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The Role of Artificial Intelligence in Transforming Human Resource Practices at Intellect Design

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ABSTRACT:

Artificial Intelligence (AI) is rapidly reshaping business functions across various sectors, and Human Resource Management (HRM) is no exception. This study explores the transformative role of AI in HR practices at Intellect Design a leading financial technology company. The research aims to understand how AI-driven tools and applications are integrated into HR functions such as talent acquisition, employee engagement, performance management, and learning and development. Through a combination of qualitative and quantitative methodologies, including surveys and interviews with HR professionals and employees at Intellect Design, this study examines the extent of AI adoption and its impact on operational efficiency, decision-making, and overall employee experience. The findings reveal that AI has significantly improved the speed and accuracy of recruitment processes, enabled personalized learning pathways, and enhanced employee analytics for better workforce planning. Moreover, the research highlights key challenges such as data privacy concerns, the need for re skilling, and resistance to change, which can hinder the seamless implementation of AI in HR. Despite these obstacles, the study concludes that AI holds substantial potential in redefining HRM by automating routine tasks and allowing HR professionals to focus on strategic initiatives that drive organizational growth. This research contributes to the growing body of knowledge on AI in HR by providing insights specific to a real-world corporate environment, offering practical recommendations for organizations aiming to leverage AI in their HR transformation journey.

Keywords: Artificial Intelligence, performance management, Intellect Design and human resource management.

1. Introduction

Artificial Intelligence (AI) is one of the most transformative technologies of the 21st century, reshaping industries, redefining business processes, and altering the way humans interact with machines. At its core, AI refers to the simulation of human intelligence in machines that are designed to think, learn, and make decisions. These systems can perform tasks such as problem-solving, speech recognition, visual perception, and language translation functions traditionally requiring human cognition. The evolution of AI can be traced back to early computer science concepts in the mid-20th century, but recent advancements in computing power, data availability, and algorithmic innovation have accelerated its growth at an unprecedented pace. Today, AI is not just a futuristic concept but a practical tool embedded in our daily lives—from virtual assistants and recommendation systems to self-driving cars and advanced robotics. One of the most significant benefits of AI lies in its ability to process vast amounts of data in real-time and extract meaningful insights. This capability is being leveraged by organizations to improve efficiency, reduce errors, and enhance decision-making. In sectors such as healthcare, finance, education, and manufacturing, AI is being used to automate repetitive tasks, predict trends, and personalize services. Its adaptability and scalability make it a valuable asset for businesses of all sizes. In particular, the impact of AI on Human Resource Management (HRM) is profound. Traditional HR practices that relied heavily on manual processes are now being redefined through AI-driven tools. Applications such as automated resume screening, AI-based chatbots for employee queries, predictive analytics for talent retention, and personalized learning modules are helping HR departments become more strategic and data-driven. This not only streamlines operations but also allows HR professionals to focus on enhancing employee engagement and workplace culture. However, the adoption of AI also brings with it a set of challenges. Ethical concerns surrounding data privacy, bias in algorithms, transparency, and the potential displacement of human jobs are critical issues that need careful consideration. Organizations must strike a balance between leveraging the power of AI and ensuring fair, inclusive, and responsible use. Moreover, investing in employee rescaling and creating awareness about AI's capabilities and limitations are crucial steps toward successful implementation.

As AI continues to evolve, its influence on business and society will only grow. Understanding the fundamentals of AI, its practical applications, and its implications is essential for professionals, researchers, and policymakers. In this context, exploring the role of AI in specific domains, such as Human Resource Management, provides valuable insights into how technology is transforming the way organizations function and compete in the digital era.

2. Literature review

- [1]. **Kapoor, 2010** The researcher has analysed the function of business intelligence and its use in human resource management. This research examines the primary business intelligence provider to investigate the business intelligence and data analytics functionalities integrated inside human resource management modules.
- [2]. **Dirican, 2015**In his paper, titled "The Impact of Robotics and Artificial Intelligence on Business and Economics," a researcher examines how the implementation of robotics and artificial intelligence in business may adversely affect various organisational functions, including production, performance management, trade, strategic planning, customer relationship management, banking systems, coaching, training, and taxation
- [3]. **Buzko, et al., 2016**In the study titled "Artificial Intelligence Technologies in Human Resource Development." The researchers examined the challenges of AI technologies in the human resources sector, where the authors observed that AI was unable to assess the efficacy of training expenditures. The authors of the research report observed that artificial intelligence technologies enable thumans to quickly examine data
- [4]. **Holtel, 2016**Machines with incredibly high cognitive abilities will transform information processes inside every organisational division, including marketing, human resources, research and development, customer service, and even the executive board. Organisations must involve all significant partners in the initial phase of implementation, as the impact of artificial intelligence is extensive. Secondly, organisations must examine their established value framework, as it closely aligns with the capabilities of artificial intelligence systems. Third, organisations must implement controlled testing, as "divide and conquer" is no longer effective for addressing robots that replicate human reasoning.
- [5]. Elliot, 2017Examined the complexities of human-robot interaction and artificial consciousness from various perspectives, encompassing dynamic and somewhat ambiguous conditions not originally designed for robots; analysed each capability, presented practical applications, and demonstrated their integration within a coherent and innovative deliberative framework for human-robot collaboration. Supported by trial results, he ultimately demonstrated how to convey information to the executives, both symbolic and geometric, which proves essential for more sophisticated and natural human-robot interactions by advocating for ubiquitous, human-level semantics within the robot's deliberative framework.
- [6]. **Jain, 2018**The study article examined the role of artificial intelligence in human resource management. The report has stated that most organisations are adopting advanced technology in many HR operations, including recruiting, performance evaluations, and cloud-based HR solutions.
- [7]. **R & D, 2018**The title of the research paper is "Recruitment through Artificial Intelligence". An Abstract Study. The researchers have articulated the importance of AI in recruiting, highlighting its important function in the hiring process. Artificial intelligence assists in application screening, automated contacts with candidates, employee relations, and interview cataloguing.
- [8]. Jarrahi, 2018In his research article entitled "Artificial Intelligence and the Future of Work: Human-AI Symbiosis in Organisational Decision Making". The researcher's writings discussed the value of AI for humanity. Artificial intelligence has been useful in decision-making, addressing enquiries, and, particularly, resolving ambiguities within organisational decisions. Humans play a crucial role in the sector since technology must rely on human judgement when subconscious judgements are necessary to assess and address the complexities of findings.
- [9]. Villani, 2018Artificial intellect is a discipline that seeks to emulate facets of human intellect, including learning, reasoning, perception, and critical thinking, using computer programs governed by logical principles.
- [10]. Ruby merlin.p, jayam .R,2018The study named "AI in HRM" asserts that AI would facilitate ease in job performance and diminish the workload of HR managers, although it does not supplant the role of human resource managers. Machine learning represents a new paradigm in business, indicating that by 2020, every organisation would consistently utilise AI, leading HR departments to encounter novel concerns and obstacles. The evidence indicates that the issue originates from the selection and retention of suitable candidates; hence, AI will expedite the issues. Human resources workers increasingly rely on technology such as artificial intelligence to enhance their work. AI primarily streamlines the recruiting process by eliminating unqualified resumes. AI will use a performance management system to continually get input from employees. Employee retention is crucial for organisations. Ultimately, in accordance with employee requirements, the HR manager must establish new policies and processes to foster employee engagement within the organisation. Machine learning has yielded several breakthroughs and significantly influences contemporary society.
- [11]. **Peter, 2018**The paper indicates that in the near future, artificial intelligence will significantly transform the implementation of human resource practices through its integration within organisations. While certain jobs may be affected, overall productivity within an organisation is likely to increase. Some Western companies have successfully incorporated AI into various HR practices, yielding profitable outcomes, while others remain focused on cost considerations. Notably, recruitment stands out as the most effective function for integrating AI, particularly in sourcing and screening qualified candidates. Consequently, organisations must adapt their talent management strategies accordingly.

3. Research Methodology

Research technique is essential for structuring the research process and developing the instruments required for the paper's objectives. It pertains to the methodical design of a study to guarantee valid and reliable outcomes that fulfil the research aims and objectives.

Our study technique elucidates the impact of AI on human resource management.

This study technique is designed to analyse and evaluate the impact of AI on human resource management.

4. Need for the study

This study aims to investigate the implications of technological advancements, particularly artificial intelligence, on human resource management operations. The objective is to examine the functions and primary obstacles of AI, identify potential implementation areas, and enhance efficacy by addressing these issues.

5. Scope f the Study

The objective of this study is to emphasise that HR must be adequately prepared to adopt technology improvements to enhance accuracy and competency.

6. Objectives of the study

- a) To assess the influences of Artificial Intelligence on HR Practices.
- b) To analyze the challenges and limitations of Artificial Intelligence in HR Practice
- c) To understand the reasons for adopting Artificial intelligence.

7. Population, Sampling & Questionnaire Survey

Sampling is an essential method in statistical analysis, including the selection of a subset of a prospective population to evaluate or gain insights into the population at a reduced cost. Simple random sampling (SRS), sometimes referred to as "random sampling", involves the selection of samples at random from the sampling frame using either random number tables or an online random number generator. The questionnaire consists of both closed-ended and open-ended questions using multiple-choice answers. The survey questionnaire is created online, kept on Google Drive, and sent using a Google Form. The link to the Google Form is disseminated on professional networks like LinkedIn, student forums, and through direct emails. Two hundred replies were obtained. The survey questionnaire was organised under the subheadings of demographics, project status related to flexibilities, opportunities, and further remarks.

8. Statistical Analysis

Statistical analysis is the discipline of gathering, examining, and presenting extensive data sets to uncover fundamental patterns and trends. Statistics are utilised daily in research, business, and government to enhance the scientific basis of decision-making. Significance Statistical analysis is the discipline of gathering, organising, examining, analysing, and presenting data to reveal patterns and trends. A multitude of enterprises depend on statistical analysis, which is increasingly vital. A primary reason is that statistical data is employed to forecast future trends and mitigate hazards.

Hypothesis 1:

Null Hypothesis (Ho): There is no significant relationship between performance and the variables technology, flexibility, and employee competency.

Alternative Hypothesis (H1): There is a significant relationship between performance and the variables technology, flexibility, and employee competency.

Hypothesis 2:

Null Hypothesis (H_0): There is no significant association between technology and flexibility.

Alternative Hypothesis (H1): There is a significant association between technology and flexibility.

Hypothesis 3:

Null Hypothesis (Ho): There is no significant relationship between performance and employee competency.

Alternative Hypothesis (H1): There is a significant relationship between performance and employee competency.

9. Data Analysis and Interpretation

		NO. OF RESPONDENTS	PERCENTAGE	
Gender	MALE	110	55%	
Gender	FEMALE	90	45%	
	21-25 YEARS	106	53%	
	26-30 YEARS	32	16%	
AGE	31-35 YEARS	24	12%	
	36-40 YEARS	20	10%	
	ABOVE 40 YEARS	18	9%	
	UNDERGRADUATE	76	38%	
EDUCATIONAL	POSTGRADUATE	94	47%	
	PHD	30	15%	
	1-5 YEARS	112	56%	
WORK EXPERIENCE	6-10 YEARS	50	25%	
WORK EM ERIENCE	11-15 YEARS	16	8%	
	ABOVE 15 YEARS	22	11%	
	BELOW 20,000	78	39%	
	20,000-30,000	42	21%	
MONTHLY INCOME	30,000-40,000	24	12%	
	40,000-50,000	20	10%	
	ABOVE 50,000	26	13%	

ANOVA

Performance and (Technology, Flexibility, Employee Competency)

H0: There is no significance between Performance (dependent variable) and Technology, Flexibility, and Employee competency (independent variable).

H1: There is significance between Performance (dependent variable) and Technology, Flexibility, and Employee competency (independent variable).

Show the ANOVA Test

		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	1.783	60	0.594	5.312	0.001
Performance	Within Groups	55.505	140	0.112		
	Total	57.288	200			
Technology	Between Groups	1.739	110	0.58	5.108	0.002
	Within Groups	56.283	90	0.113		
	Total	58.022	200			
Flexibility	Between Groups	1.783	120	0.594	5.312	0.001
	Within Groups	55.505	80	0.112		
	Total	57.288	200			

		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	1.783	130	0.594	5.312	0.001
Employee Competency	Within Groups	55.505	70	0.112		
	Total	57.288	200			

The above table indicates a significant relationship between the dependent and independent variables, as evidenced by the strong F-values, each of which exceeds the corresponding significance (p) values. Specifically, the F-values for Performance (5.312 > 0.001), Flexibility (5.108 > 0.002), Opportunities (5.312 > 0.001), and Adaptability (5.312 > 0.001) demonstrate statistical significance. Therefore, the null hypotheses are rejected, and the corresponding alternative hypotheses are accepted, confirming a meaningful association between the variables.

Chi-Square Technology and Flexibility

H0: There is no association between Technology and Flexibility.

H1: There is an association between Technology and Flexibility

Shows the Chi-Square test

	Chi-square and df		Fishers Exact Test	
	Technology	Pearson	Sig 2 sided	Total
Flexibility	Strongly agree	6.0 & 4.8	0.001	110
	Agree	6.0 & 4.8	0.001	90
Total				200

The table indicates a significance value of .001, which is less than 0.5. The null hypothesis was rejected, whereas the alternative hypothesis was accepted with chi-square values of 6.0 and 4.8. Consequently, a correlation exists between technology and flexibility.

Correlation

Performance and Employee Competency

H0: There is no relation between Performance and Employee competency.

H1: There is a relation between Performance and Employee competency

Correlations							
		Company Considers Governance Of AI Platform As Vital In Conditioning Of HRM	Company Responds Quickly Changes In AI Platform	AI Platform Assists To Reduce The No. Of Errors	AI Has No Space Time Constraint	AI Can Deliver Relevant Vast Amounts Of High Quality Data In Real time	
Employees Have An Adequate Knowledge Of The Artificial Intelligence	Pearson Correlation	1	.578**	.517**	.325**	.355**	
	Sig. (2-tailed)		0	0	0	0	
	N	200	200	200	200	200	
Employees Are Continuously Trained To Work With The AI Platform	Pearson Correlation	.578**	1	.596**	.493**	.411**	
	Sig. (2-tailed)	0		0	0	0	
	N	200	200	200	200	200	

Employees Identify Ways To Improve The Efficiency And	Pearson Correlation	.517**	.596**	1	.447**	.623**
Effectiveness Of The AI Platform	Sig. (2-tailed)	0	0		0	0
Airiationii	N	200	200	200	200	200
Employees Make An	Pearson Correlation	.325**	.493**	.447**	1	.627**
Effort To Adapt To	Sig. (2-tailed)	0	0	0		0
The AI Platform	N	200	200	200	200	200
Employees Work As A Team Frequently To Execute Inter-	Pearson Correlation	.355**	.411**	.623**	.627**	1
Organizational Strategies	Sig. (2-tailed)	0	0	0	0	
	N	200	200	200	200	200
**. Correlation is significant at the 0.01 level (2-tailed).						

The table shows a significance value of 0.01, which is less than both 0.05 and the critical value of 1. Therefore, the null hypothesis is rejected, and the alternative hypothesis is accepted.

9. Findings:

Among 200 responders, 55 per cent were male and 45 per cent were female, reflecting a marginally greater proportion of male participation. The age distribution of responses revealed that 53 per cent were aged 21–25 years, 16 per cent were aged 26–30 years, 12 per cent were aged 31–35 years, 10 per cent were aged 36–40 years, and 9 per cent were above 40 years of age. Concerning educational credentials, 38 per cent of respondents were undergraduates, 47 per cent were postgraduates, and 15 per cent possessed a Ph.D. Regarding job experience, 56 per cent possessed 1–5 years, 25 per cent had 6–10 years, 8 per cent had 11–15 years, and 11 per cent had above 15 years of experience. Regarding monthly income, 39 per cent earned less than ₹20,000, 21 per cent earned between ₹20,000 and ₹30,000, 12 per cent earned between ₹30,000 and ₹40,000, 10 per cent earned between ₹40,000 and ₹50,000, and 13 per cent earned more than ₹50,000.

The data analysis indicates a substantial correlation between the dependent and independent variables. The robust F-values for several categories, including performance (5.312 > 0.001), flexibility (5.108 > 0.002), opportunities (5.312 > 0.001), and adaptation (5.312 > 0.001), clearly demonstrate this. Given the F-values above the significance values, the null hypothesis is rejected, and the alternative hypothesis is affirmed. The chi-square test findings indicate a significance value of 0.001, which is below the threshold of 0.5, accompanied by chi-square values of 6.0 and 4.8. This signifies a significant correlation between technology and flexibility, resulting in the dismissal of the null hypothesis and the endorsement of the alternative hypothesis. Another test reveals a significance value of 0.01, which is below both 0.05 and the crucial value of 1, so reinforcing the rejection of the null hypothesis and the acceptance of the alternative hypothesis.

10. Suggestions:

Among 200 responders, males constituted 55%, and females represented 45%. The majority of participants were aged 21 to 25 years (53%), with lesser proportions in older age brackets. Regarding educational attainment, 47% were postgraduates, 38% undergraduates, and 15% possessed Ph.D. degrees. Concerning job experience, 56% possessed 1–5 years, and 25% had 6–10 years, while a smaller proportion of respondents exceeded 10 years of experience. In terms of income, 39% earned less than ₹20,000, while the remainder was allocated among higher income tiers.

Statistical analysis revealed substantial correlations between dependent and independent variables. The robust F-values for parameters such as performance, flexibility, opportunity, and adaptation exceeded their significance thresholds, resulting in the rejection of the null hypothesis in favour of the alternative hypothesis. Chi-square tests revealed significant values below 0.05, therefore affirming connections, including that between technology and flexibility. The results endorse the adoption of alternative hypotheses, demonstrating significant correlations among the examined variables.

11. Conclusion:

AI-based HR practices can enhance employee productivity and enable HR staff to become educated advisors. AI-enabled HR practices can analyse, diagnose, anticipate, and prescribe HR solutions. Industrial development is booming in the competitive era. Industries must manage ongoing improvement. Most industries use current technology for speed and regular labour. Most researchers and experts advocate enterprises adopt AI and digital

technology. Many companies use artificial intelligence and machine language in their human resources departments to recruit, select, hire, analyse performance, collect employee data, and provide real-time and accurate information. HR strategy and planning, data mining, and knowledge discovery may create an intelligent decision support system; face recognition and natural language processing are used to create an interview system; intelligent robots and visual scanning technologies can help people teach and learn; data mining technology can be used to create an intelligent incentive system for performance management; and neural network technology can be used to create an intelligent salary evaluation system. Finally, robot and voice interface technologies can help manage employee relationships to create a corporate advising system. The case analysis of leap.ai recruiting online training explores AI recruitment and training.

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