

Importance of Artificial Intelligence in Human Resource Management

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Abstract:

The purpose of HRM is managing the human resources effectively. HR plays crucial responsibility in employing the eligible candidates at right time and at right place within the Organization. It focuses on policies and on systems which are designed to enhance employee job performance. In the age of digitalization, Artificial Intelligence is redesigning the functions of HR. Artificial intelligence is intelligence demonstrated by machines, in contrast to the natural intelligence displayed by humans and other animals. Nothing can beat the human brain in the case of problem-solving. The purpose of this article is to review the existence literature on importance of Artificial intelligence in Human Resource Management.

Keywords: Human resources, artificial intelligence, Artificial Stupidity

I. INTRODUCTION

From the early 20th century, Artificial Intelligence has been of interest to scientists, when the first generation of computers was designed. Professor John McCarthy, who was the professor in Mathematics at the Dartmouth College in 1955 coined the term Artificial Intelligence. In the beginning of 21st century, we spoke about how Artificial Intelligence will soon replace low level workers and occupy that space, leaving a susceptible job market. As that guess was true, AI even occupies legal jobs, managerial jobs, and reporting jobs etc.,

As Companies all over the world are taking up new technology to improve the work atmosphere, automation in HR is also more common. When the AI was first started, the HR Departments feared

To big loss in jobs. But the organizations have opened up to it. Technologies reduced the labor of HR Professional and give them time to focus on other goals. According to Artificial Intelligence Market Forecasts by Tractia, the revenue generation by using AI will reach 36.8 Billion Dollars by 2025.

Fifty six percent of the TA leaders approved that their processes will be speed up by AI automation tools, Babu

Mittal, Head HR at Shopclues supported AI in HR as the 60% of the time that was spent on managing and organizing can now be invested in strategizing. Currently AI has already taken its place in most of the industries, majorly automobiles, boilers, steering, airplanes and others. As far as the mobile industry is concerned we understand that the AI in the form of Siri, Google assistant have become an indispensable component in our lives.

They have helped us to get easy access to our application without actually giving manual commands over the phone.

II. ARTIFICIAL INTELLIGENCE

AI is the imitation of human intelligence by machines, especially computer systems. In simplest terms, AI is the capability of a computer program or a machine to think, learn and act like humans.

Now a day's most of the jobs are related with paper work, accounting etc., so it is useful to get support from digital assistants to spend more time in thinking ideas. While Some experts are expecting that it is a threat for workers others take it as an advancement in the digitalization.

These AI or other Changes in Technology may affect the Employment. But mass unemployment not expected. But

somewhat bigger unemployment expected. This is the well known reason that if automation in business increases automatically the requirement of workers will be reduced. It has been estimated that 5 million jobs would be replaced by AI but the real fact is that some competencies like judgment skills, human relations, feelings and emotions which cannot be imitated by AI.

III. REVIEW OF LITERATURE

Autor, Levy and Murnane (2003) opined that automation replaces the routine tasks of workers, whether manual or cognitive, but non-routine tasks of workers cannot be replaced.

Goos and Manning (2007) strongly said that automation increases the demand for well-paid skilled jobs which requires non-routine cognitive skills and also for low-paid, least-skilled jobs, which requires non-routine manual skills.

S. No	Conference/ Association /Survey	Discussion /Found	Year	Country
1	HR Technology Conference And Expo	Several Companies Touted The Integration Of Artificial Intelligence (Aid) Into Their Recruiting Products	2017	Las Vegas
2	HR Technology Conference And Expo	Explored Aid In The Hr Landscape Through Multiple Sessions, Focusing On Its Role In Hiring, Eliminating Bias Etc,	Sep, 2017	Las Vegas
3	SHRM HR Tech Conference	Key Sessions On How Aid Is Going To Be A Driving Force In Hr Functions.	2018 - April	Hyderabad

4	A Survey In Collaboration With Society For Human Resource Management (Shrm)	Found That 94% Of Respondents (Hiring Managers From Across The World) Believed That 'Dark Traits' Need To Be Identified At Work Places To Avoid Distressing Incidents.	2018 - April	
5	SHRM HR Tech Conference	Sessions On How To Use Aid To Better Understand Employees.	2018 - June	Chicago
6	Toronto-Based Regulatory Body Human Resources Professional Association (Hrpa)	The Report Found That Hrpa Members Across The World Believe That Aid Is A Useful Tool For Human Resources And Around 14% Are Already Using It In Some Form To Assist With Hr Decisions In Their Organizations.	2017	
7	Deloitte's Fifth Annual Global Human Resource Trends Report	Report Released That 33% Of Surveyed Hr Teams Globally Are Using Some Form Of Aid Technology To Deliver Hr Solutions	2018	

Expert's opinions on Artificial Intelligence

S. No	Experts	Opinions
1	Parthasarathy NS, Executive vice chairman and COO, Mindtree.	"AID plays important role in our selection process. It is not about processing large data, but also about finding correct resumes, eliminating bias and discovering fraudulent resumes"
2	Ekkehard Ernst, chief of macro-economic policies and job unit at the UN International Labour Organization (ILO).	"It is not so much about losing jobs but about how jobs are being transformed and employees in these sectors will add new tasks to their profile while being supported by computer and robots in others,"
3	Ekkehard Ernst, chief of macro-economic policies and job unit at the UN International Labor Organization (ILO).	The type of tasks that are being replaced by AI algorithms are routine, repetitive tasks that take a lot of time and can be more easily and more effectively performed by machines and by robots – leaving people to focus on interpersonal, social, emotional skills.
4	Bansal of People Strong	Getting rid of human bias from the equation, however, is of utmost importance. Even the most rational HR professionals can have certain inherent biases that might reflect in their work. And it's these

		biases and stereotypes in recruitment choices that lead to loss of potential talent or hiring of unfit ones. Bansal, argues that it's better to use psychometric assessment through AID for military recruitment as well.
5	Ajay Sharma, a Veteran HR professional and founder of Delhi-based Get me Experts, a company that provides consultants for different industries on an on-demand basis.	'AID can play important role in talent acquisition, performance management, attrition prediction, identification of unlawful and unethical behavior of employees and in their training and development',
6	Hari Krishna, CEO and co-founder, Param.aid, a Hyderabad-based hiring startup.	AID covers all these aspects like "Right from sourcing resumes, screening, scheduling meetings and interviews to candidate engagement, employee development and employment services, AID covers all these aspects. Automation and AID covers also free up users' time, which can be channelized for more critical tasks,"
7	ArjunPratap, founder and CEO, EDGE Networks, a Bengaluru-based AID-driven HR	Firms are looking at replacing manpower with AID for tasks that are redundant and repetitive. They are looking at

	Tech Solutions Provider	creating jobs, where people will have to put their cognitive thinking and decision making skills to use. This will be the advantage to the HR managers which helps them to shift their focus from tactical work to strategic work.
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IV. ROLE OF ARTIFICIAL INTELLIGENCE IN HR

Over the years, artificial intelligence has gradually trickled into the areas which once were driven by humans only. One of the such area in an organizational set up is the Human Resources department.

In HR department AI can effectively be used to hasten and support human effort. Starting from acquiring the applications to short listing resumes without bias, to improve employee commitment and answering real-time question, AI has the potential to modernize human resources and its management. Artificial intelligence has the capacity to take HR experience to the higher level.

It also plays a vital role in doing the HR activities faster than ever before.

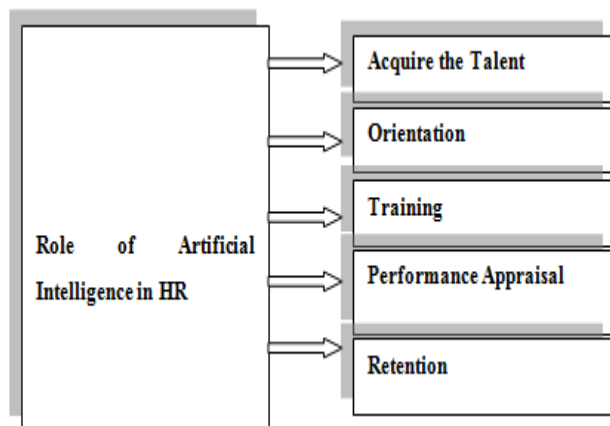


Fig.1. Role of Artificial Intelligence in HR

Acquire the Talent

AI enables the HR department in acquiring the talents and also helps to invite applications and to select the correct fit candidates within seconds and also provides feedback to the candidates about their performance in each level.

Some of the talent acquisition technologies used in the organizations are Symphony Talent, Pomato, Piazza careers, Textio, Relode and many more. This software technology helps in scanning, reading, and analyzing applicants and rapidly reduces 75% of them from the recruiting process. This is an important benefit to the recruiter as it allows to spend more time in evaluating only a smaller group of eligible candidates.

In such situations, HR units radically increase the hiring decisions quality. Additionally, companies save a lot of money by eliminating the cost on poor hiring decisions.

Orientation:

Selecting the suitable talents is not only enough but also their adjustment to the organization’s environment is vital. Hence it needs proper induction program.

By that newly joined employees needs a lot of attention and the employees don’t have sufficient time to dedicate on each one of them. Hence the Artificial intelligence steps in it and ascertains customized induction procedures for every new employee. This makes the employees to aware about the company and their expectations in achieving the organizational objectives and it also helps in retaining the employees as compared to previous employees.

Training:

In the training programme, identifying the training needs is the crucial task for HR managers.

Once training needs are identified, according to that artificial intelligence which can successfully plan, organize, and coordinate training programs for all staff members.

Performance Appraisal:

Performance analysis evaluates the performance level of the employees. By using artificial intelligence tools, HR managers

are enabled to set concrete objectives and let all units work in smaller increments. This type of work is easier to follow and assess and it creates better overall outcomes. It not only improves productivity and also detects team members who show lack of engagement continuously.

Retention:

Retention of employees is one of the biggest problems to the organizations. To remain the employees within the organization for maximum period of time, it is necessary to satisfy their requirements. So artificial intelligence has the ability to analyze and predict the requirements of staff members. It can also determine individual affinities and reveal who should get a raise or who might be dissatisfied with the work-life balance. Such analysis provides room to HR professionals to be proactive and solve the problem even before it actually arise.

V. SOME EXAMPLES OF AI IN BUSINESS ORGANIZATIONS

- Wade and Wendy, a chatbot service, brings AI and chatbots to recruitment and career planning. Wade helps employees with their career strategies and shows them career opportunities in the company. Wendy talks with candidates and helps them understand the company's culture, job opportunities, and hiring process.
- Firstjob's chatbot Mya can eliminate up to 75% of the questions people have during the recruiting process.
- Switch, a new app for recruiting, helps candidates find jobs by giving them a Tinder-like experience for job search and recruitment.
- Software vendor Unitive uses AI to write job descriptions based on actual discussions about the job, and can algorithmically identify gender, race, or

generational bias to reduce unconscious bias in recruiting.

- Another example is Success Factors, which now provides similar tools in its enterprise talent management application.

VI. BENEFITS OF AI IMPLEMENTATION IN HR

- **More learning:** AI gives high access to employees to enhance knowledge and individual learning; the eradication of language barriers between humans; and the removal of meaningless and repetitive work which reduces humans to the status of, well, robots. Making our life easier:
 - **Making our life easier:** Artificial intelligence has made our life easier by reducing the manual labor induced in that job. Whether is calculating, ticket booking, and searching stuff online.
 - **User friendly:** It uses basic directions to do complex task, and helps even differently abled to use it. Even if someone not used to typing he may use the AI to make the work done, until he learns to use to a smartphone.
 - **Will require less labour force:** AI will capable to carryout works requiring minimal logic in much faster and economical manner.
 - **Remains Unbiased:** AI and ML algorithm conducts periodic and unbiased performance appraisals.
 - **Superior Prediction Models:** AI and ML are able to forecast the return on investment, the level of workers commitment and the probability of completing the projects and predicting contingencies.

VII. DRAWBACKS

- **AI is necessarily dehumanizing:** In the present changing scenarios, AI can be misused by some to control others, whether by surveillance, robotic policing, automated "justice", or an AI-supported command-and-control economy. These can certainly

be possible in future, but not vast majority of people would support it.

- **AI will necessarily increase inequality:** As it happened in case of industrial revolution, it is certainly possible that increased AI-based automation of work will concentrate income and wealth in the hands of fewer and fewer people. We do, however, have a choice about how AI is used.
- **AI will reduce jobs available for humans:** We humans are lazy people, we want our work to be reduced to minimum. So when AI technology is making our job so easy, to get connected, talk setting up reminders or etc. we will trade human labour with machine as machine dont get tired and deliver desired results always.
- **AI cannot handle the sensitive issues:** AI cannot handle the sensitive issues/ problems at work place like humans
- **Artificial stupidity:** Intelligence gains through learning, whether it is people or machine. Systems are trained to identify the correct methods and perform as per that input. Security: the damage can be occurred if AI is not used properly.
- **Artificial stupidity:** Intelligence comes from learning, whether you're human or machine. Systems usually have a training phase in which they "learn" to detect the right patterns and act according to their input.
- **Security:** the damage can be occurred if AI is not used properly.

VIII. FUTURE APPLICATIONS OF AI IN HR

The effort is put in the direction of following future applications to HR that comprises the further advances in AI applications in HR such as the behavioral tracking, etc.

- Limiting the number of interviews required for an applicant (more than four didn't lead to higher quality) to make it more economic and efficient process.

- Revealing optimal organizational size and department size (to ensure optimal operational expenses as required).
- Better managing of leaves (Google saw a 50 percent decrease in defections). This ensures the minimal work output at every day basis.
- Create placement plan for an employee's first four days of work, with increased productivity levels of up to 15 percent.
- Post hiring monitoring.
- Employees' behavioral tracking and making appropriate recommendations for the sake of performance improvement, etc.

CONCLUSION

HR plays a vital role to help the organization to makeover to digital enterprise. In future the humans and machines as a group to find solutions to organizational problems. AI is observed replacing routine tasks in recruitment with least interference by humans. AI is seen successful carrying out simple activities of HR. Despite all the capabilities of this new tech, companies will still need humans in the human resource process. AI assists in all the activities with human touch.

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