR practices. Digital literacy programmes can also be strategically invested in to facilitate a smooth solution of AI adoption among all groups of employees.

CONCLUSION

The proposed study will examine the AI-based HRM practices within the Indian organisations with respect to efficiency, retention, and fairness. The study offers understanding of the impact of AI on HRM practices and whether its execution is viewed as fair and efficient in various groups of employees by evaluating the employee perceptions and looking at the demographic correlations. Using a sample of two hundred respondents who were chosen using convenience sampling, the study assessed AI-induced HRM practices in Indian organisations in terms of efficiency, retention and fairness. The results show that the use of AI in HR functions is moderately rooted, and the employees, on the whole, see balanced levels of implementation. Chi-square tests of statistical analysis showed no significant correlation between demographic factors (age, experience, etc.) and perceptions of AI-driven HRM practices. It indicates that the application of AI within the HR functions is more or less consistent within the groups of employees. The lack of any strong demographic variations shows that AI-

driven HRM practices are possibly becoming standardised in organisations, and there are wider trends of digital transformation in India. Nonetheless, the level of perception that is middle emphasizes the necessity to maintain a constantly good increase in the transparency, training, and morally established governance. Organisations should make sure that AI systems do not reduce efficiency but rather serve as the means of fairness and trust between management and employees. Altogether, the HRM practices that are based on AI have significant potential to revolutionise organisational performance by enhancing efficiency in operations, increasing employee retention and facilitating the decision-making process in an objective way. In order to realise these benefits in full, organisations should incorporate responsible AI models with transparency and inclusivity and human control. Further studies can examine the industry specific differences and use larger and probabilistic samples to strengthen the generalisability

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