



Study of Artificial Intelligence in Human Resource Management

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Abstract: Today, Human Resource Management, in any organization, requires a strong backing from various computing systems for data processing, analysis and decision making so that it can function smoothly. This paper elaborates on how Artificial Intelligence, when applied into H.R.M. paves ways into a number of processes like recruitment and selection of apt candidates. The paper also incorporates the role of A.I. in context of data collection and data processing in growth and retention of people in an organization. It encompasses the levels at which A.I. can be helpful in collecting data to enable calculations and interpretations for appraisals and competency mapping of employees, storing and record keeping as well. The paper also puts light on the limitations of A.I. considering that A.I. can't match up with the nuances and instincts of a human brain and also on the scope of A.I. in revolutions to be brought in H.R.M.

Keywords: *Artificial Intelligence, Human Resource Management, Competency Management, Efficiency and Effectiveness, Scope and Limitations of A.I. in Human Resource Management*

I. INTRODUCTION

Solitary area of a business that is often late and considered slow to the game of changes is human resources. The HR department is generally targeted of budget cuts or, many a times, lack of investment in software, so the department is left behind to manage most of the work using the already existing methods which tend to make physical as well as mental efforts to be put up more by the human resource management team. Artificial Intelligence involves the process of developing computer systems in such a way that they are capacitated with performing tasks that human intelligence performs. Artificial Intelligence technologies embedded in human capital solutions can provide companies with astounding access to real-time individual capital information that will allow a line leader, a manager or a CEO to make mission-critical people decisions, in a far less time rather than days or months altogether down

the line while they are accessible with out of date human capital information.

Artificial Intelligence is slowly invading the field of HR. In the present VUCA (*Volatility, uncertainty, complexity and ambiguity*) scenario, even a little careless attitude or not being cautious enough possibly will lead an organization towards bereavement and decline. The competition may possibly be in the form of products, services, resources or know-how. As a consequence, although companies pay good attention towards enhancing their products and services, they must not overlook the human resources which form the backbone of the organization.

II. ROLE OF ARTIFICIAL INTELLIGENCE IN HR

The competency management data in an organisation require continuous analysis, interpretation and preparation of data base at various levels of an organisation and their application in different decision-making systems. The need for interaction of individual competencies creates the opportunity for application of Artificial Intelligence in general and expert systems in particular. The development of proficient system utilizes various knowledge Engineering methods to represent and infer knowledge; software engineering techniques to manage the system developments, information and control flows of model and data; intelligent systems technology to process and display data.

III. ARTIFICIAL INTELLIGENCE AND RECRUITING

There are a lot of innovative trends in human resource in the region of data: Big Data, Social Data and Data Analytics. But the one direction in which human resource is drifting towards is use of Artificial Intelligence for human resource management. In brief, here are five key ways that Artificial Intelligence can be used to get better process of recruiting: discovering the correct talent quickly.

1. **Going Beyond Key Words:** Most search and innovative solutions are capable of only finding

candidates that deploy the same words one uses when one writes his or her job description. If someone applying for a job articulates Marketing Manager, you can search out people using the same term. But you might miss the perfect candidate who happens to have the precise skills but a job title which is not similar to the searched term and or may have a slightly unconventional or non-traditional career path. Artificial Intelligence operates data clustering techniques to generate a job clusters so such different and alternate skills and titles can be identified.

2. **Fast and Accurate:** It is very common to spend hours on community and professional media sites to try and find that perfect candidate. Artificial Intelligence based search can look from beginning to end with the same data in seconds using refined searching and matching that helps you narrow in on what you are looking for.
3. **Perfect for the New World of Social Recruiting:** Data in the social "ether" is sprouting and turning more and more relevant to organisational decision making. But not all the data follows the traditional ways of recruiting. People reveal their skills and experiences in different ways, their job titles are distinctive and so it makes it harder to find people. A.I. based data matching has no difficulty or issues with these anomalies. Chief Idea Officer, no problem, Chief Moral Officer, no problem, Beer Ranger, AI loves that title too.
4. **Customizes to your Needs:** Not everybody who says they want a project manager or a sales lead or a client support specialist means the identical things. At times you can see that clearly in the job description, other times, we do not. By means of artificial intelligence based matching, you can work with predicted outcomes to customize the kinds of individuals and skills you are in actuality looking for. These in return will allow you to create a modified profile for a particular job that is matched to your needs.
5. **Gets Smarter:** The most important facet of Artificial Intelligence have been termed to get smarter with the use. AI adjusts to patterns and recognizes them. So if one is to hire sales people with a definite background and knowledge level, every time you give affirmation to or dismiss a match the system finds for you, it begins to recognize that blueprint and adjusts the types of recommendations it forwards to you.

IV. THE ROLE OF A.I IN PEOPLE MANAGEMENT

When it comes to people operation and strategic decision about organizational effectiveness for example how to attract, retain, grow, and motivate people, data analysis do not come into play. Companies generally do not use data to address critical questions about team effectiveness and improve effectiveness of managers. Human resource leaders are now beginning to recognise that data-driven insight can have a major impact in risk reduction and success in decision making around talent management and organizational performance.

V. HOW IT WORKS: PREDICTIVE MEETS PRESCRIPTIVE

AI is designed to parse analysis, and transform data into humanized formats that are easy understand and act upon. With an influx of data in HR phase, AI has the capacity to provide a wealth of insight in areas including talent assessment, employee engagement, manager effectiveness and tem productivity – insight that might go undiscovered, which helps the HR Teams better understanding and predict workforce trend and problem area. Importantly it can help solve the major problem solved by the HR's i.e. building and executing plans for improvement.

Gathering of data together with employee engagement levels, information on performance and feedback on intuition or perception on why people leave, A.I. can provide company- and team specific prediction instantly. The prediction includes the employees that can be most successful, the population that are most at risk turnover or performance issues.

AI systems instantly identify patterns and make connection that would be difficult and time-consuming for individuals to uncover. This predictive intelligence allows HR team to become more proactive and more proactive and more strategic with their planning and program. AI eliminates much of the manual analysis and challenging planning associated with creating people programs and allowing us to have recommendations based on data rather than gut feelings. AI is poised to help HR teams and managers make better less biased decision and help make more impactful decision.

VI. ARTIFICIAL INTELLIGENCE – THE NEW BRAIN OF RECRUITING AND SELECTION

At the present time organizations are trying to do their part in being more economical in today's workforce Instead of hiring more employees' to tackle a job they distribute that job into equal parts among already employed individuals. This seems like a planned strategy and money cutback technique utilized to cut business costs, and utilise the finances for other things that the organisation needs with their annual budget.

It can help improve human resource managers and recruiters from the tiring tasks of the various levels of selection, interviewing, and screening processes. In order for AI to be successful in recruitment one needs to form a comprehensive set and order of the questions that are required for a particular position needs so that the selection process can be as easy and without ruffle as possible. Years ago, different algorithms helped in interpreting numerous decisions and lead us to otherwise difficult to get answers. And so it eases a lot of calculations to help choosing the right fit for a job as well.

VII. ADVANTAGES AND LIMITATIONS OF ARTIFICIAL INTELLIGENCE APPLIED IN HUMAN RESOURCE MANAGEMENT:

a. ADVANTAGES:

Artificial Intelligence will enable more precision and less errors. Use of computer systems with Artificial Intelligence will enable eliminating wastage of time due to fatigue. Emotions and sentiments that disable rational thinking in human beings will not be a hindrance to artificial

intelligence applied thinking programs. And it can carry out repetitive and time taking monotonous work without boredom and very efficiently without any requirement or demand of breaks or sleep.

b. **LIMITATIONS OR DISADVANTAGES:**

Employing a system that works on A.I. on a many levelled organisation for data processing, interpreting and decision making can seem costly and will definitely incur costs in applying, maintaining, updating, restoring and repair. A.I. might think like a human brain that has taught it but it will not inherit the dynamics of ethical or moral human behaviour. A.I. will not have a sense of belonging to the organisation or to the employees and hence might not fulfil the most important role of an H.R. personal that is of a grievance officer. It will not help being creative or original or intuitive or judgemental and alter responses based on previous failures and will not get better with experience.

VIII. CONCLUSION

A.I. in the last 20 or so years has made itself useful to the field of management by exactly performing the way it is programmed and taught by experts and hence utilises its programmers brain into collecting, arranging, sorting and decision making. It even learnt to distinguish between correct and incorrect and employed various resolutions calculating best responses and results. AI continuously mimicked the human brain and hence it is as good as the foresight of its programmer to grasp and forecast the problems or rather the situations that might arise in future. Thus, A.I. might always remain as good as a human brain can make it and will always get beaten by human instincts, ethics and morals that are ever changing with the situation one is in. When A.I. will start making decisions dynamically depending on intuition and basic instincts like a human brain, we suppose we will see a revolution in recruiting, selection and a completely reformed Human Resource Management.

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