

Artificial-Intelligence and recruitment: Shift towards automated HR practice

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Abstract

This is a conceptual paper on Artificial Intelligence (AI) application in recruitment process, based on recent studies in the area of AI application in recruitment process. In this paper authors have tried to find answers to some of the questions regarding application of AI in recruitment process which are, why recruiters preferring AI based recruitments? Can application of AI in recruitment process eliminate human biases? Will AI based recruitment eradicate HR manager? And what is the future of AI applications in recruitment? From the thorough analysis of recent research papers in this area it is concluded that, there are several advantages for both, to recruiters as well as to candidates seeking job. AI in recruitment can promote fair, effective, efficient, unbiased and cost-effective model of recruitment, therefore changing the HR role and the leading to automated recruitment process. Future research can be undertaken by the researchers in order to address the human bias in AI algorithm.

Keywords

Artificial Intelligence, AI Recruitment, Automated Recruitment.

Introduction

Artificial technologies around us have developed to such extent that we are surrounded by the technology of Artificial Intelligence (AI) in our daily life from the smartphones to smart devices. Scott-Briggs, A. (2021) Artificial Intelligence is not a new thing these days to the mankind it is from quite long time now. It was around 1950s when AI started to emerge and since then it is continuously revolutionizing the world from its great potentialities. AI is successfully serving individuals and organisations in almost every area leading to efficiency and cost effectiveness. AI technology has evolved to such an extent that machine learning, based on growing volume of data are capable of taking decision without any human intervention, far ahead from its predecessor rule base AI technology. In this era of AI recruitment process also get benefitted from the application of AI in recruitment process and it becomes important to have more and more research in this area. This paper is purely a conceptual paper based on recent research works in this area with objective to find answers

to the following questions. Why business organizations rapidly adopting AI-applications in their recruitment process and to what extent? Will there be unbiased recruitment process using AI based recruitment? Can we say that AI-application will eradicate HR managers? And lastly what is the future of AI in recruitment process? To get the insight into above posed questions thorough analysis of recent published work has been done by the authors. This paper will help the reader to get insight into the artificial intelligence-based, recruitment and selection of the rightful candidates for the organization.

Research methodology

This is a conceptual paper, purely based on recent published research papers, and on the analysis of news and secondary data available at various websites. Recent published works were accessed on the google scholar using the keyword “AI AND Recruitment”. Some of the relevant news and updates were also accessed on the various website using the same keyword to get the insight into the Artificial Intelligence in recruitment process.

Review of literature

Krishnakumar, A. (2019) “AI has also found applications in organizational recruitment processes. Unlike the conventional rule-based systems, present-day AI systems learn from data patterns—supported by the growing volumes of (big) data and increasing computing capacity—and make decisions independently without any human interventions.” Scott-Briggs, A. (2021) AI has changed the tedious task into automated and recruitment process isn't left untouched. AI applications assisting in recruitment process and leading to achieve maximum efficiency. Around 96% of recruiters see AI-applications in a pivot role for talent acquisition and retention. Upadhyay & Khandelwal (2018) The application of AI in the recruitment process is a win-win game for both the client & candidates applying for job through AI-based recruitment platform leading to efficiency as well as qualitative advantages. Albert, E. T. (2019) AI have several applications and can be applied at various processes in recruitment and selection but, but most common are: chatbots for automated communication, screening software for application screening and task automation tools. But when we look at the popularity of the AI-application in recruitment, it is found that most companies adopting

these AI-tools are tend to be larger in size, technology-focussed innovative firms. Hemalatha, A., Kumari, P. B., Nawaz, N., & Gajenderan, V. (2021) “The study finds that AI technologies capabilities namely NLP, Machine Vision, Automation, and Augmentation have a significant impact on the Recruitment and Selection Process with potential positive outcomes such as time & cost-saving, accuracy, removes bias, reduced workload, increased efficiency, and candidate experience”. Raveendra, P. V., Satish, Y. M., & Singh, P. (2020) AI offers to be a potential solution to HR manager to carry out recruitment efficiently and free from the human biases which exist during recruitment process. Augmented intelligence technologies are standing at door to take over from AI and offer better results, which will eventually take over administrative jobs of repetitive nature completely. Nawaz, N. (2020) also confirmed in their research paper that artificial intelligence positively related with replacement of human intervention in recruitment process. Hmoud, B., & LASZLO, V. (2019) Promising solutions provided by the AI to the recruiters in optimizing talent acquisition through taking over various time-consuming tedious tasks such as sourcing and screening of applicants etc., has improved the quality of the hiring process and minimized human biases.

Why business organizations rapidly adopting AI-applications in their recruitment process and to what extent?

In this section authors have tried to describe the role and benefits of using AI-applications in recruitment process and the areas in which it can be used. It is a transitional era where machine learning capabilities are transforming into self-operated system based on large volume of data. Machine learning capabilities and automated data analytics has played central role in emergence of AI application in recruitment process as well, which has revolutionized the entire recruitment process into automated technology-based function. Adoption of AI-applications in the recruitment process is rapidly growing, though in present most of the companies adopting AI in the recruitment process are either very large or tech-savvy innovative firms. Though there are various areas where AI application can be used but chatbots, automated communication, screening software for recruitment applications are the areas where AI is used in more frequently. Previous researches have proved the efficiency and effectiveness of the AI-applications. Tedious and repetitive jobs can be automated in the recruitment process and thereby it can save lots of time, energy and cost. Candidates selected by AI platform are more efficient and positively related with their performance. Leading the recruitment process to human biases free is another contribution by the AI though in the

recent studies this claim is highly debatable and existence of biased selection of candidates is also confirmed. Application of artificial intelligence is not only beneficial to the organisation adopting it but it efficient way for the candidates as well for getting the job.

Can application of AI in recruitment process eliminate human biases?

Use of AI in recruitment process and existence of biases in selection of candidate, is a debatable topic among the researchers. There are research evidences for both side of the of the debate and is the area which require more attention of the researchers. AI is data driven technology which relies mainly on data feed into the system by humans, and therefore human biases can find its way to affect the decisions made by AI based recruitment model. Studies have shown facial recognition and candidate ranking, some of AI or machine learning application infected with biases. On the other hand, with the rapid growth in AI technology, several toolkits are developed to mitigate biases in the AI model and to promote fair AI algorithms. It can be concluded from the recent studies, growing volume of large data and rapid growth in computational capabilities of computer systems that AI offer potential solution to the recruiters in shrinking the scope of human biases in the recruitment process.

Will AI based recruitment eradicate HR manager?

Artificial intelligence has great potential continuously developing and evolving every day. Advancement in computational and information technologies fuelling its capabilities to the extreme hight. AI based automation has started taking up the tedious and repetitive jobs leaving thousands of employees unemployed. According to a survey reported by The New Indian Express “36% of decision-makers said that overall advancements in automation and technology had not displaced jobs. However, 46% of them indicated that they would have a severe impact on employment in India. Further, nearly half of the participants surveyed felt that job automation was reasonably probable; however, it was likely to be partial, with humans retained for specific expertise”. In this environment the role of HR manager is also not left untouched by the AI technologies. Application of AI tools in screening of applications, selection of candidate, compensation to employees, automated data analytics of the candidates etc. have been continuously transforming the role of HR manager in the in the organisation. AI has taken up most of the repetitive roles of HR manager but it doesn't mean the end of manual HR function in the organisation. In this technologically dynamic environment HR manager have many other important roles to play. From the repetitive roles

which can be efficiently done by AI tools it is shifting towards a relationship builder between the candidates, employees and employees-organisation. Focus of HR manager is likely to be on the relationship and welfare side of the employees in the presence of AI. HR managers are not going to eradicate from the organisation due to advancement and adoption of AI technologies, but it will change their roles in the organisation.

Future of AI-applications in recruitment

AI application in recruitment process is in its nascent stage in India, limited to certain areas of recruitment process. Companies adopted AI applications in recruitment process are either technologically innovative or very large organizations leaving a space for a huge growth potential. Scope of AI application in recruitment process is very wide and it still have to achieve many milestones. Researches shown that application of AI in recruitment process not only beneficial for the recruiters but for the candidates as well. On the other hand, rapid development in information technology and computational powers with decreasing cost of technology will lead to increased usage of AI and ML (machine learning).

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