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A Study on Artificial Intelligence and its Impact on Human Resource Management Functions

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Abstract: ***The increasing use of Artificial Intelligence (AI) in Human Resource Management (HRM) is transforming the way organizations manage their workforce. This study examines the impact of AI on HRM functions, including recruitment, talent management, employee engagement, and performance management. Using a combination of primary and secondary data, this study finds that AI has improved efficiency, accuracy, and employee experience in HRM functions. However, it also raises concerns about job displacement, bias, and data security.***
Keywords: Artificial Intelligence, Human Resource, AI ethics

I. INTRODUCTION

Artificial Intelligence is changing the way organizations work. One area where AI is having a significant impact is Human Resources (HR). Human Resource (HR) is responsible for managing an organization's most valuable asset-its employees. From recruiting and hiring to training and development, HR plays a crucial role in helping organizations achieve their goals.

In recent years, Artificial Intelligence (AI) has started to automate many Human Resource (HR) tasks, such as screening resumes, scheduling interviews, and answering employee queries. While this may seem like a threat to HR professionals, AI is also creating new opportunities for HR to add more value to organization. Furthermore, the integration of Artificial Intelligence (AI) in HR not only increases efficiency but also enhances the overall employee experience by providing personalized learning and development opportunities. It offers valuable insights into employee behaviour helping organizations make data-informed decisions that align with their goals.

II. OBJECTIVES

Here are some objectives for studying the impact of AI on Human Resource Management (HRM):

1) To examine the current state of Artificial Intelligence (AI) on Human Resource Management.
2) To identify the benefits and challenges of AI in HRM.
3) To investigate the impact of AI on HR roles and responsibilities.
4) To identify best practices for implementing AI in HRM.
5) To identify the future directions for AI in HRM and also employee experience and engagement by AI.

III. REVIEW OF LITERATURE

The increasing use of Artificial Intelligence (AI) in Human Resource Management (HRM) has sparked significant interest among researchers and practitioners. This literature review aims to provide an overview of the current state of research on the impact of AI on HRM.

1) *Recruitment (2010):* AI tools have streamlined the hiring process since the early 2010s by automating resume screening and initial candidate interactions, leading to better quality hires and reduced biases
2) *Onboarding (2015):* since around 2015, AI has enhanced onboarding processes by personalizing training and resources for new employees, improving engagement and retention rates.
3) *Training (2016):* AI-driven adaptive learning technologies have been on the rise since 2016, customizing training content based on individual needs and leading to more effective skill development.
4) *Employee Engagement (2018):* AI tools like sentiment analysis have gained traction since 2018, allowing organizations to gauge employee satisfaction and proactively address concerns.
5) *AI-based Performance (2019):* Management systems can provide real-time feedback and coaching to employees.
6) *Ethical Considerations (2020s):* As AI technologies have evolved in the 2020s, concerns about data privacy, bias in AI, and job displacement have emerged, highlighting the need for ethical guidelines in AI use.

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AI-powered chatbots and virtual assistants can provide employees with quick and easy access to information and support (2020, IBM). Ai-powered analytics can help HR professionals make data-driven decisions and identify areas for improvement (Society for Human Resource Management, 2020). The main challenges and limitations b use of AI in HRM raises concerns about bias, transparency, and accountability. Overall, AI is enhancing HR efficiency and decision-making 2023 and 2024, but addressing ethical implications remains crucial as these technologies continue to evolve.

IV. REASEARCH METHODOLAGY

This research methodology for investigating the impact of AI on HR involves a quantitative and descriptive research design. This study aims to explore the current state of AI adoption in human resource, its benefits, challenges, and future implications.

A. Research Objectives

*To examine the current level of AI adoption in HR functions
*To identify the benefits and challenges of implementing AI on HR
*To explore the future implementation of AI on HR roles and responsibilities

B. Research Hypotheses

*AI adaption in HR will increase significantly in next two years.
*AI will improve HR process efficiently and employee engagement.
*AI will require significant changes in HR roles and responsibility.

C. Research Design

- Quantitative research: online survey and questionnaires will be used to collect the numerical data.
- Descriptive data: the study will describe the current state of AI adaption in HR and its impact.

D. Data Collection Methods

- Primary data: - a survey questionary will be designed and distributed to HR professionals through online platform.
- Secondary data: - a review of existing research papers, articles, books on AI will be conducted.

E. Sampling Method

Convenience Sampling Method: - HR professionals will be invited to participant online survey through email and social media.
Snowball Sampling: - participants will be asked to refer other HR professionals to participant in the survey.
Sampling Size: - the sampling size is 70

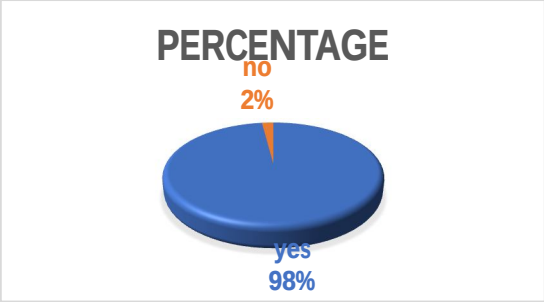
V. DATA ANALYSIS

A. Had organization adopted AI-powered tools in HR?

❍ Yes
❍ No

opinion	percentage	Count
Yes	98%	65
No	2%	5

INTERPRETATION: *Based on this, it seems that a significant majority of organizations, 98% have adopted AI-powered tools in their HR department, while only 2% have not.*



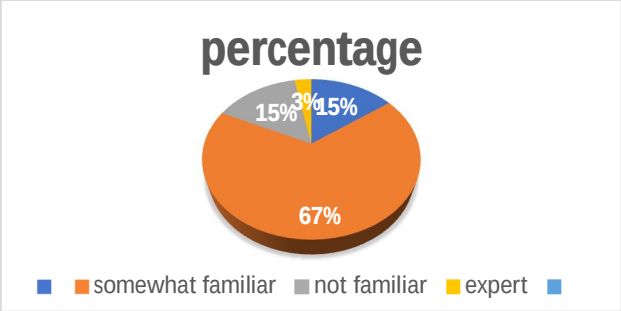
B. *How familiar are you with AI technologies?*

- ❍ Very familiar
- ❍ Somewhat familiar
- ❍ Not familiar
- ❍ Expert

familiar	percentage	count
Very familiar	15%	10
Somewhat familiar	67%	48
Not familiar	15%	10
expert	3%	2

INTERPRETATION:

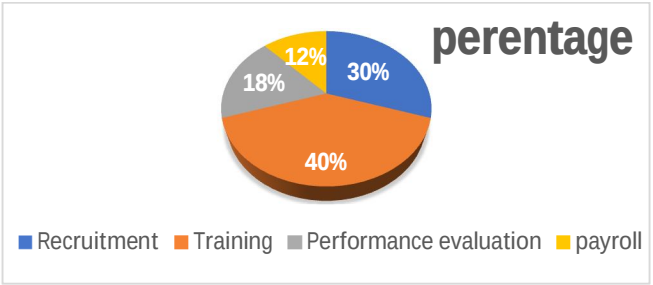
The responses about familiarity with AI technologies reveal a varied understanding among individuals. With 67% of respondents being somewhat familiar, it shows a general awareness and interest in AI, while only 15% are very familiar. Meanwhile, 15% are not familiar at all, indicating a knowledge gap that could be addressed through education. The 3% who consider themselves experts highlight that true expertise in AI is still quite rare.



C. *What area do you think the AI can impact the most?*

- ❍ Recruitment
- ❍ Training
- ❍ Performance evaluation
- ❍ Payroll

areas	percentage	count
Recruitment	30%	20
Training	40%	30
Performance evaluation	18%	13
payroll	12%	7



INTERPRETATION:

the responses about AI impact on HR, AI is expected to have the most significant impact on training 40%, followed by recruitment 30%, performance evaluation 18%, and payroll 12%. The impact of AI on HR is undeniable.

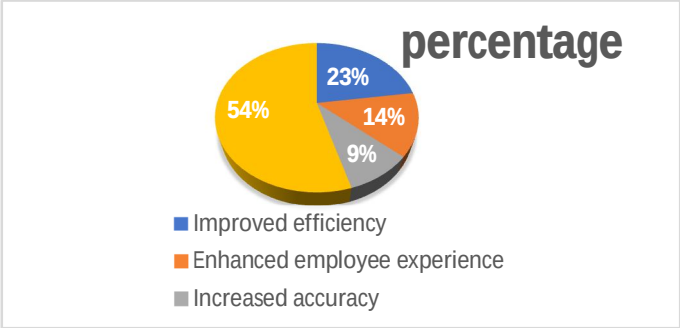
D. How has AI impacted HR process in your organization.

- ❍ Improved efficiency
- ❍ Enhanced employee experience
- ❍ Increased accuracy

impacts	percentage	counts
Improved efficiency	50%	44
Enhanced employee experience	30%	20
Increased accuracy	20%	16

INTERPRETATION:

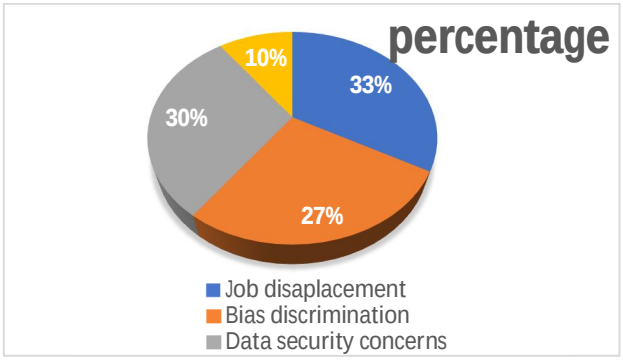
the responses about how AI impacted on HR, 50%, followed by improved efficiency, 30% enhanced employee experience, 20% followed by increased accuracy. According to this survey improved efficiency has more impacted on HR process



E. What changes do you think AI posses the HR?

- ❍ Job displacement
- ❍ Bias discrimination
- ❍ Data security concerns
- ❍ Lake of transparency

changes	percentage	Counts
Job disaplacement	33	28
Bias discrimination	27	22
Data security concerns	30	12
Lake of transparency	10	8

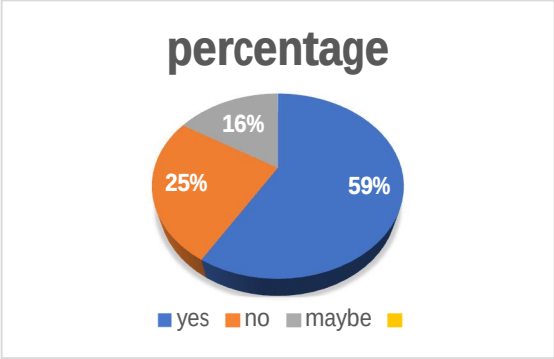


INTERPRETATION:

according to the data by respondents the changes on HR posses by AI is 33% followed by job displacement, 27% followed by bias discrimination. 30% for data security and 10% for lake of transparency. Based on this the AI has posses the changes on job displacement.

F. Do you belive AI can replace the HR posistions?

- ❍ Yes
- ❍ No
- ❍ Maybe



INTERPRETATION: *yes (59%), no (25%), maybe (16%). based on respondent's opinion yes option has majority votes therefore AI can replace the HR positions.*

VI. FINDINGS

"As AI technology continues to advance, its impact on HRM is becoming increasingly evident".
following are the findings, these findings present the comprehensive study on the impact of AI on HRM.

A. Positive Impact

- Automated recruitment: AI-powered tools can screen resumes, schedule interviews, and improve the overall hiring process.
- Enhanced employee experience: AI-driven chatbots and virtual assistants can provide 24/7 supports to employees, improving their overall experience.

B. Negative Impact

- Job displacement: AI may automate certain HR tasks, potentially displacing some HR professionals.
- Bias and discrimination: AI systems can perpetuate existing biases and discriminate against certain groups of employees or job applicates.

C. Future Implications

- Hybrid HR roles: HR professionals will need to develop skills that complementing AI, such as strategic thinking, creativity, and emotional intelligence.
- Ethical AI development: organizations must prioritize the development of ethical AI systems that promote fairness, transparency, and accountability

D. Suggestions

- * Stay updated on AI developments.
- * Ensure AI is fair, transparent, and unbiased.
- * Develop emotional intelligence
- * Train the HR staff to work with AI

VII. CONSLUSION

Based on my research I conclude that AI has benefits such as saving time and improving accuracy, it also has some drawbacks. For example, AI may replace some jobs, and can also make biased decisions if it is not programmed correctly. To get the most out of AI in HR, companies need to find a balance between using technology and keeping the human touch. This means using AI to help with tasks, but also making sure that employees are treated with respect and care. Overall, the use of AI in HR is going to continue to grow and change the way companies work.

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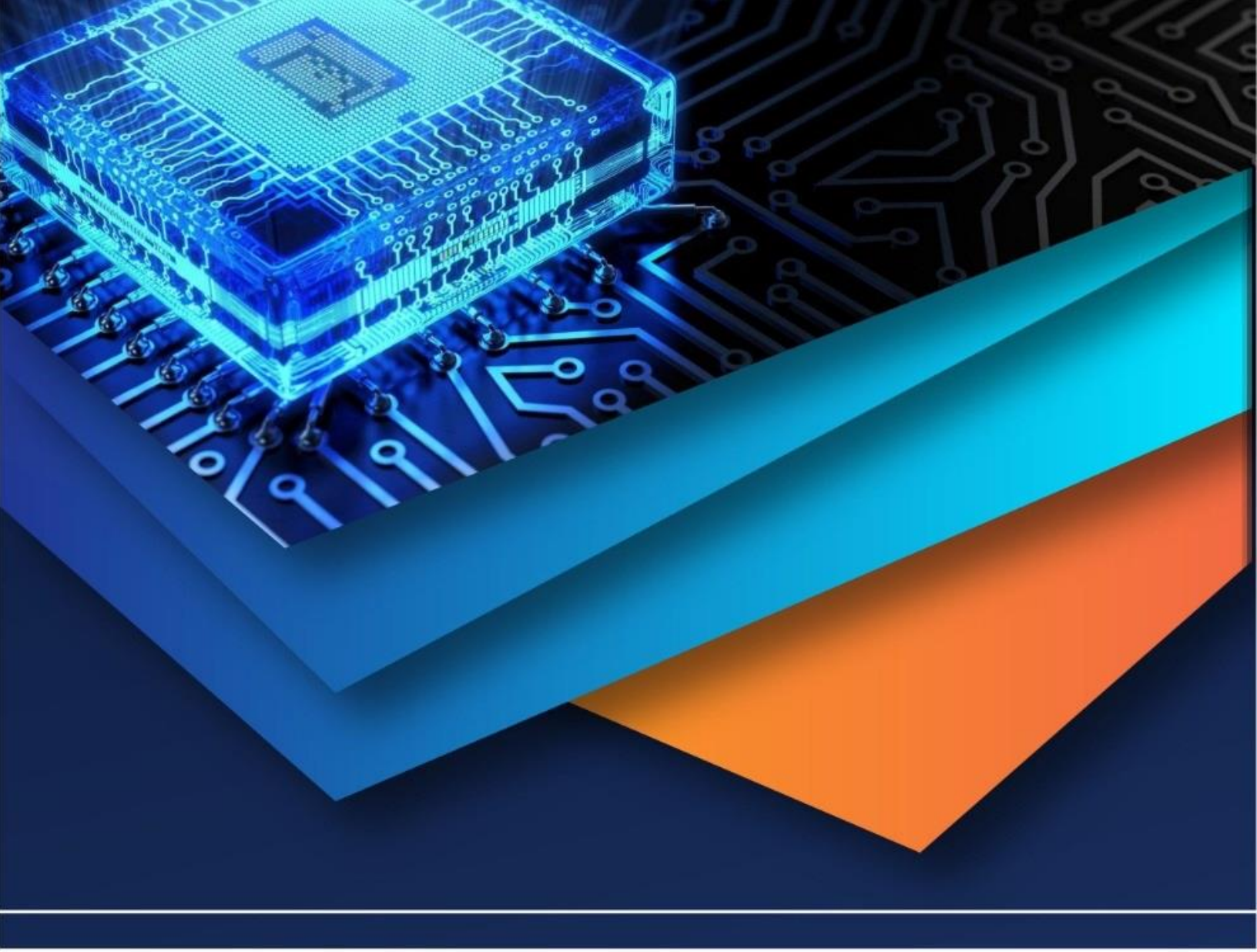
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