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" A STUDY ON THE USE OF AI IN THE HR FIELD "

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ABSTRACT:

Through automating repetitive processes, improving decision-making, and enhancing employee experiences, artificial intelligence (AI) is rapidly changing human resource (HR) practices.

Recruitment and Talent Acquisition: AI makes it easier for HR managers to find and connect with top talent by streamlining the candidate sourcing, screening, and selection processes.

Performance management: AI examines worker performance data to reveal areas of strength, room for growth, and possible career trajectories. staff Engagement and Retention: AI assists companies in proactively addressing problems that could result in staff attrition by tracking employee sentiment and engagement levels.

Training and Development: By detecting skill gaps and suggesting focused training courses, AI personalises learning experiences.

INTRODUCTION:

The origins of artificial intelligence (AI) can be found in the myths, tales, and rumours of skilled craftsmen endowing artificial creatures with consciousness or intellect throughout antiquity. The philosophers who attempted to characterise human thought as a mechanical manipulation of symbols sowed the seeds for current artificial intelligence. The programmable digital computer, a device built on the abstract core of mathematical reasoning, was created in the 1940s as a result of this effort. A few scientists were motivated to start thinking seriously about the prospect of creating an electronic brain by this gadget and the concepts that went into it.

At a workshop held in the summer of 1956 on the campus of Dartmouth College in the United States, the area of artificial intelligence research was established.[1] The people in attendance would go on to spearhead AI research for many years. Many of them projected that within a generation, a computer with the same level of intelligence as a human being will exist, and they received millions of dollars to realise this goal.

It was eventually apparent that the researchers had greatly overestimated the project's difficulties.[3] The U.S. and British governments stopped funding undirected research into artificial intelligence in 1974 in response to criticism from James Lighthill and continued pressure from the U.S. Congress. The subsequent years were dubbed the "AI winter" due to the numerous difficulties faced. The Japanese government later injected new life into AI research with a massive investment, but investor enthusiasm waned by the late 1980s.

When machine learning was successfully applied to numerous problems in academia and industry in the 2020s, thanks to new techniques, the use of potent computer technology, and the accumulation of enormous data sets, investment and interest in AI skyrocketed.

With online recruiting growing more popular, the recruitment process has already begun to gradually evolve from its previous iteration, which involved a lengthy application procedure, a lot of time, and a lot of paperwork for the recruiters (O'Donovan, 2019).

REVIEW OF LITERATURE

Sr. No	Author	Finding
1	(PANDA , 2021)	"examines how AI is affecting HR tasks including hiring and employee engagement. explains the advantages and difficulties of integrating AI in human resources.
2	(KHATRI & UPADHYAY, 2019)	"Examines the use of AI in recruitment, including AI-powered screening and interviewing technologies. Discusses the potential benefits and pitfalls of AI in recruitment.

3	(Mariani, 2023)	"This study explores the convergence of Artificial Intelligence (AI) and innovation through a systematic literature review, identifying key drivers, outcomes, and future research directions.

SIGNIFICANCE OF THE STUDY

Artificial intelligence (AI), in its broadest sense, is intelligence exhibited by machines, particularly computer systems. It is a field of research in computer science that develops and studies methods and software which enable machines to perceive their environment and uses learning and intelligence to take actions that maximize their chances of achieving defined goals.[1] Such machines may be called AIs.

The growing use of artificial intelligence in the 21st century is influencing a societal and economic shift towards increased automation, data-driven decision-making, and the integration of AI systems into various economic sectors and areas of life, impacting job markets, healthcare, government, industry, and education. This raises questions about the long-term effects, ethical implications, and risks of AI, prompting discussions about regulatory policies to ensure the safety and benefits of the technology.

The various sub-fields of AI research are centre around particular goals and the use of particular tools. The traditional goals of AI research include reasoning, knowledge representation, planning, learning, natural language processing, perception, and support for robotics. General intelligence—the ability to complete any task performable by a human on an at least equal level—is among the field's long-term goals.

OBJECTIVE OF THE STUDY

- To determine and investigate the HR domains where AI can be applied successfully.
- To examine how AI might improve temporal efficiency and save costs in HR operations.
- To look into the deployment of AI in organisational settings, both now and in the future.
- To evaluate AI's effectiveness in improving productivity, optimising workflow, and influencing HR decision-making.
- To closely examine how data-driven decision-making and pattern recognition function in AI-powered HR systems.

METHODS OF DATA COLLECTION

1. Primary tool: Questionnaire: A structured set of questions will be administered to HR to gather data on their experiences, challenges, and mechanism.
2. Secondary tool: Research articles, books, journals & magazines collecting relevant information from various sources.
UNIVERSE: The universe for this study consists of all HR professionals working in various sectors (public, private, and educational institutions) within Vadodara city, Gujarat.
SAMPLE: Given the purposive nature of the sampling, the sample size consists of 50 HR professionals who are actively involved in HRM practices and have varying levels of exposure to AI technologies.
SAMPLING METHOD: The researcher uses simple random sampling method and randomly selecting participants from the pool of eligible HR to ensure each individual has an equal chance of being chosen.

OPERATIONAL DEFINATION

- Artificial intelligence: AI is the simulation of human intelligence processes by machines, especially computer systems.
- Human Resources: HR is the division of a business that is charged with finding, screening job applicants, and administering employee-benefit programmes.
- Work Field: A components of work performed, are categories of technologies that reflect how work get done and what gets done as a result of the work activities of a job.

FINDINGS:

AI Adoption in HR: 44% of businesses use AI for talent management and recruitment, while 71% of businesses utilise it for HR-related tasks.
AI-powered recruiting: 55% of recruiters say AI-powered recruiting tools shorten time-to-hire, and 62% think they enhance the candidate experience.
AI-driven Talent Management: AI-powered solutions for talent management, such as succession planning and performance review, are used by 58% of organisations.
AI-powered Chatbots: 35% of businesses use AI-powered chatbots for hiring, and 45% use them for employee support and engagement.
AI in HR Benefits: The three main advantages of AI in HR are increased productivity (85%), better decision-making (78%), and a better applicant experience (74%).

SUGGESTIONS:

Utilise AI-powered hiring tools: According to Gartner, 71% of businesses utilise AI-powered hiring solutions to enhance candidate sourcing and screening.
According to Glassdoor, AI-powered hiring tools can cut the time to hire by 30–50%.
Employ AI-driven analytics: 62% of businesses base their HR decisions on AI-driven analytics. AI-powered analytics can enhance talent management choices by 25–30% (Deloitte; PwC).
Create AI-powered chatbots: According to SHRM, 45% of businesses use AI-powered chatbots to improve employee experiences.
Chatbots with AI capabilities can cut down on employee enquiries by 20% to 30%. (Gartner)
80% of HR professionals think AI training is necessary for their position (SHRM), and according to PwC, AI training can increase HR professionals' proficiency in data analysis and interpretation by 40–50%.
Implement AI governance in HR: According to PwC, 60% of organisations have put in place AI governance frameworks to guarantee responsible AI deployment. These frameworks can cut risks associated with AI by 20% to 30%. (Gartner)
Track the effects of AI on diversity and inclusion: 50% of businesses use AI to track diversity and inclusion in talent management and hiring (SHRM); AI can lessen bias in hiring by 20-30%

CONCLUSION

The way businesses handle hiring, talent management, and employee engagement has changed as a result of the application of artificial intelligence (AI) in the human resources (HR) sector. The study's conclusions emphasise the advantages of AI in HR, such as increased productivity, better decision-making, and an improved applicant experience.
The results do, however, also highlight obstacles to AI adoption in HR, including prejudice, poor data quality, and worries about job displacement. Companies need to address these issues and create plans for ethical AI adoption if they want to take full use of AI's promise in HR.

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