
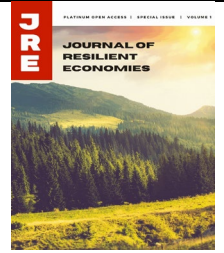




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A Study on the Role of AI in Transforming HR Practices in Pune's IT Industry

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Abstract:

This research study examines the evolving role of AI (Artificial Intelligence) in human resources, aiming on how IT employees perceive and engage with AI Automation at their workplace. It highlights the impact of AI technologies on employee identity, job security, and job satisfaction, while noting significant research gaps in understanding AI's influence on workforce dynamics. The literature classifies AI into categories like general AI tools, machine learning, and robotics, each affecting workplace interactions differently. A major concern is the "dark side" of AI, which may reduce employee autonomy and transparency, impacting their identity and sense of purpose. The research emphasizes AI's transformative potential in HR functions such as recruitment, training & development, performance evaluation and compliance management but also highlights challenges like resistance to change and ethical concerns about AI tools. It advocates for longitudinal studies to better understand AI's long-term effects and suggests that demographic factors may shape employee responses to AI. In conclusion, while AI could enhance HR operations, many questions remain about effective implementation of AI tools in HR functions.

Future research should address these gaps to enable organizations to leverage AI for a more innovative and adaptable workforce.

Keywords: Workplace Transformation, HR Operations, AI Tools, IT Industry, AI Automation

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1. Introduction

Artificial Intelligence has expressively transmuted human resources practices, particularly in Pune, a key IT hub in India. In this vibrant tech ecosystem, leading companies like Infosys, TCS and Wipro are harnessing AI to streamline recruitment process by automating resume screening, scheduling interviews, and conducting preliminary candidate assessments through catboats. This adoption accelerates hiring processes and enhances the accuracy of candidate selection. Additionally, AI-driven platforms are revolutionizing employee engagement as well as employee retention. For instance, Tata Consultancy Services (TCS) employs AI tools to analyse internal communication and gauge employee sentiment, allowing for early intervention to address potential issues and boost retention rates. AI's impact extends to performance management, where Tech Mahindra leverages real-time analytics and predictive insights to set personalized goals and provide actionable feedback, thereby fostering a data-driven approach to employee development. Furthermore, AI-powered platforms such as Coursera and LinkedIn Learning offer personalized learning experiences, aligning training programs with individual career aspirations and industry trends, ensuring continuous skill development.

Despite these advancements, the integration of AI into HR functions introduces complex legal and ethical considerations. Compliance with data protection regulations like the General Data Protection Regulation (GDPR) and the Indian Information Technology Act, 2000, is crucial to safeguard employee data and ensure transparency in data usage. AI systems must be designed to protect sensitive information and adhere to privacy standards. Additionally, the risk of algorithmic bias presents challenges in maintaining fairness in hiring and promotion practices. It is essential for organizations to implement regular audits and updates to their AI systems to mitigate biases and promote diversity. The evolving nature of employment laws, particularly regarding employee monitoring and automated decision-making, necessitates that companies stay abreast of legal developments and ensure AI applications do not infringe on employee rights or lead to discriminatory practices. Ethical considerations also play a critical role, requiring organizations to establish clear guidelines for the responsible use of AI, ensuring that technology aligns with organizational values and respects employee dignity. Balancing the benefits of AI with these legal and ethical responsibilities is vital for optimizing its potential while promoting fairness and protecting employee rights in the evolving HR landscape.

AI (Artificial Intelligence): According to Russell and Norvig (2016), AI refers to "The science and engineering of constructing intelligent machines, especially intelligent computer programs. "It includes variety of technologies designed to mimic human cognitive functions, including learning, reasoning, and problem-solving."

Transformation: According to David A. Garvin (1993) Transformation as "a process of organizational change that involves adopting new methods, technologies, or practices to improve performance and adapt to external demands." He also highlights the role of continuous learning and adaptation in driving transformation.

2. Literature Review

Ali Fenwick, Gabor Molnar and Piper Frangos (2024), They explores the pivotal role of HR functions in driving digital transformation and integrating AI into the workplace. It introduces a framework that classifies HRM practices into three categories which are people management, culture, and compliance to address concerns related to AI's impact on HR functions. Highlighting the evolving nature of HRM in the AI era, the paper emphasizes the need for a holistic, human-centric approach to effectively manage the human-AI relationship. It outlines the AI-HRM journey through three phases: Technocratic, Human-AI Integration, and fully-embedded AI, each with distinct challenges and opportunities. This research study serves as a comprehensive guide for HRM professionals, policymakers, and researchers, advocating for ethical considerations and fostering a harmonious coexistence of AI and humans in the workplace.

David Oyekunle, David Boohene (2024), in his research study they explore the transformative impact of Artificial Intelligence (AI) and Machine Learning (ML) in the HR domain, the articles emphasize how AI and ML can streamline operations by automating repetitive tasks, enhancing decision-making, personalizing employee experiences, and improving efficiency. These technologies are particularly beneficial in recruitment, on boarding, and performance evaluation by providing data-driven insights and improving compliance with policies. Overall, the research underscores the potential of AI and ML to drive innovation, optimize operations, and enhance decision-making across diverse sectors.

Gbemisola Okatta, Funmilayo Aribidesi Ajayi, Olufunke Olawale (2024), This research study identified key themes include strategic issues, system-related challenges, and human factors in AI development and implementation. Respondents emphasized the need for organizational education, legal considerations, process re-engineering, stakeholder consultation, and improving the human-AI interface. Despite overall positive perceptions, there is a notable sense of disempowerment among some employees, with non-management staff feeling more empowered compared to management. The responses reflect a balance of optimism and caution, highlighting the necessity to address strategic, technological, and human factors for successful AI integration.

Ram Paude (2024), The perceptions of two stakeholder groups (G1 and G2) regarding AI in the workplace reveal a generally positive outlook, with around 50% of respondents expressing favourable views. Conditional statements, emphasizing the importance of proper implementation and acknowledging AI's limitations, were noted by 40% of G1 and 28% of G2 respondents. Negative statements, such as AI's limitations compared to human skills, were less common, with 4% of G1 and 13% of G2 respondents expressing such concerns.

A few respondents indicated uncertainty about AI's impact. Key themes identified include strategic, systems, and human-centric issues, highlighting the need for effective implementation and addressing human factors for successful AI integration. Overall, the findings suggest a positive yet cautious stance on AI, with attention required for its proper adoption and human-centric considerations. Francisco Lopez Sanchez (Feb-24), The context discusses a study that explores the attitudes and sentiments of academic industry practitioners towards the use of AI-enabled tools and technologies in the workplace. This study used a mixed-method approach, combining an archival study to analyse global and industry-specific trends, and a survey with a 4-point Likert scale to gather quantitative data from participants in the academic industry. The purpose is to understand the perceptions, beliefs, and opinions of academic professionals regarding the benefits, risks, and impact of AI on their work, profession, and institutions. The study aims to provide recommendations for the ethical and effective application of AI-enabled tools and technologies in academic settings.

Chhaya Kewalramani, Shantanu Neema (2024), The new change management framework integrates generative AI to improve the efficiency and effectiveness of organizational change initiatives. It offers a holistic approach to managing change, ensuring smooth implementation through comprehensive planning. AI enhances efficiency by automating routine tasks, enabling managers to focus on strategic aspects and accelerating change adoption. It ensures consistency in communication, maintaining a clear change narrative and preventing misunderstandings. Additionally, the framework fosters innovation by using AI to generate new ideas and solutions, addressing resistance and driving successful transformations. Its scalability and adaptability allow it to fit various change projects within an organization. Overall, the framework leverages generative AI to streamline change processes, boost efficiency, and better navigate the evolving business environment.

Leili Babashahi and et. al, (2024) The Rapid Review study examines the impact of Artificial Intelligence (AI) on the job market and explores how individuals and organizations can adapt to this transformative shift. It addresses key areas including how businesses are incorporating AI into their workforce, the skill sets necessary for successful AI adoption, the challenges and skill gaps encountered, and the strategies used to overcome these challenges. By synthesizing existing research through a focused search and efficient information extraction, the review offers timely insights into AI integration and workforce adaptation, providing a clear understanding of

trends and variations across industries without the exhaustive scope of a Systematic Literature Review.

Annika Farhang Mossavar-Rahmani and Bahman Zohuri (2024), Artificial Intelligence (AI) is profoundly transforming industries and job markets, emerging as a major force that reshapes work and challenges traditional roles. AI is automating routine tasks, enhancing human capabilities, and shifting job roles towards higher-order thinking and creativity. By streamlining processes and improving workflow efficiency, AI fosters a symbiotic relationship where technology augments human skills. This transformation redefines work, with automation and job evolution as key aspects. Economically, AI integration brings benefits such as increased efficiency, better decision-making, enhanced customer experiences, and a more skilled, adaptable workforce, driving long-term business success in a changing economic landscape.

Richard Fulton, Diane Fulton, Nate Hayes and Susan Kaplan (2024), It emphasizes the critical role of collaboration in leveraging AI and technology to tackle complex challenges. Key points include integrating legacy and new systems through partnerships with vendors, government, and educational institutions; personalizing customer experiences and enhancing HR practices; addressing AI risks and benefits through structured assessment and continuous evaluation; and adopting a transformational mind set for agility and improvement. Collaborative projects like xView2, which uses machine learning and satellite imagery for disaster response, exemplify the effective use of technology to address pressing issues.

Ritika Gupta (2024), It provides an overview of the impact of Artificial Intelligence (AI) on Human Resource Management (HRM). It highlights the various benefits of integrating AI into HRM, such as streamlining operations, enabling data-driven decision-making, and fostering personalized employee experiences. The context also discusses the challenges and ethical considerations associated with AI in HRM, emphasizing the need for conscientious integration and governance. Additionally, the context anticipates upcoming AI trends and provides strategic guidance for organizations navigating this evolving landscape. Overall, the context advocates for ethical, transparent, and human-centric approaches to AI adoption in HRM to harness its transformative potential while addressing the inherent challenges.

Volodymyr Krupa, et al, (2024) It outlines a comprehensive approach to enhancing personnel management at an engineering rural enterprise using various methods. It employs an integrated methodology combining abstract logical analysis, expert ranking, and the Delphi method to deeply understand and evaluate innovative updates. The abstract logical method helps systematize data and form conclusions, while expert ranking and the Delphi method prioritize and reach consensus on solutions. The analysis highlights the implementation of artificial intelligence and digital databases as key innovations for improving the personnel management system and motivation. Overall, the approach focuses on leveraging digital transformation and AI to support and advance personnel management.

3. Research Gap

The Literature study suggests various research areas to guide future studies and also shows how AI can boost performance in different HR functions. There is very limited study available on comprehensive and contextual understanding of AI tools on workforce transformation. There is a need for a deeper exploration of the diverse perspectives and implications of robotics, AI, and automation on employee-related outcomes. There is a need for more empirical research that examines the real-world implications of AI in various workplace settings, beyond conceptual or theoretical studies. Most existing studies focus on specific industries or geographical areas. There is a lack of research that explores the impact of AI tools across different sectors and cultural contexts.

Many studies are cross-sectional, providing a snapshot of AI's impact at a single point in time. Longitudinal studies are needed to assess the long-term effects of AI on workplace outcomes, such as employee satisfaction, productivity, and organizational culture. There is limited guidance available on effective strategies for integrating AI technologies into existing HR frameworks. This Research study is needed to develop best practices for implementation and to understand the barriers organizations face during this process.

Objectives of the Study

- 1) To study the impact of AI on the agility and flexibility of organizations in predictive workforce planning.
- 2) To examine effects of AI-powered real-time insights and data-driven initiatives for improving decision making related to HR operations.
- 3) To understand various AI tools used by HR professionals for improving employee well-being, like customized health and wellness programs.
- 4) To study on AI tools used for automating regulatory reporting and compliance adherence to labour laws and employment regulatory standards.
- 5) To assess integrating system of AI tools and HR functions to improve employee feedback programs which lead to flexible and adaptive organizational processes.

Hypothesis of the Study

- 1) Predictive workforce planning combined with AI increases an organization's agility and flexibility to adapt to changes in the organisation's workforce planning.
- 2) AI-powered insights significantly improve HR decision-making's effectiveness and yield strategic outcomes.

Conceptual Model

The conceptual model, depicted in Figure 1, illustrates the relationships between key variables: AI tools, HR

functions, and workplace outcomes, forming the basis for the research methodology.

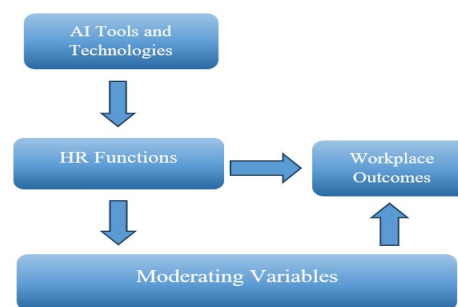


Figure 1- The Conceptual Model

4. Research Methodology:

Descriptive and cross-sectional research design has been used for conducting the research study. Purpose of using descriptive research design is to describe the existing situation as well as to describe the Phenomenon, Characteristics and Effects on Considered Population. This research study involves primary data collection from human participants. All participants were informed of the study's objectives, procedures, and potential risks, and their participation was voluntary. Informed consent was obtained from all participants prior to their involvement in the study. Additionally, all personal data collected were anonymized to ensure confidentiality and privacy.

Purposive and convenience sampling method of Non probability sampling was used for collecting data from the respondents. Well-structured close-ended questionnaire was used for collecting data from respondents. HR Professionals from IT Industry of Pune City were selected for collecting data. Morgan table of sample size suggest that there should be at least 284 respondents involve in the study with full response. We have approached 325 respondents and actual responses collected with correct response is 300. Hence, Sample size for this research study is 300 respondents only. Data was collected from respondents through personal visits and google forms. Secondary data were collected from magazines, research journals, books, government reports and from websites. Simultaneously for drawing the statements of hypothesis extensive literature review was done. For that purpose, various sources of secondary data were used. Continues five point Likert scale is used to measure variables for hypothesis testing.

Hence, current research has used both the type of data i.e. Quantitative as well as Qualitative. Data collected for the study was analyzed using MS-Excel-19 and SPSS-26. Classification of respondents has been done using Descriptive Analysis, with the help of various tools like Frequency Analysis, Graphs and Pie Charts to Describe Population Characteristics. Technology like SPSS-26 is used for performing the test like Reliability Test, T test and one sample test to approximate statistical correlations between dependent and independent variables.

5. Data Analysis

Gender wise representation of respondents

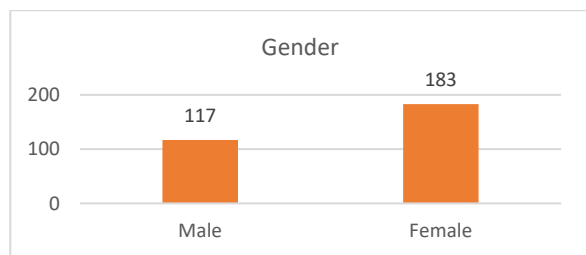


Figure 2- Gender Distribution

As depicted in Figure 2, the study revealed that a significant majority of the professionals surveyed were female, comprising 61% (183) of the total respondents. Male healthcare professionals made up 39% (117) of the total respondents.

Analysis on Type of Role in HR Department:



Figure 3- The distribution of HR professionals

Figure 3 shows the distribution of HR professionals in the study includes 128 recruiters, 73 HR Specialists, 50 HR Managers, 42 HR Analysts and 7 respondents from Other HR professionals. This diverse professional representation ensures that the findings and recommendations are relevant across different types of HR Professionals, enhancing the overall applicability and impact of the study's conclusions on AI adoption in HR Operations.

Analysis of Experience of HR Professionals in Age:

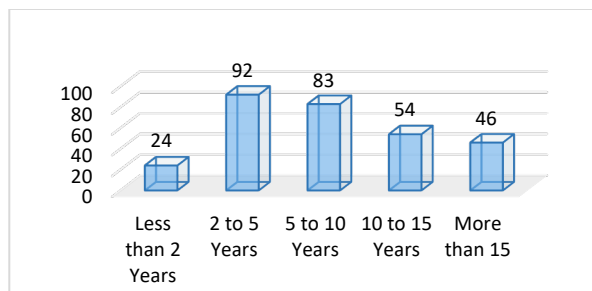


Figure 4- The age distribution of HR professionals

Figure 4 shows the age distribution of HR professionals in the Pune area reveals that the majority of respondents have experience between 2 to 5 years, accounting for 31% of the respondents followed by 28 % of respondents have 5 to 10 years of experience in HR Domain. Majority of the respondents work experience is between 2 to 10 years.

6. Hypothesis Testing:

Hypothesis: 1

H01: Predictive workforce planning combined with AI does not increases an organization's agility and flexibility to adapt to changes in the organisation's workforce planning.

Ha1: Predictive workforce planning combined with AI increases an organization's agility and flexibility to adapt to changes in the organisation's workforce planning.

Table 1- Sample Statistics

One-Sample Statistics			
Adoption of AI for workforce planning	N	Mean	Std. Deviation
Employee Performance Metrics	300	3.24	.961
Employee Recruitment and Talent Acquisition	300	3.78	.975
Employee Engagement and Satisfaction	300	3.64	.853
Employee Training & Development	300	3.43	1.030
AI enhanced your organization's ability to adapt to changes in workforce	300	3.73	1.034

Inference from T-Test Results: Table 1 shows statistics give a comprehensive view of the adoption levels of various aspects of AI Tools among HR professionals in the Pune Area. Analysis: The mean scores for all aspects of AI Tools adoption are above the midpoint (3.00), with Employee Recruitment and Talent Acquisition, Employee Engagement and Satisfaction, and AI enhanced your organization's ability to adapt to changes in workforce having higher means. This suggests that the overall adoption of AI Tools among HR professionals of IT Sector in the Pune City is moderate to high, rather than low.

Table 2- T-Test Analysis for H1

Adoption of AI for workforce planning	Test Value = 0					
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Employee Performance Metrics	85.51	299	0	3.24	3.1	3.96
Employee Recruitment and Talent Acquisition	82.2	299	0	3.78	3.69	3.87
Employee Engagement and Satisfaction	98.77	299	0	3.64	3.37	4.05
Employee Training & Development	74.05	299	0	3.43	3.37	3.69
AI enhanced your organization's ability to adapt to changes in workforce	76.6	299	0	3.73	3.64	3.83

Based on the findings shown in Table 2, we reject the null hypothesis (H01) that the level of adoption of AI is low and accept the alternative hypothesis (Ha1) that the level of adoption is moderate. This implies that HR professionals in Pune are moderately using AI tools, which can lead to improved HR operations, better recruitment planning, and enhanced employee engagement for managing organisations workforce planning. From the first table mean and standard deviation values are shown. Mean values for all the five variables varying between 3.24 to 3.78. It shows the acceptance of AI Tools in their organization is moderate. Further T-Test was performed with 95% of confidence level and 5% of significance level. From the p-value for all the five variables is less than 0.05. Hence result fails to prove the null hypothesis. Therefore, Alternative hypothesis is accepted. Therefore, alternative statement "Predictive workforce planning combined with AI increases an organization's agility and flexibility to adapt to changes in the organisation's workforce planning." is accepted.

Hypothesis 2:

- H02: AI-powered insights do not improve HR decision-making's effectiveness and yield strategic outcomes.
- Ha2: AI-powered insights significantly improve HR decision-making's effectiveness and yield strategic outcomes.

Inference from T-Test Results:

The provided statistics give a comprehensive view of the adoption AI powered Tools improves Decision making among HR professionals. The mean scores for all aspects of AI powered Tools adoption are above the midpoint (3.00), with Higher productivity, Increased employee satisfaction, AI-powered real-time insights are most valuable for decision making in HR having higher means. This suggests that the

overall adoption of AI powered Tools among HR professionals results in effective decision making in the Pune City is moderate to high, rather than low. Based on these findings, we reject the null hypothesis.

As seen in Table 3, Hypothesis (H02) that the effectiveness of AI tools on HR functions is low and accept the alternative hypothesis (Ha2) that the effectiveness of AI tools on HR functions is moderate. This implies that HR professionals from IT Sector in Pune are moderately using AI tools, which can lead to improve the thoroughness of the decision-making process, Higher productivity and AI-powered real-time insights are most valuable for decision making in HR Operations.

Table 3- Sample Statistics for the impact of AI tools

One-Sample Statistics			
Impact of AI Tools on HR Decision Making Process	N	Mean	Std. Deviation
Increased employee satisfaction	300	3.76	.741
Better health outcomes	300	3.56	.648
Higher productivity	300	3.93	1.457
AI-driven tools impact the thoroughness of the decision-making process	300	3.73	1.27
AI-powered real-time insights are most valuable for decision making in HR	300	3.82	0.976

T-Test was performed with 95% of confidence level and 5% of significance level. From the p-value for all the five sub questions it has been observed that it is less than 0.05. Hence result fails to prove the null hypothesis. Therefore, Alternative hypothesis is accepted. Therefore, alternative statement "AI-powered insights significantly improve HR decision-making's effectiveness and yield strategic outcomes." is accepted.

Table 4- T-test Analysis for H2

Impact of AI Tools on HR Decision Making Process	One-Sample Test					
	Test Value = 0					
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Increased employee satisfaction	85.51	299	0	3.76	3.43	3.96
Better health outcomes	82.2	299	0	3.56	3.32	3.87
Higher productivity	98.77	299	0	3.93	3.89	4.05
AI-driven tools impact the thoroughness of the decision-making process	74.05	299	0	3.42	3.4	3.69
AI-powered real-time insights are most valuable for decision making in HR	76.6	299	0	3.73	3.54	3.83

7. Findings of the Study:

HR professionals from Pune shows high adoption of AI tools across all different HR functions, such as recruitment, training & development, appraisal, compliances etc. with mean scores from 3.24 to 3.78, indicating positive perceptions of AI's utility among HR professionals.

The survey reveals a gender imbalance, with 61% of respondents being female. This highlights the need to address gender dynamics in HR technology discussions. It will help organisations to adapt AI tools in their workplace.

Respondents include recruiters, HR specialists, managers, and analysts, enhancing the generalizability of the findings across all the HR functions of organization. AI driven predictive analytics helps HR professionals for managing all their functions effectively. As well as it also addresses the GAP's present in identifying and organizing talent, organising resource allocations and optimizing HR functions.

Most respondents have 2 to 5 years of HR experience, suggesting younger professionals are driving AI integration. As young professionals are adapting technology changes it will help them to increase agility and also allow them to quick respond to market demand, economic shift and operational challenges.

The study identifies challenges like the need for effective implementation, overcoming resistance to change, and addressing ethical concerns. But, AI tools will help HR leaders with effective use of existing system with real time data driven recommendations along with real time analytics.

Findings encourage HR professionals to adopt AI tools to improve workforce management and strategic decision-making. AI tools will help HR professionals to improve overall operational efficiency as well as foster a culture of continuous development for workplace transformation.

Majority of respondents believe that AI has positively impacted the organization's adaptability. This shows strong confidence in AI's effectiveness in responding to changing workforce demands. AI tools which were useful for employee wellbeing grown popularity as IT industries are more concern about their employees.

Study reveals that decisions made using AI driven tools are more accurate than decisions made through traditional methods. AI tools help HR professionals to track employee health data, preferences and behavior to manage activities and programs for employee's health and well-being.

Integration with existing system and Data privacy are major challenges faced by HR professional while Using AI Tools. AI tools can have streamlined regulatory reporting and compliances for by automating the compliance process with labour laws. This will reduce the human errors along with management and implementation of local, regional and global employment standards.

For supporting employee well-being, HR professionals use AI tools which focuses on employee health and which increases employee satisfaction towards the job.

Large number of HR professionals used AI tools for automating Labour Law Compliances and Health and Safety Regulations, while automating this Compliances and regulations many HR professionals face Challenges like Data Accuracy and Regulatory Changes. Study concludes that AI tools help HR professionals for creating supportive change management plan and also provides user friendly interface for ease of use.

Findings from Hypothesis Testing Results: AI insights improve HR decision-making effectiveness, productivity, and employee satisfaction, confirming the rejection of the null hypothesis. AI in predictive workforce planning enhances organizational agility, supported by p-values below 0.05. The research indicates a positive outlook on AI adoption in HR professionals from IT Industry from Pune city, with significant implications for operational efficiency with better employee outcomes.

8. Suggestions & Recommendations:

Organisations should implement thorough training programs for HR staff members to improve their knowledge and skills required for using AI tools and make sure that they can utilise these technologies efficiently for improving HR operations.

HR professionals can use and expand predictive analytics by using neural networks and machine learning for managing workforce planning and accuracy in attrition, demand and in skills shortage.

HR professionals should understand the difficulties that arises while implementing AI tools and technologies, such as financial limitations or a lack of technical expertise, and develop strategies to get beyond them. HR professionals should comparative study with the organisations which are using AI tools in their organisation to access impact on agility and flexibility.

Organizations may focus on conducting trial projects for specific AI tools in HR operations like recruiting, training and employee engagement before executing them fully to assess efficacy and also for comparing insights given by AI tools.

Organizations should keep an eye on how AI tools affect employee satisfaction, employee engagement, and employee retention to ensure that the use of these technologies aligns with employee needs and organizational objectives.

HR departments should benchmark their AI tools adoption practices against the industry standards to identify areas for improvement and stay competitive. HR professionals should conduct research on real time insights regarding Employee health, training, compliances, lifestyle etc., for implementing AI tools in their HR operations.

HR Department should develop clear communication strategies to inform employees about AI

initiatives, addressing any concerns and highlighting the benefits to promote acceptance and engagement.

HR professionals should also explore potential challenges regarding acceptance of employee regarding AI driven wellness programs, particularly regarding data privacy concern.

HR professionals should Identify metrics or key performance indicators to assess the performance of AI tools which will be used by the organisation as well as managing their HR operations successfully.

9. Conclusion

The research employs a descriptive and cross-sectional study design to explore the adoption of AI tools among HR professionals in Pune City, collecting data from 300 respondents through a well-structured questionnaire. This robust sample exceeds the minimum requirements, enhancing the reliability of the findings. Demographic analysis reveals a significant female representation (61%) within the HR sector, underscoring diversity across various roles, from recruiters to HR managers. This variety allows for broad insights applicable to different HR functions. Key findings from hypothesis testing highlight the substantial integration of AI in workforce planning and decision-making. One-sample t-test results show mean scores above the midpoint of 3.00, indicating moderate to high acceptance of AI tools. Notably, areas like employee recruitment, engagement, and organizational adaptability received particularly strong endorsements. The analysis leads to the rejection of null hypotheses (H01 and H02), affirming that predictive workforce planning with AI enhances organizational agility and that AI-driven insights significantly improve HR decision-making. This suggests that HR professionals in Pune city are not only receptive to AI adoption but are also realizing tangible benefits. Beyond immediate operational impacts, these findings signal a transformative potential for HR practices in Pune's IT sector. They advocate for increased investment in AI technologies to optimize workforce management and enhance strategic decision-making, ultimately driving organizational success.

The foundational understanding provided by this research inform future studies. Organizations should consider exploring additional dimensions of AI adoption, such as barriers to implementation and the specific impacts on employee outcomes. The positive evaluations of AI's impact on employee engagement suggest that HR professionals recognize AI's role in enhancing workplace culture. This could lead to strategies aimed at increasing employee retention and satisfaction through tailored AI solutions. This research emphasizes the critical role of AI in modern HR practices, offering valuable insights that can inform future studies and strategic initiatives. The moderate to high levels of AI adoption indicate a promising trend, suggesting that effective leveraging of these technologies can lead to significant advancements in HR operations and overall workforce effectiveness.

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