



Impact of Artificial Intelligence on HR practices in Service Sector in India

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Abstract:- This research helps to identify the impact of AI in HRM practices in service sector in India. Almost all companies use AI to increase efficiency of Human Resource in service sector. This begins with the automated process in recruitment till performance appraisal of employees. Artificial Intelligence (AI) is fast developing technology from across the world. The service sector is becoming one of the first adopters of Artificial Intelligence. Service sector is exploring and implementing technology in various ways. Artificial Intelligence is getting better and smarter day by day. Here we have discuss how Artificial Intelligence is used in the Indian service sector, what are the scope, what are the factor responsible for impacting effectiveness of AI and what are the Challenges facing India's Artificial Intelligence. Development that Artificial Intelligence offers to FinTech and the different ways in which it can improve the operations of an Indian service sector. There are various factors that have contributed to the growth of Artificial Intelligence. Though many researches have already been conducted in this area but they are not sufficient and there is still a gap on which we can pursue our research on.

KEYWORDS :- Artificial Intelligence, Human Resources Management, Service Sector, India

Introduction and Background:- AI defines the technology applied to perform a task that requires some intelligence level accomplish. Artificial Intelligence (AI) is fast developing technology from across the world. It refers to a trained technology to perform like human can perform.[1] Owing to limitless capacity and applications of AI, the HR functionalities in organisations and businesses have adopted AI in their process. Google, IBM, Amazon, Tesla, Apple etc. are using AI in their HR procedures and solving problems of employees related to HR innovatively.[2] "AI" conventionally refers to a broad class of technologies that allow a computer to perform tasks that normally require human cognition including decision-making. The effective application of AI to human resources problems presents very different challenges. They range from practical to conceptual, including the fact that the nature of data science analyses when applied to people has serious conflicts with criteria societies typically see as important for making consequential decisions about individuals. The first problem is complexity of HR outcomes, such as what constitutes being a "good employee". There are many dimensions to that construct and measuring it with precision for most jobs is quite difficult. Performance appraisal scores the most widely used metric, have been roundly criticized for problem of validity and reliability as well as for bias any many other employees giving them altogether. Role of robots have been replacing employees in production department. In third revolution began in the year of 1970s personal computers and the internet entered into working life and human labours were replaced by the machines. Nowadays AI has entered into the overall system of an organisation, one of the area is human resource department where the using AI system human replaced the human and all functions in human resource department is carried like candidate screening, recruitment, alignment of human resource activities and performance management, etc. [4]

Objectives :-

- (1) To identify and analyze the role of AI in HRM practices in service sector in India
- (2) To identify the factors responsible for impacting the effectiveness of AI in HRM practices in service sector in India.
- (3) To identify the challenges in adopting AI in HRM practices in service sector in India.
- (4) To overcome the challenges in adopting AI in HRM in sector in India.

Scope of the Study:-There are various ways by which AI can help in benefitting the HR practices:-

- AI will allow business to obtain or sustain competitive advantages.
- It will help in maximising the employees involvement at workplace.
- Decrease the burden on administrative staff in company.
- Free up workers to be more creative by automating tasks.
- It will help in talent acquisition & identify the right candidates for the job.
- Optimizing external processes like marketing & sales.
- AI helps to predict the rate of employee retention at workplace.
- Capture & apply scarce knowledge w There are various ways by which AI can help in benefitting the HR practices.
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- AI helps to predict the rate of employee retention at workplace.
- Capture & apply scarce knowledge where needed.
- It can overcome limitations of human & work accordingly. Create potential for new products in market.
- It can help enhancing the features, functions & performance of our products.
- It helps in optimizing internal business operations.
- Through AI companies can able to get accurate results.
- AI helps in accessing the new market & launch our products there.
- It will minimize the bias behavior in decision making.
- It helps in reducing head count through automation.
- It will maintain the workflow in various department.

- The chances of error will be less.

Literature Review: - According to new study , 38% organization are already using AI at workplace & 62% enterprises are expecting to start using AI very soon. Deloitte report shows 33% employees desire that their workplace will become integrated by AI in the coming future. If repetitive tasks can be assisted by digital system & automated software. It would make it easier for manpower to give more time to innovations & creativity.[6]

- Strategic HR planning through AI – Strategic planning is an essential pre-requisite in HRM. HR Manager will investigate & summarize the prior work & have specific prudence to the prospective development pattern of enterprise when planning strategically.[7]
- The service sector could experience a huge job loss with emergence of AI particularly in large size enterprises. Banking, financial services & insurance [BFSI], information Technology [IT], business process outsourcing [BPO], healthcare & retail which are embracing AI in a big way could experience these job losses in the coming years . The impact could be as much as 15-20% in next three years. When AI achieves critical mass and reaches reflection point & from there the annual growth rate could reach a higher level.[8]
- The Nation Moreover, AI can offer cognitive insights that enables decision making. This type of AI uses machine learning & algorithms for interpreting huge amount of data, exploring for hidden trends not previously discovered identified by firms. AI is embedded within organisations to forecast customers purchasing behaviour, develop customised advertisements & identify frauds. For instance, candidates used AI for targeting messages to diversified group of individuals to maximise the effect of each advertisement and reduced costs. Additionally, AI was used competently for accurately diagnosing cancer patients in a fraction of time. AI has also helped assess the link job characteristics to employee satisfaction.[10] NASA's Aeronautics & Space Administration [NASA], in support of HRM, revealed that use of AI improved HR procedures enabled them to complete most of the HR activities irrespective of human intervention. [9]
- The new built Human Resource Information System (HRIS) has established foundation of AI applications in the system. AI developed Human-Computer interaction function enhances management efficiency which helps to improve functional procedure for collecting, maintaining & validating data required by an organisation. The technological advancement in form of AI is replacing routine tasks with minimum interference of humans.[11]
- It has been observed that these machines work better than HR teams by reducing rate of attrition & also improving employee retention. It is seen that simple activities of HR is being successfully carried out by AI but it is also needed to check in complex situations are yet to see. There are many reasons for adopting AI as it gives huge benefits to organisation in less timeline & with more accuracy.[12]
- AI has been supporting in decision making, dealing with uncertainty and especially equivocality of decision making in the organisation. Still in an industry the role of human is essential and technologies have to depend on human when subconscious decisions are essential to evaluate and facilitate the outcomes of decisions.[13]
- AI can be via training in form of keynote speaker of enterprise training. Through AI, a respective person can explore different appropriate models for enterprise training via a large amount of information data but further can observe & balance the training situation of employees at any time in organisation training. [14]

Research Methodology:-

Study Design-

Owing to nature of this study, a mixed method study design was applied comprising of both qualitative & quantitative designs. The focus of quantitative study design was to investigate research objectives 1,2,3 & 4 respectively. On the other hand, the qualitative study design was focused on observations & insights associated to India natives about implementation of AI into recruitment. Moreover, qualitative exploration was based on employees' perspectives too.

This study with help of mixed method design identified critical aspects associated to AI & HR practices. Both designs allowed the researches in throwing light on existing issues of HR practices, so that a conclusive solution could be offered to the employees planning to integrate AI their HR practices.

Exploratory Research [Qualitative Research Design] could merely assess the research topic & doesn't offer a conclusive statement, which may not be much beneficial for this study. Therefore, explanatory research along with exploratory research was relevant since there is requirement of cause-and-effect process.

SAMPLE SELECTION / DATA SIZE –

Top 10 companies were chosen based on the basis of their work throughout the area of AI in HR practices. Companies/Participants were reached who are actively using AI software/techniques throughout their recruitment process or firms where developers of AI software for firms to integrate in their HR practice. For quantitative design, the data needed was collected using a survey.

DATA COLLECTION –

Qualitative – The data was collected by selected the type of companies using AI in their HR practices. Data Collection process ensured that the concepts from prior studies throughout the line of research covers and establishes what research can expand on.

Qualitative – This quantitative design used primary and secondary date to complement the finding & conclusion of this study. All factors were measured from perspective of HR experts working in HR domain via close ended questionnaire.

Role & Significance: -Now a days HR department heading towards the digital revolution & using various method to simply the resources by using big data analysis artificial intelligence and cloud computing. [17] Following are the role of artificial intelligence in Human Resource Management –

- (1) Recruitment - Only 45% of companies & industries are using AI. Organisations like SAT, Facebook, GE are using digital technologies in screening, interview and identify the new talent for the recruitment manager can examine the application & candidates can get quick response. Chat box '7system or automated answering machine plays essential role to solve the queries & problems regarding the process of recruitment in an organisation.
- (2) Reduce Discrimination – Now a days, AI is being used to reduce the favouritism & will help to increase the transparency at workplace. In such a way organisation is able to select the resume. AI applications can be used to analyse job descriptions
- (3) Increase Efficiency - AI will be helpful to reduce the redundancy of employees at workplace. Various robotics task has been carried out to increase the efficiency at workplace. Robotic task

includes collecting data, filing report, copying data, identifying required data from available data, processing, collecting data for HR & payroll systems etc.

Factors responsible for enhancing effectiveness of AI: -

The scale and the urge in attention to AI is not a new concept as the ideology behind the human-machine interaction collaboration has been floating around since the 1980s but various factors contributed to the idea being put on hold for a while especially the lack of attention and funding. Billions of dollars are being annually invested in the industry for its research & development. Few factors that have contributed to the growth of AI are: -

(1) Availability of enormous data: - The innovation of cloud storage has enabled easy access to otherwise locked data that was not made available to the public. Before cloud storage became mainstream, accessing data was a costing affair for data scientists for research, but now governments, research institutes, businesses are unlocking data that was once confined to tape cartridges and magnetic disks. To train machine learning models, data scientists need enough data for precise accuracy and efficiency.

(2) Advancement in Innovations: - The innovation of a new breed of processors like the Graphics Processing Unit (GPU) the training process of ML models is now up to speed. The GPU comes with thousands of cores to aid in AI.

(3) Competition drives Efficiency and Interest: - With machine learning and deep learning, AI applications can source for data and analyse new information that can be of advantage to organisations and industries alike.

(4) Advancement in Deep Learning: - Deep learning is a type of AI course that allows systems to learn patterns from data and subsequently improve their experience. Deep learning and artificial neural networks are the most essential part of AI growth.[20]

Conclusion: - In several HR functions, AI has its presence and meaning. This states an AI system that lies within the umbrella of HR activities. Many organisations have used artificial intelligence and computer language in the area of automation, software engineering and human capital department in which AI plays an integral role in hiring, choosing, recruiting, monitoring results, gathering employee data, providing real-time information and providing reliable information. Artificial Intelligence is just beginning its lifelong journey in the field of technology. It is slowly beginning to take over in almost every aspect including transportation, healthcare, education, media and customer service. Many tend to worry about how AI will affect what it means to be a human, to be productive and to exercise free will.

While general purpose AI is still a long shot in any domain of human activity, the speed of progress towards specialised AI systems in health care, automobile industry, social media, advertising & marketing is considerable. For less progress has been made in issues around the management of employees even on the first step of AI path, which is decision guided by algorithms. Mostly four reasons are there – complexity of HR phenomena, data challenges from HR operations, fairness & legal constraints, and employees' reactions to AI management.

AI has its presence in recruitment & predictive analysis. AI is observed replacing routine tasks in recruitment with least interference by humans. AI is seen facilitating in recruitment process by conducting CV screening, sending automated messages & helping reference checks. Above all machines are observed to perform better than HR team by reducing the attrition rate & improving talent retention. AI is seen successfully carrying out simple activities of HR but how far it can take up complex issues of HR is yet to see. It can be concluded that removal of routine tasks & speeded quality are the main benefits brought by AI. Similarly, lack of training & technological reading are the main challenges. Due to AI,

certain limitations make it less implementable in overall recruitment process & can make questionable outcomes with respect to its validity. AI is assumed to replace administrative tasks in both the recruitment process & HRM in recruitment activities which will intervene job applicable factor and the recruitment outcomes. AI will extend on the conventional recruitment process & be competent for offering a more extensive options for both the applicants and company.

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