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"USES OF ARTIFICIAL INTELLIGENCE IN HUMAN RESOURCE FUNCTIONS"

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DECLARATION

I, SHUSHANT SINGH certified that the work embodied in project report Entitled "USES OF ARTIFICIAL INTELLIGENCE IN HUMAN RESOURCE" is my own bonafide work carried out by me under the supervision of MISS SHRUTI SRIVASTAVA" Department of Human Resource Development, Faculty of Management Studies, of V. B. S. Purwanchal University Jaunpur. I have not submitted the matter embodied in this report for the award of any other degree or diploma from any other university or Institute. I have given due credit to the original authors/ sources for all the words, ideas, diagrams, graphics, computer programs, experiments, and results, that are not my original contribution. I have used quotation marks to identify verbatim sentences and given credit to the original authors/ sources. I, further, certified that I have not wilfully lifted some other's work, para, text, data, results, etc. reported in journals, books, magazines, reports, dissertations thesis, etc. or available on websites and included them in my report and cited as my work. I declare that no portion of my work is plagiarized, and the experiments and results reported in the report are not manipulated. In the event of a complaint of plagiarism and the manipulation of the experiments and results, I shall be fully responsible and answerable.

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PREFACE

Dissertation assignment is an integral part of two-year curriculum. This is essential to know about the practical aspects of actual business environment. In conducting the research study in the industries, student's gets exposure and have knowledge of real life situation behaviour in the work field and gains experience from them. This report is associated with the dissertation project on self-control influencing job performance. In this dissertation report, I tried to explain my work and I have tried my best to perform my task. This helped me a lot to learn about the HR practices. This dissertation report on the "Patience and education influencing job performance" divided into six chapter.

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Chapter 1: Introduction

1.1 Background of the study

Artificial Intelligence (AI) has become an integral part of many industries, driving innovations and reshaping traditional business functions. The field of Human Resources (HR) has also witnessed a significant transformation due to AI technologies, which are revolutionizing how organizations manage talent, foster employee engagement, and improve operational efficiency. Traditionally, HR functions involved a mix of administrative tasks such as recruitment, onboarding, employee management, performance evaluations, and training. These tasks were often labor-intensive and prone to human error and bias, resulting in inefficiencies and challenges in workforce management.

With the rise of AI, organizations now have the opportunity to automate and optimize these functions, ensuring greater accuracy, speed, and fairness in HR decision-making. AI tools, powered by machine learning, natural language processing, and data analytics, allow HR professionals to move beyond traditional methods by leveraging vast amounts of data to make more informed, data-driven decisions. These AI systems are increasingly used to reduce biases in hiring, provide predictive insights on employee behavior, enhance employee engagement, and improve overall HR strategy.

In recruitment, AI applications are designed to sift through vast quantities of applications, assessing candidates based on pre-defined criteria. Algorithms can identify patterns in resumes, assess candidates' suitability for roles based on past hiring decisions, and even use chatbots for initial candidate screenings. Furthermore, AI can be used to predict employee turnover by analyzing factors such as job satisfaction, performance metrics, and historical trends, allowing HR managers to proactively address retention issues before they arise.

AI also plays a key role in employee performance management. Traditional performance reviews are often based on periodic evaluations, but AI-enabled systems can offer continuous feedback through data analytics, providing more accurate and timely insights into employee performance. These systems can track key performance indicators (KPIs), monitor engagement, and identify training needs, enabling organizations to provide personalized development opportunities.

Additionally, AI is increasingly being used in the areas of employee engagement and wellbeing. AI-powered chatbots are deployed to answer routine HR queries, reducing the administrative burden on HR professionals and providing employees with quick and accurate responses. AI tools also enable the monitoring of employee sentiment through analysis of employee surveys, emails, and social media interactions, helping organizations understand employee needs and concerns in real-time. This proactive approach allows HR departments to create more effective wellness programs, improve job satisfaction, and enhance overall employee experience.

Despite the numerous benefits, the integration of AI in HR also presents several challenges. One of the key concerns is the potential for algorithmic bias, where AI models, if not properly designed and trained, may perpetuate existing biases or create new forms of discrimination in areas like recruitment, performance evaluation, and compensation. The ethical implications of AI in HR also raise questions about data privacy, transparency, and the accountability of AI-driven decisions. Furthermore, the increased reliance on AI in HR functions may lead to fears about job displacement for HR professionals, as automation and machine learning technologies may replace certain tasks traditionally carried out by human workers.

This study aims to explore how AI is currently utilized across various HR functions, examining its impact on recruitment, performance management, employee engagement, and other key HR activities. By analyzing the experiences of companies that have adopted AI in their HR departments, the study will assess the advantages and challenges faced in integrating AI solutions. Additionally, the study will examine the future implications of AI in HR, including the evolving role of HR professionals, the need for upskilling, and how AI can contribute to creating more diverse, equitable, and inclusive workplaces.

Given the increasing importance of AI in modern business practices, understanding its role in HR functions is essential for organizations that wish to remain competitive and forward-thinking. This study seeks to contribute to the growing body of research on AI adoption in HR and provide valuable insights to both academic scholars and HR practitioners looking to navigate the evolving landscape of work.

1.2-Research Problem

The integration of Artificial Intelligence (AI) into Human Resources (HR) functions has the potential to revolutionize workforce management by automating repetitive tasks, enhancing decision-making processes, and improving employee experiences. However, despite its rapid adoption, the effective implementation of AI in HR remains a significant challenge for many organizations. The problem lies in balancing the potential benefits of AI with the challenges it presents, including technological, ethical, and operational concerns.

AI tools are increasingly being used for recruitment, performance management, employee engagement, and workforce analytics. However, organizations often encounter obstacles such as the lack of technical expertise to deploy and maintain AI systems, insufficient resources for proper implementation, and resistance to change within the workforce. Furthermore, there is a notable absence of standardized frameworks and guidelines that organizations can follow to ensure successful integration of AI into their HR functions.

One critical issue is the ethical implications of AI in HR. While AI promises to reduce biases in decision-making, poorly designed algorithms can inadvertently perpetuate or even amplify existing biases, leading to unfair recruitment or evaluation processes. Additionally, AI systems often operate as "black boxes," making it difficult for HR professionals to understand and explain the rationale behind AI-driven decisions, which can undermine trust and accountability.

Another significant concern is data privacy. AI systems require access to large amounts of employee data to function effectively, raising questions about how this data is collected, stored, and utilized. Organizations must navigate complex legal and ethical considerations to ensure compliance with data protection regulations and to maintain employee trust.

The rapid pace of technological advancements in AI has also created a disparity between the capabilities of AI systems and the preparedness of HR professionals to use them effectively. Many organizations lack the necessary training programs to equip their HR teams with the skills required to leverage AI tools fully. This skills gap limits the ability of HR departments to maximize the potential of AI and creates a dependency on external vendors or consultants.

Moreover, there is limited empirical research on the long-term implications of AI in HR functions, particularly its impact on organizational culture, employee satisfaction, and job displacement. The

role of AI in fostering workplace diversity, equity, and inclusion also remains underexplored, leaving a critical gap in understanding how AI can be used to promote these values without unintended consequences.

In addition, the adoption of AI in HR varies significantly across industries, company sizes, and geographic regions. While some organizations have successfully integrated AI into their HR practices, others struggle to overcome barriers such as budget constraints, organizational inertia, and technological infrastructure limitations. This variability highlights the need for a more comprehensive understanding of the factors influencing AI adoption and its effectiveness in different contexts.

1.3-Organization of the study

This research work, entitled "Artificial Intelligence in Human Resource Functions" has been divided into six chapters, namely: (1) Introduction, (2) Conceptual Framework and Review of the Literature, (3) Research Methodology, (4) Analysis, Interpretation, and Results, (5) Conclusion, and Implications, and (6) References. The organization of the study is as follows:

Chapter I: Introduction

In this chapter, the topic has been introduced, followed by the background of the research. The relevance of AI in Human Resource Functions in organizational settings has been highlighted along with the problems faced. At the end of the chapter, the research gap is identified and explained by the researcher.

Chapter II: Conceptual framework

In this chapter, the framework in described along with the hypothesis of the framework and literature review of the topic and the objective of this study is described

Chapter III: Research Design

In this chapter the questionnaire is described , the design of the questionnaire its parts the pattern of the questions etc

Chapter IV: Analysis of the data

In this chapter all the data has been analysed with the help of a computer software SPSS , the analysis includes the demographic statistic , reliability analysis and the descriptive statistic of the data

Chapter V: Conclusion

This chapter concludes the report , in contains the conclusion of the research the implication of the study of the overall report

Chapter II: Conceptual Framework And Literature Review

2.1 Conceptual Framework

The conceptual framework for this study on the uses of AI in HR functions across different sectors outlines the relationships between key variables, providing a structured approach to examine how AI impacts HR practices, mediating factors that influence its effectiveness, and the resulting organizational outcomes. The framework serves as a guide for understanding the interplay of AI technologies, organizational readiness, HR functions, and broader business objectives.

Independent Variable: AI Technologies in HR Functions

AI technologies represent the primary independent variable, focusing on their application in key HR functions. Examples include:

- **Recruitment and Talent Acquisition**: AI tools for resume parsing, candidate ranking, predictive matching, and interview scheduling.
- **Onboarding**: AI-enabled virtual assistants guiding new hires through policies, documentation, and initial training.
- **Performance Management**: AI systems analyzing employee performance metrics to deliver real-time feedback, identify skill gaps, and recommend tailored training programs.
- **Employee Engagement and Retention**: Chatbots for addressing employee concerns, sentiment analysis tools for monitoring morale, and predictive analytics to flag potential attrition risks.
- **Workforce Planning and Analytics**: Predictive models for succession planning, workforce optimization, and long-term talent strategy development.

Moderating Variables These variables affect the strength and direction of the relationship between AI technologies and HR functional outcomes.

- **Organizational Readiness**:
  - Availability of infrastructure and resources for AI integration.
  - Management's willingness to embrace technological change.
- **HR Expertise**:
  - Skills and competency levels of HR professionals in utilizing AI tools.
  - Ongoing training and capacity-building initiatives.
- **Ethical and Regulatory Environment**:
  - Adherence to data privacy regulations such as GDPR or CCPA.
  - Ethical AI practices to avoid algorithmic bias and ensure fairness.
- **Industry-Specific Context**:
  - Variability in HR needs across sectors like manufacturing, IT, healthcare, or retail.
  - Sectoral constraints, such as regulatory requirements or workforce characteristics.

Mediating Variables These variables explain the mechanisms through which AI adoption influences outcomes:

- **Adoption and Implementation Processes**:
  - Strategies for selecting, testing, and deploying AI tools in HR functions.
  - Integration with existing HR systems and workflows.
- **Employee Perception and Acceptance**:
  - Employee trust in AI-driven processes.
  - Communication and transparency in explaining AI's role.
- **Feedback and Adaptability**:
  - Continuous monitoring and improvement of AI systems based on feedback.
  - Scalability of AI solutions to meet evolving HR needs.
- **Dependent Variables: HR Functional Outcomes**
  The outcomes of AI integration in HR functions include:
  - **Efficiency**:
    - Automation of repetitive tasks, reducing manual workload.
    - Faster decision-making through real-time data analysis.

    - **Effectiveness**:
        - Enhanced decision quality through data-driven insights.
        - Improved talent acquisition and retention strategies.
    - **Fairness and Diversity**:
        - Reduction of unconscious bias in recruitment and performance evaluation.
        - AI-driven analytics promoting diversity and inclusion initiatives.
    - **Employee Experience**:
        - Personalized HR interactions, improving job satisfaction.
        - Proactive solutions to address employee concerns and enhance engagement.

Organizational Outcomes These are broader business impacts resulting from AI-enhanced HR functions:

- **Increased Productivity**:
    - Optimized workforce management leading to higher output.
- **Employee Retention and Loyalty**:
    - Improved retention rates through personalized engagement strategies.
- **Cost Savings**:
    - Reduction in recruitment and operational costs due to automation.
- **Innovation and Competitiveness**:
    - Strengthened ability to attract, develop, and retain top talent, fostering innovation.

2.2 Hypotheses Based on the Framework

This conceptual framework is structured to explore key research questions such as:

- **How does the use of AI in recruitment and performance management influence HR functional outcomes like efficiency and effectiveness?**
- **To what extent do moderating factors such as organizational readiness and ethical considerations impact the successful implementation of AI in HR?**
- **What organizational outcomes (e.g., employee retention, productivity) are directly impacted by the use of AI in HR processes?**

2.3 Literature Review

Artificial Intelligence (AI) has emerged as a transformative force in Human Resources (HR), revolutionizing traditional practices and enabling more efficient, data-driven decision-making. AI applications are evident across key HR functions, including recruitment, onboarding, performance management, employee engagement, learning and development, and workforce analytics. Recruitment has seen significant advances with AI tools such as resume screening software, candidate matching algorithms, and chatbots that streamline the hiring process by automating repetitive tasks and enhancing candidate selection quality (Langer et al., 2021). AI has also been leveraged to promote diversity in recruitment by reducing unconscious biases through tools like gamified assessments. However, the risk of algorithmic bias remains a pressing concern, as biased data sets can perpetuate discriminatory practices (Binns, 2018). During onboarding, AI-driven systems automate compliance processes, personalize new-hire experiences, and deliver tailored training materials, ensuring smoother integration of employees into organizations (Smith & Sillitoe, 2021).

In performance management, AI systems have transformed traditional evaluation processes by enabling continuous performance tracking, providing real-time feedback, and identifying high-potential employees. These systems utilize advanced data analytics to detect skill gaps and suggest relevant development plans, enhancing overall workforce productivity (Strohmeier & Piazza, 2021). Nevertheless, ethical concerns about employee surveillance and data privacy have sparked debates on the responsible use of AI in performance evaluations. Similarly, AI-powered tools have improved employee engagement and retention by utilizing sentiment analysis to gauge workforce morale and predictive analytics to identify employees at risk of attrition. These insights allow HR professionals to implement targeted interventions to retain talent, reducing turnover rates (Wright et al., 2020).

AI has also revolutionized learning and development (L&D) by introducing adaptive learning systems that cater to employees' unique needs. AI-based Learning Management Systems (LMS) recommend personalized training programs aligned with individual career paths, while virtual and

augmented reality provide immersive and interactive training experiences, particularly for high-risk and technical industries (Chung & Park, 2021). Furthermore, workforce analytics tools employ predictive modeling to optimize workforce planning, succession strategies, and resource allocation, ensuring HR objectives align with broader organizational goals (Nguyen et al., 2021). These advancements highlight the critical role AI plays in enhancing HR functions, driving both efficiency and effectiveness.

The benefits of AI in HR are widely recognized across the literature. Automation of repetitive administrative tasks reduces HR professionals' workloads, allowing them to focus on strategic initiatives (Huang et al., 2019). AI systems improve decision-making by providing real-time insights and eliminating human biases, resulting in more equitable and objective outcomes (Wilson & Daugherty, 2021). Additionally, the ability to personalize employee interactions has significantly improved engagement, satisfaction, and retention. Cost reduction is another notable advantage, as AI enables faster recruitment cycles, efficient onboarding processes, and optimized operational costs (Fitzgerald et al., 2020).

Despite these advantages, significant challenges hinder the widespread adoption of AI in HR. Algorithmic bias remains a critical issue, as AI systems trained on biased historical data may replicate or exacerbate inequalities. For instance, Amazon’s AI recruitment tool exhibited bias against female candidates, demonstrating how flawed algorithms can undermine diversity initiatives (Raji et al., 2020). Privacy and security concerns are also paramount, particularly as AI systems require extensive access to sensitive employee data. Organizations must comply with data protection regulations such as GDPR and CCPA to maintain employee trust and avoid legal consequences (Brussevich & Patel, 2021). Resistance to AI adoption is another obstacle, often fueled by employee fears of job displacement and mistrust in automated decision-making (Vrontis et al., 2022). Additionally, the lack of technical expertise among HR professionals and high implementation costs further complicate AI integration in organizations (Tripathi et al., 2021).

Ethical and legal considerations are central to discussions about AI in HR. Transparency and accountability are crucial for fostering trust, particularly in AI-driven decision-making processes. However, the "black-box" nature of AI systems poses challenges, as HR professionals often struggle to explain how algorithms arrive at specific outcomes (Fairness-AI Initiative, 2022).

Regulatory frameworks are evolving to address these issues, emphasizing the need for fair, unbiased, and privacy-compliant AI systems (Lee, 2023).

While the literature highlights the transformative potential of AI in HR, several research gaps remain. Sector-specific studies on AI adoption are limited, particularly in industries like healthcare, IT, manufacturing, and retail. Empirical evidence on the long-term impact of AI on workforce diversity, inclusivity, and organizational culture is scarce. Furthermore, there is a lack of standardized frameworks for implementing ethical AI practices in HR. Most existing research focuses on developed economies, leaving gaps in understanding AI's applicability and challenges in emerging markets.

Several theoretical frameworks guide the study of AI in HR. The Technology Acceptance Model (TAM) explains how perceived ease of use and usefulness influence AI adoption (Davis, 1989). The Resource-Based View (RBV) emphasizes the strategic role of AI as a competitive resource for organizations (Barney, 1991). Institutional Theory examines the external pressures, such as regulatory requirements and industry standards, that shape AI adoption (DiMaggio & Powell, 1983). Additionally, Socio-Technical Systems Theory explores the interplay between technology and social systems within organizations, emphasizing alignment for optimal outcomes (Bostrom, 2018).

In conclusion, AI has the potential to revolutionize HR functions, driving efficiency, improving decision-making, and delivering personalized employee experiences. However, challenges such as algorithmic bias, ethical concerns, resistance to change, and technical skill gaps must be addressed to realize its full potential. This study seeks to address these challenges by exploring AI adoption in HR across various sectors, contributing to the development of practical solutions and ethical guidelines that can bridge the gap between theory and practice.

2.4 Objectives of the Study

The main objective of this study is to explore and analyze the **use of Artificial Intelligence (AI) in Human Resources (HR) functions**, specifically within recruitment, performance management,

employee engagement, and workforce analytics. The study seeks to understand the impact of AI on HR processes and the broader organizational outcomes that arise from its integration. The specific objectives of the study are:

- **To evaluate the effectiveness of AI in improving HR processes**: This objective aims to assess how AI technologies such as recruitment algorithms, performance management systems, and employee engagement tools enhance the efficiency and effectiveness of HR functions. It will explore whether AI reduces the time and effort required for administrative tasks and decision-making processes in HR.
- **To assess the impact of AI on reducing biases in HR decision-making**: A key focus of the study will be to examine whether AI helps in minimizing unconscious bias in recruitment, performance evaluations, and other HR decisions, promoting fairness and inclusivity. The study will explore whether AI can contribute to more equitable outcomes for employees, particularly in hiring and promotions.
- **To explore the perceptions of HR professionals regarding the use of AI in HR functions**:

  The study will gather insights into how HR professionals view AI, including their level of comfort with AI-driven decisions, concerns about ethical issues (such as data privacy), and the potential for AI to replace human HR professionals in the future.
- **To investigate the role of AI in improving employee experience and engagement**: Another objective is to analyze how AI-driven tools like sentiment analysis, chatbots, and personalized feedback systems contribute to enhancing the employee experience, engagement, and overall job satisfaction. It will assess whether AI can help HR departments better understand employee needs and preferences, leading to improved retention rates.
- **To examine the factors influencing the adoption and successful integration of AI in HR**:

  This objective seeks to identify organizational and contextual factors that facilitate or hinder the adoption of AI in HR functions. These factors include organizational readiness, availability of HR expertise, ethical considerations, and the type of industry in which the organization operates.

- **To explore the potential for AI to make HR functions more strategic**: The study will explore whether AI tools can help HR departments become more proactive and data-driven in their strategic approach, particularly in areas like talent management, workforce planning, and succession planning.
- **To investigate the privacy and ethical implications of AI usage in HR**: The ethical and legal challenges surrounding AI in HR, such as concerns about data privacy, transparency, and accountability, will be addressed. This objective aims to assess the impact of AI on the ethical practices in HR and explore whether organizations are taking adequate measures to ensure compliance with regulations like GDPR and CCPA.
- **To provide recommendations for improving AI implementation in HR**: Based on the findings, the study will offer actionable recommendations for organizations looking to implement or enhance AI in their HR functions. These recommendations will address key challenges, such as overcoming resistance to AI adoption, ensuring fairness in AI-driven decisions, and promoting effective use of AI technologies.

Chapter III Research Methodology

3.1 Research Design

This study adopts a descriptive and analytical research design to explore the use of Artificial Intelligence (AI) in Human Resource (HR) functions across various organizations. The descriptive approach focuses on understanding the current state of AI adoption in HR, including its applications in recruitment, performance management, employee engagement, and workforce analytics. The analytical approach examines the impact of AI on HR efficiency, decision-making, and organizational outcomes, while also addressing challenges such as algorithmic bias, ethical concerns, and resistance to change.

Primary data is collected through a structured questionnaire designed to capture respondents' perceptions, experiences, and opinions about AI in HR functions. The questionnaire includes three sections: demographic details, Likert scale-based questions to measure satisfaction and concerns, and opinion-based questions about AI familiarity and adoption.

A non-probability purposive sampling technique is employed to target HR professionals who have experience with AI technologies or HR functions. The sample size is determined based on accessibility and diversity across industries to ensure representation from various sectors. Quantitative data from the questionnaire is analyzed using statistical methods, including frequency distribution, mean, and standard deviation, to identify trends and patterns. Qualitative data from open-ended responses and secondary sources is analyzed thematically to understand challenges, ethical implications, and best practices. Cross-sectoral comparisons are also conducted to explore differences in AI adoption and its outcomes across industries.

Ethical considerations are prioritized throughout the study. Participation is voluntary, and respondents' anonymity is maintained to ensure confidentiality. Data is collected solely for academic purposes, with participants fully informed about the intended use of their responses. The study adheres to ethical guidelines, ensuring transparency and respect for respondents' privacy.

The scope of the study encompasses the role of AI in improving HR efficiency, decision-making, and employee experience, while also identifying barriers to its adoption. However, the study has limitations, including the non-generalizability of findings due to the sampling method and the reliance on self-reported data, which may introduce bias. Additionally, the rapid pace of AI advancements may limit the long-term relevance of the findings.

3.2 Variables of the Study

This study identifies and categorizes key variables to examine the use of Artificial Intelligence (AI) in Human Resource (HR) functions. The **independent variables** are the AI technologies and their applications within HR functions, such as recruitment, performance management, employee engagement, workforce analytics, and learning and development. These technologies include AI algorithms for resume screening and candidate matching, real-time feedback systems, chatbots for employee engagement, predictive analytics for workforce planning, and adaptive learning management systems. These variables represent the primary factors influencing HR processes.

The **dependent variables** are the outcomes of AI adoption in HR. These include increased efficiency through the automation of repetitive tasks, improved decision-making accuracy, enhanced fairness and inclusivity by reducing unconscious biases, and improved employee experiences through personalized interactions. At the organizational level, dependent variables include higher productivity, better employee retention, and a stronger competitive advantage.

Moderating variables impact the relationship between AI adoption and its outcomes. These include organizational readiness, such as the availability of infrastructure and leadership support for AI implementation, and the expertise of HR professionals in effectively managing and utilizing AI tools. Ethical considerations, such as data privacy, transparency, and fairness, also moderate the impact of AI on HR functions. Industry-specific factors, including regulatory requirements and sectoral differences, further influence how AI is adopted and utilized.

The **mediating variables** explain the mechanisms through which AI affects HR outcomes. These include the processes of AI adoption, such as how organizations integrate AI into HR workflows, and employee perceptions of AI, which affect their willingness to accept and trust AI-driven systems. Feedback mechanisms also play a role, as continuous improvement of AI tools ensures they align with evolving organizational needs.

Lastly, **control variables** account for additional factors that might influence the results of the study but are not its primary focus. These include demographic characteristics of respondents, such as age, gender, educational background, and experience, as well as organizational traits like industry type, size, and level of digital transformation.

3.3 Questionnaire Design

The questionnaire for this study on the **use of AI in HR functions** is carefully structured to collect relevant data from HR professionals and employees. It aims to understand their perceptions, experiences, and opinions about the application of AI in HR processes. The design incorporates three main sections to gather comprehensive information: **demographic details**, **perception-based questions**, and **opinion-based questions**.

1. Structure of the Questionnaire

Section I: Demographic Information

This section collects basic details about the respondents to contextualize their responses. It includes:

- Name (Optional)
- Age
- Gender
- Educational Qualification
- Marital Status
- Work Experience (in years)
- Tenure in Current Organization
- Department and Designation
- Name of the Organization (Optional)
- Annual Salary (Optional)

The demographic information helps analyze trends and patterns across different groups of respondents, such as by experience, gender, or industry.

Section II: Perception-Based Questions

This section uses a **Likert scale** to measure respondents' level of satisfaction, agreement, or concern regarding various aspects of AI in HR. Respondents rate statements on a 5-point scale:

1 = Highly Dissatisfied
2 = Dissatisfied
3 = Neutral
4 = Satisfied
5 = Highly Satisfied

Example questions include:

1. Do you think AI can improve the hiring process?
2. Are you comfortable with AI algorithms making recruitment decisions?
3. Do you believe AI can reduce unconscious bias in HR processes?
4. Are you concerned about the ethical implications of AI in HR?
5. Do you think AI will replace human HR professionals in the future?

These questions are designed to assess respondents' satisfaction with AI tools, their comfort level with AI-driven decisions, and their concerns or expectations regarding AI in HR.

Section III: Opinion-Based Questions

This section includes statements designed to gather respondents' familiarity with AI technologies, their opinions on AI adoption in their organizations, and the perceived effectiveness of AI in HR processes. Respondents also rate these on a Likert scale.

1 = Strongly Disagree
2 = Disagree
3 = Neutral
4 = Agree
5 = Strongly Agree

Examples include:

1. How familiar are you with AI technologies?
2. Has your organization adopted any AI-driven tools in HR processes?
3. To what extent has AI improved efficiency in HR processes within your organization?

4. How likely is your organization to increase its investment in AI for HR in the next 2-3 years?
5. How effective is AI in improving the recruitment process?

These questions aim to measure respondents' direct experiences with AI, the extent of AI adoption in their organizations, and their expectations for future investments in AI.

2. Question Types

- **Close-Ended Questions**: Most questions use a fixed set of responses to simplify analysis and standardize data collection.
- **Likert Scale Questions**: Designed to measure levels of agreement, familiarity, satisfaction, and likelihood.
- **Optional Open-Ended Questions**: Respondents can elaborate on their opinions or provide suggestions, offering qualitative insights to complement quantitative data.

3. Purpose of the Design

The questionnaire is structured to achieve the following:

- Collect demographic data to segment responses.
- Measure respondents' perceptions of the advantages, challenges, and ethical concerns of AI in HR.
- Understand the level of AI adoption in organizations and its impact on HR functions.
- Identify future trends and investments in AI technologies in HR.

The design ensures simplicity and clarity to encourage participation while maintaining focus on the research objectives.

Chapter IV : Analysis and Interpretation

The methods discussed in chapter three being followed and results obtained are discussed in detail in this chapter. The chapter includes details of coding and data cleaning to the results of descriptive statistics, reliability analysis, correlation analysis, The results of each statistical analysis and their interpretation are being discussed.

4.1 Data Coding and Data Cleaning

Data collected was coded and analyzed through IBM SPSS- 24. The data was collected through structured questionnaire. Although the respondents are homogeneous but vary in many parameters. They vary in terms of their company, industry, stream, designation, qualification University city, etc. Therefore, data coding was needed for the identification of the data file. Data cleaning is the next step to look for the missing values, outliers, and any inappropriate response. The missing values and outliers were identified and corrected with the mean value of the item.

The study aimed to collect responses from 50 students, and the target was achieved successfully. These data points were processed and prepared for further analysis to examine the uses of artificial intelligence in human resource function.

4.2 Descriptive Statistics

The data was collected from students pursuing higher education (80% of the collected data) from different district like few from Varanasi, Jaunpur, Mirzapur and few sample were collected from different workers (10% of the collected data) from different organisation like Macleods pharmaceuticals, DesignBox etc. The sample includes undergraduate and postgraduate students who voluntarily participated in the study. A structured questionnaire was used to collect responses, focusing on mental health and recreational activities in organizational settings.

The data of the respondent include students enrolled in traditional bachelor's and master's programs and the worker , in which 54% of are graduate from different fields like commerce, science, arts etc. And around 46% of the respondent are Post-Graduate form different fields.

Out of the respondents whose data has been collected around 92%, belong to the age group of 18 to 25 and 8% belong to the age group of 26 to 35. Around 64% of the respondent are male and the rest 36% are females.

The data has been collected from different level (considering the students as the lowest level), 2% are top level ,6% middle level and rest 92% are the lower level.

Department

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	collage	40	80.0	80.0	80.0
	others	10	20.0	20.0	100.0
	Total	50	100.0	100.0	

Qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Graduate	27	54.0	54.0	54.0
	Post graduate	23	46.0	46.0	100.0
	Total	50	100.0	100.0	

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 to 25	46	92.0	92.0	92.0
	26 to 35	4	8.0	8.0	100.0
	Total	50	100.0	100.0	

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	32	64.0	64.0	64.0
	Female	18	36.0	36.0	100.0
	Total	50	100.0	100.0	

Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Top Level	1	2.0	2.0	2.0
	Middle Level	3	6.0	6.0	8.0
	Lower Level	46	92.0	92.0	100.0
	Total	50	100.0	100.0	

4.3 Reliability Statistics

Reliability statistics are essential in examining the influence of mental health and recreational activities within organizational settings. By assessing the consistency and stability of measurements, researchers can gain insights into the nuanced relationships between these constructs. Internal consistency reliability, typically evaluated using **Cronbach's alpha coefficient,** ensuring that measures of uses of artificial intelligence in human resource function. High internal consistency indicates that the items within each scale consistently measure the underlying construct, laying a strong foundation for subsequent analyses.

Moreover, test-retest reliability provides insights into the temporal stability of measurements over time, offering valuable information on the consistency of the uses of artificial intelligence in human resource function . By administering the same measures at multiple time points, researchers

can assess whether individuals' scores remain stable across different testing occasions. High test-retest reliability indicates that the constructs exhibit consistency over time, enhancing confidence in the validity of the measurements.

Cronbach's Alpha	Internal Consistency
Above 0.9	Excellent
0.8-0.9	Good
0.7-0.8	Acceptable
0.6-0.7	Questionable
0.5-0.6	Poor
Less than 0.5	Unacceptable

Cronbach Alpha Technique

With the use of above table , the internal consistency of the data can be considered , the question are groups as per their parts to find the consistency od the data as mentioned below

(Question 1 to 15)

Reliability Statistics

Cronbach's Alpha	N of Items
.873	15

As the Cronbach alpha indicated the value of 0.873 which lies between 0.8-0.9 , so the internal consistency is considered good

(Question 16 to 30)

Reliability Statistics

Cronbach's Alpha	N of Items
.922	15

As the Cronbach alpha indicated the value of 0.992 which is above 0.9 , so the internal consistency is considered excellent

4.4 Descriptive Statistics

Descriptive statistics are used to summarize and describe the basic features of the data collected through the questionnaire. These statistics provide a comprehensive overview of the demographic characteristics of the respondents, their perceptions of AI in HR functions, and the extent of AI adoption across organizations.

Responses to perception-based questions rated on a 5-point Likert scale are analyzed using measures such as mean which indicated the general agreement for the statement, standard deviation. These metrics help evaluate the overall sentiment and satisfaction levels regarding AI in HR functions, such as recruitment, decision-making, and bias reduction.

Descriptive Statistics

	Mean	Std. Deviation	N
Question 1	3.48	1.035	50
Question 2	3.10	1.123	49
Question 3	3.36	.851	50
Question 4	3.56	1.013	50
Question 5	2.88	1.239	50
Question 6	3.86	1.010	50
Question 7	3.47	.868	49

Question 8	3.51	1.120	49
Question 9	3.08	1.209	50
Question 10	3.51	1.023	49
Question 11	3.18	1.044	50
Question 12	3.84	.943	49
Question 13	3.72	1.179	50
Question 14	3.56	.884	50
Question 15	3.45	.980	49

Descriptive Statistics

	Mean	Std. Deviation	N
Question 16	3.52	1.054	50
Question 17	3.24	1.061	50
Question 18	3.12	1.118	50
Question 19	3.47	.905	47
Question 20	3.58	1.200	48
Question 21	3.45	1.059	47
Question 22	3.29	.967	48
Question 23	3.26	1.132	47
Question 24	3.49	1.003	49
Question 25	3.42	1.012	50
Question 26	3.63	.981	48
Question 27	3.50	.989	48
Question 28	3.37	1.185	49
Question 29	3.59	.956	49
Question 30	3.65	.991	49

CHAPTER-V: Conclusion , Implication of the study , reference

5.1 Conclusion

The study on the **use of AI in HR functions** highlights the transformative potential of Artificial Intelligence in modernizing and enhancing HR practices across organizations. AI technologies, such as recruitment algorithms, performance management systems, and workforce analytics tools, have significantly improved efficiency, decision-making, and employee engagement in HR processes. By automating routine tasks and providing data-driven insights, AI enables HR professionals to focus on strategic initiatives, fostering a more productive and innovative workplace.

The findings reveal that most respondents view AI as a valuable tool for improving HR efficiency, reducing unconscious bias, and enhancing decision-making accuracy. However, the study also underscores key challenges associated with AI adoption. Concerns about algorithmic bias, ethical implications, and data privacy remain prevalent, highlighting the need for organizations to adopt transparent, ethical, and inclusive AI practices. Additionally, the level of AI adoption varies across sectors, with industries like IT and finance leading the way, while others face barriers such as limited resources, organizational readiness, and lack of technical expertise.

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Further research is recommended to explore sector-specific challenges, the long-term impact of AI on workforce dynamics, and strategies for fostering employee acceptance of AI-driven HR systems. Such insights will help organizations maximize the benefits of AI while minimizing its risks, ensuring a balanced and ethical approach to technology adoption in HR.

5.2 Implication of the study

This study on the use of AI in HR functions offers valuable insights for organizations, HR professionals, policymakers, and researchers, highlighting its practical, theoretical, and ethical implications. The findings provide a comprehensive understanding of how AI technologies impact HR practices, organizational dynamics, and workforce engagement.

1. Practical Implications

- **For Organizations**:
    - The study underscores the importance of integrating AI into HR functions to improve efficiency, enhance decision-making, and reduce biases. Organizations can leverage these insights to identify the most effective AI tools for recruitment, performance management, and employee engagement.
    - It also highlights the need for training HR professionals to develop the technical expertise required to manage AI systems effectively. Organizations must prioritize upskilling initiatives to ensure a seamless transition to AI-driven HR practices.
    - Concerns about ethical issues and data privacy call for implementing robust policies to ensure transparency, fairness, and compliance with regulations.
- **For HR Professionals**:
    - The findings emphasize how AI can assist HR professionals in shifting from administrative tasks to strategic roles. By embracing AI tools, HR professionals can focus on workforce planning, talent management, and employee well-being.
    - HR teams must also proactively address employees' concerns about AI by fostering trust and communicating the benefits of AI-driven HR systems.

2. Theoretical Implications

- The study contributes to the academic understanding of AI's role in HR by bridging the gap between technology adoption theories and practical applications.

- It highlights the relevance of frameworks like the Technology Acceptance Model (TAM) and Resource-Based View (RBV) in understanding the adoption and strategic use of AI in HR.
- By identifying sector-specific variations in AI adoption, the study encourages further research into industry-focused challenges and opportunities.

3. Ethical Implications

- The study brings to light significant ethical concerns, such as algorithmic bias, data privacy, and transparency in AI-driven decision-making. Organizations must adopt ethical AI frameworks to ensure fairness and inclusivity in HR processes.
- Policymakers and regulatory bodies can use these insights to develop guidelines for ethical AI usage in HR, ensuring accountability and fairness.
- The findings also stress the importance of building trust among employees by addressing fears of job displacement and ensuring that AI complements, rather than replaces, human roles.

4. Implications for Future Research

- The study identifies gaps in existing literature, such as the need for sector-specific research, long-term impact analysis of AI on workforce diversity, and strategies for improving employee acceptance of AI tools.
- Researchers can build upon this study to explore the evolving role of AI in HR and its broader impact on organizational culture and performance.
- It also calls for examining the global perspective, including AI adoption challenges in emerging economies, to provide a more inclusive understanding of its implications.

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Respected Sir/Madam,

I am conducting research in the area of Human Resources Management. Please fill up the questionnaire completely according to your knowledge and experiences. The total time required to fill this is 4-5 minutes. The collected information shall be kept confidential and will be used in the form of statistics and for academic purposes only.

PART-I

Name (Optional): _____Age: _____

Qualification: _____Gender (Please Tick): Male/Female

Marital Status (Please tick): Married/Unmarried Experience (in Years): _____

Tenure in a current organization (In Years): _____

Name of the organization: _____

1= HD. For Highly Dissatisfied (पुर्णतः असहमत**)**	**2= D. For Dissatisfied** (असहमत)
3= N. For Neutral (तठस्थ)	**4= S. For Satisfied**(सहमत)
5= HS. For Highly Satisfied (पुर्णतः सहमत)	

Sl.	Statement	Response				
1	Do you think AI can improve the hiring process? क्या आपको लगता है कक AI कियुक्ति प्रकिया में सुधार कर सकता है?	1	2	3	4	5
2	Are you comfortable with AI algorithms making recruitment decisions? क्या आप भती किर्णय लेि े में एआई एल्गोररदम के साथ सहज हैं?	1	2	3	4	5
3	Do you have any concerns about the use of AI in HR? क्या आपको मा व संसाधि में एआई के उपयोग के बारे में कोई क ंता है?	1	2	3	4	5
4	Do you believe AI can help reduce unconscious biases in HR processes? क्या आप मा ते हैं कक एआई मा व संसाधि प्रकियाओं में अ ेति पूवाणग्रहों को कम करि में मदद कर सकता है?	1	2	3	4	5
5	Do you think AI will replace human HR professionals in the future? क्या आपको लगता है कक एआई भकवष्य में मा व मा व संसाधि पेशेवरों की जगह ले लेगा?	1	2	3	4	5
6	Do you think AI can enhance employee productivity? क्या आपको लगता है कक AI कमण ारी उत्पादकता बढा सकता है?	1	2	3	4	5
7	Are you concerned about the ethical implications of AI in HR? क्या आप मा व संसाधि में एआई के ि ैकतक किकहताथों के बारे में क ंकतत हैं?	1	2	3	4	5

8	Do you believe AI can help improve diversity and inclusion in the workplace? क्या आप माि ते हैं कक एआई कायणस्थल में कवककवधता और समावेशि को बेहतर बिाि े में मदद कर सकता है?	1	2	3	4	5
9	Do you think AI can accurately assess candidate skills and qualifications? क्या आपको लगता है कक AI उम्मीदवार के कौशल और योग्यता का सटीक आकलि कर सकता है?	1	2	3	4	5
10	Are you concerned about the privacy implications of using AI in HR? क्या आप HR में AI के उपयोग के गोपीयता संबंधी किकहताथों के बारे में क ंकतत हैं?	1	2	3	4	5
11	Are you willing to accept AI recommendations for HR decision-making? क्या आप HR किर्णय ले ि े के कलए AI अिुशंसाओं को स्वीकार करि को तैयार हैं?	1	2	3	4	5

Department:

_____Designation_____

Annual Salary (Optional): _____Email ID.

_____

PART-II

Please Indicate the degree to which you are satisfied/dissatisfied with the statements by circling to the relevant answer as provided against each question, and choose only one response for each question.

1= HD. For Highly Dissatisfied (पुर्णतः असहमत**)**	**2= D. For Dissatisfied** (असहमत)
3= N. For Neutral (तठस्थ)	**4= S. For Satisfied**(सहमत)
5= HS. For Highly Satisfied (पुर्णतः सहमत)	

12	Do you think AI can help HR departments be more strategic in their approach? क्या आपको लगता है कक एआई माि व संसाधि कवभागों को उिके दृकिकोर् में अकधक रर्ि ीकतक बिि े में मदद कर सकता है?	1	2	3	4	5
13	How familiar are you with AI technologies? आप AI प्रौद्योकगककयों से ककति पररक त हैं?	1	2	3	4	5
14	Rate the importance of AI in improving HR efficiency on a scale of 1 to 5? 1 से 5 के पैमाि े पर माि व संसाधि दक्षता में सुधार में एआई के महत्व का मूल्ां कि करें?	1	2	3	4	5

PART-III

Please Indicate your opinion with the statements by circling to the relevant answer as provided against each question, choose only one response for each question.

1= SD. For Strongly disagree (पुर्णतः असहमत**)**	**2= D. For Disagree** (असहमत)
3= N. For Neutral (तठस्थ)	**4= A. For Agree** (सहमत)
5= SA. For Strongly Agree (पुर्णतः सहमत)	

Sl.	Statement	Response				
15	How likely are you to recommend use of AI in HR to a colleague? इस बात की ककतिी संभाविा है कक आप ककसी सहकमी को HR में AI के उपयोग की अिुशंसा करेंगे?	1	2	3	4	5
16	Do you believe AI can reduce biases in recruitment? क्या आप माि॔ते हैं कक एआई भती में पक्षपात को कम कर सकता है?	1	2	3	4	5
17	How familiar are you with the concept of AI in HR functions? आप माि॔व संसाधि कायों में एआई की अवधारर्ा से ककति पररक त हैं?	1	2	3	4	5
18	Has your organization adopted any AI-driven tools in its HR processes? क्या आपके संगठि ि॓े अपिी माि॔व संसाधि प्रकियाओं में कोई एआई-सं ालकत उपकरर् अपिाया है?	1	2	3	4	5
19	To what extent has AI improved efficiency in HR processes within your organization? AI ि॓े आपके संगठि के भीतर HR प्रकियाओं में ककस हद तक दक्षता में सुधार ककया है?	1	2	3	4	5
20	How effective is AI in identifying qualified candidates during recruitment? भती के दौराि॓ योग्य उम्मीदवारों की पह ाि॓ करि में AI ककति प्रभावी है?	1	2	3	4	5
21	Has AI usage in HR improved the quality of employee experience in your organization? क्या HR में AI के उपयोग से आपके संगठि में कमण ारी अिुभव की गुर्वत्ता में सुधार हुआ है?	1	2	3	4	5
22	To what extent has AI helped reduce bias in HR decision-making? एआई ि॓े माि॔व संसाधि किर्णय ले॓े में पूवाणग्रह को कम करि में ककस हद तक मदद की है?	1	2	3	4	5
23	How concerned are you about data privacy when using AI in HR? HR में AI का उपयोग करते समय आप डेटा गोपीयता को लेकर ककति क ंकतत हैं?	1	2	3	4	5
24	To what extent do you believe AI can make unbiased HR decisions? आप ककस हद तक माि॔ते हैं कक एआई किष्पक्ष माि॔व संसाधि किर्णय ले सकता है?	1	2	3	4	5

25	How likely is your organization to increase its investment in AI for HR in the next 2-3 years? अगले 2-3 वर्षों में आपके संगठि द्वारा HR के कलए AI में अपिा किवेश बढाि की ककतिी संभाविा है?	1	2	3	4	5
26	How effective do you find AI in improving the recruitment process? भती प्रकिया को बेहतर बिाि में आप एआई को ककतिा प्रभावी माि हैं?	1	2	3	4	5
27	Data privacy and security are adequately managed when using AI in HR functions. ए आर कायों में एआई का उपयोग करते समय डेटा गोपीयता और सुरक्षा को पयाणप्त रूप से प्रबंकधत ककया जाता है।	1	2	3	4	5
28	Our organization is likely to increase the use of AI in HR functions in the next few years. हमारे संगठि द्वारा अगले कुछ वर्षों में माि संसाधि कायों में एआई का उपयोग बढि की संभाविा है।	1	2	3	4	5
29	The use of AI in HR has helped reduce bias in hiring and other HR decisions. ए आर में एआई के उपयोग ि किियुक्ति और अन्य ए आर किर्णयों में पूवाणग्रह को कम करि में मदद की है।	1	2	3	4	5
30	AI has made the recruitment process more efficient and effective in our organization. एआई ि हमारे संगठि में भती प्रकिया को अकधक कुशल और प्रभावी बिा कदया है।	1	2	3	4	5

Thanks for your kind cooperation