ARTIFICIAL INTELLIGENCE IN HUMAN RESOURCES

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Abstract:

Zero's and one's are ruling the entire world. Artificial Intelligence is the most viable technology in the world. Using Artificial Intelligence technology with in the business houses has been changed the way of doing business. This paper presents the position of Recruitment and Selection in Human Resources by incorporating Artificial Technology in Human Resource Management. This Paper identify "who are hiring human using AI HR" and types of Artificial Technology developed till today in H.R.?

To identify and answer the above queries a questionnaire is designed for both Human Recruiters and the employees. A set of literature related to Artificial Intelligence models is been reviewed to know the existence of AI HR and its usage. We all know that talent acquisition is a time consuming repetitive task consisting sourcing and screening applicants. AI provides the best solution for recruiters to optimize talent acquisition. AI used to improve the quality of hiring process and neutralise human biases. AI will be used greater in size to give effective result. The routine administrative jobs will be replaced soon by Smart AI technologies and will soon disappear. This paper also identifies the root cause for Industrial Revolution 4.0, the Era of iSmart(Industry smart).

This paper also tries to define what is digital data? What are the technologies that are available in digital data? How artificial intelligence is being designed for human Resource Management? And does AI HR effect recruitment process with its AI recruiter?

Keywords:AIHR, Artificial Intelligence, AI Recruiter, Industrial Revolution 4.0, digital data, IoT, cloud computing, machine learning, AI retention, chat bots.

Introduction:

One's and Zero's have became a part in human life. Definitely one's and zero's have occupied a special place in human life. As we all are aware that getting things done through the people is Management. But soon this scenario will alter and replace it with getting things done by the men and machine is management. Technology, day by day is getting advanced. We can observe a great change in technology from the year onwards. Many researchers have identified and warned us , in future business will be dominated by machine. New technology will revamp the labour markets. As a cause that globalisation is also one of the major reasons for the unavailability of Human Resources. People are earning more by crossing their borders, As in this situation companies are trying to adhoc technology that replaces human being.

Many of the jobs will not be appear in upcoming days and new way of doing jobs will create other jobs to cope up with the future requirement. Digits or the machines will definitely

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replace sundry jobs and Innumerable personnel will leave their current positions. It has been observed that with the entry of AI in business sectors there is amount of improvement in the internal and external factors of the organisation. However this paper will concentrate on few companies irrespective of sector they belongs to and identify the way of recruitment and selection is taking place in the companies and also identify who are the companies using AI in Recruitment and Selection.

Digital Data:

What is digital Data?

The information which is usually available in paper is converted into binary numeric form are known as digital data.

Do, organisations are using digital data?

Of course, organisations are using Digital Data which makes the process of collecting, analysing, managing and manipulating information for a business.

Digital data when converted from analog will be easy to share among diversified audience including both men and machine. Digital data holds the above technologies

1. Internet of Things(IoT).
2. Artificial Intelligence(AI).
3. Machine Learning
4. Virtual Reality
5. Cloud computing

These technologies enable automation of systems and equipment to help businesses in decision making and to perform repeated tasks without human intervention.

In this context let us have a look over Industrial Revolution.

Industrial Revolution 1.0, around in the 1760 & 1840 was transition to new manufacturing process using water and steam which made machine more feasible and manufacturing a larger number of goods in turn created a better standard of living. Here in industrial Revolution 1.0 the machines run by fuels like steam and coal made faster and easier production.

Industrial Revolution also termed as "The Technological Revolution" occurred in Britain, America and German. During this period, electrical technology is allowed and replaced steam and coal. In this a greater production is achieved by more sophisticated machines.

Industrial Revolution 3.0, this began with the First Computer era and laid foundation for the world with computer technology. In 1970's, the Industrial Revolution 3.0 used Electronics and IT to automate the production.

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Era of iSmart

Industrial Revolution 4.0 can be termed as iSmart. i.e, Industry became smart, by smart machines, storage systems and production facilities, without human interventions perform & exchange information this is achieved by Industry Internet of Things(IIOT).

Key elements in Industrial Revolution 4.0 are Cyber, IoT, Cloud Computing, cognitive. So, digitisation and automation provides foundation for Industrial Revolution 5.0. Where in Industrial Revolution 5.0 automate the manufacturing and administrative processes better means you will have real time data coming in from the field.

What is Artificial Intelligence ?

Artificial Intelligence is a branch of computer science concerned with building smart machines capable of performing tasks that typically require human intelligence.

AI is a technology in computer science used in making a machine to think and behave like human being with minimal human intervention. AI uses Natural Language process to transfer the knowledge to the machine.

Examples of AI in our day to day life:

A machine which can do things as human being is said to be using AI technology. While we are working with a word processing software we come across spelling and grammar option which makes you aware of spelling grammar correction in your document. MYCIN is another Expert system used to diagnose bacteria causing severe infection such as bacteremia and meningitis. AI assists in every area of our day to day activities like: reads our emails, social media, web searching, getting driving directions, self driving and parking vehicles, digital assistants, smart replies in emails.

Artificial Intelligence used in different areas

Digital Teacher: It would be new for those who are in post covid 19. After the entry of COVID-19, the scenario in teaching is totally occupied by Digital teacher. By supporting teacher cant be replaced by machine, in India, parents are worried about their children education. Whether to send their children to schools and colleges. Here parents have a two sided coin, one side says about the problems to be faced when they send their children to school or college.

Second is, if they are not willing to take risk means what about their education. Here come online classes. Merely, online classes will not support their children education. Because, of technical aspects like low signal strength, availability of teacher to interact online can't clarify the doubts raised by students. Here comes "digital Teacher", an expert system one who not only teaches the student and also clarifies their doubts.

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Robo car: self driving cars would replace human drivers by the year 2030. The all-electric Tesla brand with its auto pilot feature allow you to sit back and drives it self. Volvo 360c is based fully autonomous electric car without a human driver. AI technology will help in preventing accidents.

Lawyers : According to "Mckinsey Global Institute", 23% of the jobs can be eliminated in future. AI is the technology not only meant for robotics, it is the technology by which legal support to the clients can be available to the clients by the year 2036. **[Mckinsey Global Institute]**

Robotic technology in Health car: People are just started experiencing robotic technology in health care. Robotic technology has been used to disinfect the rooms, operating suites in the hospitals and also participating in surgeries too. Like., daVinci System, MAICO. Davinci system is a surgical robot used in urological, bariatric and gynaecological surgical procedures. MAICO is known for orthopaedic surgery used in knee replacement.

Replacement of regular blue collar and white collar jobs: most of the studies reveals that by mid 2030's, blue collar jobs like manufacturing, mining, farming, driving, plant operations and white collar jobs like accountant, customer support, human resource manager, architects, medical professional will be replaced by Artificial Technology.

What has changed HR in past decade?

In the past decade, it has been observed that HR is Replaced with AI HR.

Less Human Intervening: A very less human intervening is observed in the past decade in HR. The involvement of human being in maintaining Human Resources is reduced from regular administrative task to the decision making areas.

High Human Intervening: A very high human intervening is observed in the past decade in HR. The involvement of machine in maintaining Human Resources is increased to a great extent from regular administrative task to the decision making areas.

Where Artificial Intelligence is used in HR

AI is being used in HR to automate repetitive, low value tasks thus increasing the focus on more strategic work. AI tools automate common HR tasks .

AI RECRUITERS: Companies are implementing AI recruiters to automate scheduling interviews, handling resumes, listing candidates, Provide ongoing feedback to candidates and Answer to candidates in real time.

AI RETENTION: Companies are using AI platforms to single out employees that may be head for exit door. These platforms track Employees activity, Emails, Key strokes, browsing. AI analyses the data to detect changes in the employee communication.

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Chat bots: A chat bot is a software application used to conduct an automated on-line chat conversation via text or text to speech, in lieu of providing direct contact with a live human agent. Chat bots are useful in collecting applicant information in Recruitment and Selection process.

Training and development: AI in training and development became more effective. AI technology in training and Development programmes uses AI based algorithms that monitors and studies attitudes, behaviour and skills of the employees. With the help of AI people with different attitudes, behaviour and skills have their own style of learning will be able to learn. AI customises the training programs to train the trainees and provides feedback to them. AI helps the entire organisation say employee and the employer to know the gaps in their skills, abilities, performance, knowledge etc., AI technology helps them to improve and give their best.

Performance management: Human biases plays major role in performance appraisal. Because, most of the managers shows bias in conducting appraisals with high error rate. Integration AI technology in performance appraisal will improves the employees performances. Because, a machine can't show any difference, do not have egos, selfishness in appraising the people.

Talent Management: Talent management means planning according to the needs. Green house software is using AI tool, Which helps to analyse the skills, abilities and knowledge of the candidates to select the best candidate for the job.

Does Ai Recruiter shows any impact on the recruitment process:

Ofcourse, with the entry of AI recruiter the information will available in the form of digital data. By which AI recruiter can easily analyses the data of the applicant.

The first step in recruitment process is to identify the vacancies, it will be very easy to identify the job positions that are vacant in exact number and location with the help of Digital data. AI recruiter itself decides how to advertise the vacant positions to the world and uses social media, online job boards. Searching for the candidate is the most important task in recruitment process. AI technology uses the available sources to search for the best. It also uses recruiting data base to source the candidates. It is easy to refer the referrals with the help of AI recruiter. AI recruiter uses telephonic and chat bot technology in screening the applicants. AI technologies use chat bot technology to gather information about the behaviour of the applicant. It creates a candidate score card to rank candidates and keep track of their responses. Recruitment, short listing, conducting face to face interviews also being carried down with the help of AI technologies. Again use of interview score card to rank candidates and compare them later. Rank candidates on things like experience, education and skills will be made easier with the help of AI recruiting technology.

Who are using AI HR?

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⇒ Amazon is one of the organizations that are using Artificial Intelligence for HRM.

⇒ Trabaajo, founded by Sunaina Agarwal and Arun Kumar, the company offers real time video interviews.

⇒ iXceed solutions uses AI based recruitment solutions

⇒ Edge Networks uses auto screen, auto engage the best candidates for the role.

⇒ Drawinbox is a cloud based HR solutions uses ranking metric in recruitment.

And few more companies are using AI HR in their companies.

Conclusion:

AI plays an important role in human resource management. It mainly helps in man power planning to production management. By using AI manpower planning is very easy. In HR activities Recruitment takes more time. In traditional way of recruiting HR manager spends more time. But AI technology reduces the time in recruitment and also the decision taken by the AI Recruiter is better than the Human recruiter. Decisions taken by AI will be superior to the decisions taken by manually.

We can observe a greater impact of Artificial Intelligence used in Human Resource Management. By agreeing the fact that AI applicants may not posses cognitive and emotional abilities but, apart from that AI based HR applications analyse, predict, diagnose the HR activities. There will be a huge job losses with the entry of AI based Technology in HR. It is true that major repetitive tasks that are performed in a typical organisation will be performed by AI. Jobs like Administrative, Recruiter, Trainer, performance appraiser and many other jobs will be occupied by AI. Most of the regular jobs will soon disappear. And finally based on our study most of the organisations are successfully integrating Artificial Intelligence in Human Resource Management.

In future will may evidence the presence of AI everywhere right from recruitment, selection, performance analysis, retention, training. till today majority companies are not yet using AI with its HR practices. The reason behind the back step of companies those who are not integrating AI with its HR practices is its cost. AI enhances the lives and creates the better future. AI laid foundation for Industrial Revolution 4.0 and the newer technologies are the base for Industrial Revolution5.0. Man invented machine for the better and efficient way doing things. Machine in turn started creating men. Now we are evidencing "Machines are recruiting men". Amazon is one of the companies using AI HR technology in recruiting human. And some other startup companies are also using AI based tools in Recruitment.

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