A STUDY ON THE IMPACT OF ARTIFICIAL INTELLIGENCE ON HUMAN RESOURCE MANAGEMENT

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ABSTRACT

This competitive world demands for the human resources as a mandatory asset in order to improve the organizational performance. The organizations have to strive for adopting the innovative HR practices to improve their performance and be different among its competitors. In near future, HRM is moving from the traditional way of HR practices to more advanced progress like automation, augmented intelligence, robotics and AI.

AI has been proved as life – changing for us. From automation of mundane and time-consuming tasks, to the professionals today are more towards optimizing the combination of human and automated work to gain a simple and intuitive work environment. It provides them enough time to deliver the enhanced employee performance.

To compete with AI and advanced machines, the real challenge now lies within the respective HR department that how will they train and re-transform their workforce in understanding the AI and collaborating and working with AI and robotics.

augmentation and amplification of human capabilities, AI has the potential to drastically transform the way we live and work. For HR, this is not just an opportunity but also an urgency to adapt and adopt.

Introduction

What is Artificial Intelligence?

Tecuci (2012) mentions that Artificial Intelligence (AI) is a rapidly evolving technology, made possible by the Internet, that will soon have major impacts on our daily lives. The name of Artificial Intelligence was verified in 1956 (Stuart & Norvig, 2016). AI traditionally refers to an artificial creation of human-like intelligence that can learn, reason, plan, perceive, or process natural language. Such traits allow AI to bring immense socioeconomic opportunities, and socio-economic challenges.

What is Human Resources Management?

Human resource management is a separate and specialized function which all managers need to perform.

It is that branch of management which is concerned with the recruitment, selection, development and the best use of employees. Thus, human resource management ensures that every employee makes his maximum contribution to the achievement of organizational goals. The human resource management that we find today is the result of a number of significant inter-related developments since the era of industrial revolution.

Artificial Intelligence in Human Resource Management:

AI technologies offer significant opportunities to improve HR functions, such as self-service transactions, recruiting and talent acquisition, payroll, reporting, access policies and procedures. We are living in an era in which AI capabilities are reaching new heights and have a major impact on how we operate our business.

Human resources executives have faith that merging AI into HR administration functions will benefit and improve the overall employee experience. This will provide more capacity, more time and budget, and more accurate information for decisive people management. According to Nilsson (2005) machines should be able to do most of the jobs that human intelligence demands, which he calls for human-level AI.

Purpose of the Study

The purpose of this study is to know what impact the Artificial Intelligence has on Human Resource Management in the current era or how AI will affect HRM in the future. As a concept, artificial intelligence has been used around decades. But from last 20 years, the successful application of machine learning enabled the boom of AI. This study is important because AI, today, has begun to engage the workforce. It is helping the staff to manage their time effectively and add the strategic value to the organization. AI has the potential and capability to solve many business problems as well as to make shift in productivity of the industries by introducing automation for tedious, time consuming, mundane and repetitive tasks.

Objectives of the Study

The objectives of the study are as follow:
- To identify the role of AI based software in hiring the best talent from industry
- To evaluate the function of AI based software specifically towards the screening process which is the primary process of hiring and cost of using such systems
- To understand the effect of AI based software on recruiters' job
- To find out the AI based software in screening process of hiring

REVIEW OF LITERATURE

Scott W. O'Connor (2020): In the article titled Artificial Intelligence in Human Resource Management, the author clearly says that artificial intelligence will continue to positively shape the field of human resources management in the coming years. HR professionals should also be more aware of the challenges that they might face. Thus, to prepare for the future of human resource management, professionals should take the necessary steps to learn about the current trends in the field, as well as lay a strong foundation of HR knowledge that they can build upon as the profession evolves.

Prasanna Vatsa and Kusuma Gullamjji (2019): In the paper titled "To Study the Impact of Artificial Intelligence on Human Resource Management", it is clearly stated that the integration of HR practices with AI based applicants definitely have a stronger impact in enhancing the organizational performance. The study depicts that AI is everywhere in HR, be in recruitment, training, on boarding, performance analysis, retention and so on, but many of the organizations are still lagging in integrating AI to its HR – practices because of its cost associated in integration.

Jennifer Johansson and Senja Herranen (2019): In the paper titled "The Application of Artificial Intelligence in Human Resource Management", it is mentioned that the area of AI in recruitment is new and there are not many organizations that has implemented AI in all parts of the recruitment process. It also mentions that the main benefits of AI are seen as the speeded quality and elimination of routine tasks, while major challenge is seen as the companies' overall readiness towards the new technologies.

Albert Christopher (2019): In his article names as "Use of Artificial Intelligence in Human Resource Management, the author says that AI – based applications raise employee productivity. It has the ability to analyze, predict, diagnose and become more capable resource while focusing on employee need and outcomes. However, there are challenges like privacy, talent gap, maintenance, integration capabilities or limited proven applications. AI systems must be managed carefully by finding reliable learning data sets, using the right implementation approach, seeking clarity, eliminating bias and considering unintentional consequences.

Barbara van pay(2018): In this article how AI is reinventing HR it was clearly stated that all the organizations mostly looking for AI solutions for their business and they are scared of letting a non-human entity handle the procedures of business. By using the AI in organization it can reduce the time consumed for filling and hiring the candidates who applied for the job, through screening multiple candidates, gathers data they rank the candidates by considering other information like experience ,skill set etc., to find right person. After finding the perfect fit for the role next main part is interviewing, now days AI interviewing

software such as hike vue, mya are used mostly. AI technology takes care from sourcing to interview which drastically reduces the recruitment timeline and help to hire right candidates with ability to perform in specific roles and make placements much easier and at faster rate.

Anupam jauhari (2017): In the paper title how AI and machine learning can affect HR practices today. AI is becoming increasingly relevant and reshaping the way businesses employ and do every activity recruitment is simple for practitioners as machine learning technology will use chatbot to carry out all activities, AI will screen candidates and send the confirmation or rejection email to the candidates. according to the analysis of India report of Delloite 5th annual global human capital trends 53% of companies are ready to deploy digital tools while 22% have already deployed their tools.

Rajeev bhardwaj :(January 5th 2019) In this article titled Artificial Intelligence Is Revolutionizing Hiring to Engagement it was clearly stated that any organization will receive plenty of resumes out which only 10% are relevant. From hiring to employee engagement, artificial intelligence is transforming the way thanks to the advent of AI supported systems. This process is now taken over by software search algorithm that are able to successfully prove out the few people matching your requirements from a pile of irreverent applications. Artificial intelligence is re-shaping and revolutionizing every sphere in life including HR management It can be incorporated in process like boarding, performance, review, feedback, training, retention apart from talent acquisition. Hence, it allows HR manager greater time and energy to focus on mentoring and motivating employees. HR department is highly benefited with the AI supporting system.

Robert Charlier and Sander Kloppenburg, PwC, Artificial Intelligence in HR: A Nobrainer (2017) - To find right talent against low costs and in less time, this is a huge argument in today's organization. As per this paper which was based on research after the various aspects of artificial intelligence by the global network of PwC, the input of business partners, interviews with experts in the field, and the valuable remarks of the participants of our Round Table session in October 2017, and which was organized in cooperation with Seed link. This study helps us to understand how do we embrace AI successfully with a case study on Loreal Business.

Research Hypothesis

H0 (Null):   AI does not have a significant impact on HRM

H1 (Alternative): AI has a significant impact on HRM

ANOVAª

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.159	4	5.290	5.355	.009b
	Residual	12.841	13	.988		
	Total	34.000	17			

ANOVA test output which helps in understanding if the independent variables used in thismodel is effective in predicting the dependent variable

Multiple Regression Output

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	Sig.
1	(Constant)	3.571	1.380		.023
	Do you have in-house HRM software or you rely on third party software systems for hiring?	-.836	.489	-.302	.111
	Are you familiar with introduction of AI in hiring practices?	.915	.273	.587	.005
	Do the software used for hiring process in your organization is based on application of AI or latest technologies?	.288	.299	.178	.353
	To what extent do you agree that AI-based software are helping to find the best talent for the job?	.777	.263	.529	.011

The regression test output. This helps to determine the significance and the effect of Artificial Intelligence on Human Resource Management and HR Practices.

Findings

1. Majority of the organizations have adopted the AI in their Human Resource Management practices.

2. There is a positive response from the respondents that they are likely to accept the introduction of AI at various stages of HR based functions.

3. Organizations are using the third party software, in house software, Omnidocs, Ezieka, etc as AI software in HRM.

4. Majority of the organization is positive for the fact that AI is the future of HR.

5. Organizations which are not using AI based software would like to adopt the same in future.

Suggestions:

Researchers would like to suggest that companies devise a simple and concise organizational strategy to integrate AI into their recruitment process, based on the results of this study. Researcher would like to recommend that recruiters should replace easy and time-consuming tasks with smart AI technology, allowing recruiters and HR managers to concentrate more on strategic functions. Furth more, developers of smart AI technologies needs to develop such platforms keeping in mind the budgetary issue of small to medium organization as well, so that they can adopt AI in their recruitment process.

5.4 Conclusion

The incorporation of HR activities for candidates based on AI undoubtedly has a greater effect in enhancing the efficiency of the organization. Although AI applications do not possess emotional and cognitive abilities like humans, these powerful AI-based HR applications may be able to interpret, forecast, diagnose, and it is a powerful tool for any kind of organization.

Yet the real concern that is overwhelming the Global workforce is how AI is demonstrating its impact in cutting jobs across various industries around the world. But, the truth is that it's not the advanced technologies that replace humans, but it's more about how humans can adapt and use these developments in wealth and prosperity development.

In the true sense, the AI-based functions would affect certain percentage of workers, and it is the responsibility of HR leaders and companies to reflect on their employee needs and future outcomes. And, eventually, based on our research, most companies effectively incorporate AI-related methods into recruitment, but AI is everywhere in HR in the near future: May be in recruitment, training, on boarding, performance analysis.

But most companies are still lagging behind in incorporating AI into their HR activities due to their integration-related costs. In conclude, the application of AI should be regarded as a positive opportunity, because AI improves life, AI produces a better future if it is clearly understood and properly used.

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