INTERNATIONAL JOURNAL OF LAW

MANAGEMENT & HUMANITIES

[ISSN 2581-5369]

Volume 5 | Issue 2

2022

© 2022 International Journal of Law Management & Humanities

Follow this and additional works at: https://www.ijlmh.com/

Under the aegis of VidhiAagaz – Inking Your Brain (https://www.vidhiaagaz.com/)

In case of **any suggestion or complaint**, please contact **Gyan@vidhiaagaz.com**.

To submit your Manuscript for Publication at the **International Journal of Law Management & Humanities**, kindly email your Manuscript at **submission@ijlmh.com.**

Artificial Intelligence: A Tool for Optimizing Talent Acquisition

DR KRISHAN LAL GROVER[1]

ABSTRACT

In the new phase of Industry 4.0, businesses, organisations, and industries compete in the labour market for the most qualified, talented, and dynamic people in this age of technical developments. With the rising use of technology, Human Resource Management has undergone a transformation. Several Digitally Disruptive Technologies have radically altered the existing systems and resulted in the development of new business models. The present paper focuses on the application of artificial intelligence in the talent acquisition process, which is one of the most important functions of human resource management. It investigates the use of artificial intelligence as a tool for managing diverse talent acquisition initiatives. It includes case studies of firms that have effectively employed artificial intelligence to manage their hiring and talent acquisition operations. It can be concluded that AI has the potential to improve the quality of the hiring process by matching the best candidates to the job requirements

Keywords*: Industry 4.0, Artificial Intelligence (AI), Talent Management (TM), Human Cantered AI, Talent Acquisition, Recruitment*

I. INTRODUCTION

In the new phase of Industry 4.0, every company and organization functioning today is a different environment; they all face a common challenge-the need for connectivity and access to real-time data across processes, partners, products, and people. The appropriate blend of people, procedures, and technology has always been required. The decision making has been decentralized from humans to computer systems. Several Digitally Disruptive Technologies have radically altered the existing systems and resulted in the development of new business models. They have significantly affected the way customers, industries, and enterprises function and have rendered traditional commercial and regulatory procedures ineffective. Industry 4.0 technical developments include big data, cloud computing, the Internet of Things (IoT), cyber security, nanotechnology, robotics, and artificial intelligence (AI). Certain

---

[1] Author is an Associate Professor at Department of Commerce, Sri Guru Hari Singh College, Sri Jiwan Nagar (Sirsa), Haryana, India.

traditional employment became obsolete as a result of technological advancements, while many new jobs were established (Oswal et al., 2020). Artificial intelligence (AI) refers to a machine's ability to think like a human brain. Computers are programmed to continually learn from data in order to execute certain jobs and increase their performance as more data is poured in. This technology will support recruiters in improving their performance by allowing them to work faster by automating administrative duties and gaining wiser insights that were previously difficult to obtain manually. According to a study conducted by People Matters and ABC Consultants (2019), most organisations believe AI can assist recruiters by optimising the search process, increasing efficiency during the recruitment process, enhancing and assisting human decision making, and balancing the speed and quality of the recruitment process. AI may help with sourcing eligible candidates, collecting resumes, matching candidates to job profiles, scheduling interviews, and pre-screening assessments, among other things. The study demonstrated that 83 per cent of companies believe that humans and artificial intelligence would collaborate in finding and employing future-ready individuals. Talent management is the process of identifying and controlling an organization's personnel's ability, expertise, and power. The notion is not limited to recruiting the appropriate individual at the right moment; it also includes investigating employees' hidden and atypical abilities and developing and nurturing them to achieve the desired results. Hiring the greatest person in the business is a major problem for organisations today, but maintaining them and, more significantly, transitioning them according to the culture of the organisation and getting the most out of them is a far larger concern. Hence, Today's businesses have broadened the scope of their talent management strategies to account for long- and short-term business implications, and to go beyond identifying the best personnel for immediate business requirements to identify future leaders using market mapping concepts etc.

(A) Literature review

AI is described as a software or hardware programme that can think like a person and make data-driven intelligent decisions. Strohmeier and Piazza (2015) discovered in their research that Artificial Intelligence Techniques are not new to Human Resource Management and that since their introduction, a diverse set of suggestions on the use of Artificial Intelligence and Computational Intelligence in Human Resource Management has emerged. These studies provide deep insights into possibilities with the nature of the specialised application, but these scholarly publications lack an overview of the overall potential. The broad potential of Artificial Intelligence Techniques in Human Resource Management was investigated. The potential of Artificial Intelligence in Human Resource Management was investigated in six

situations (i.e., turnover prediction using artificial neural networks, candidate search using knowledge-based search engines, staff-fostering using genetic algorithms, and human attitude analysis).

According to an Oracle and Future Workplace poll, HR professionals feel AI gives chances to learn new skills and obtain more free time, allowing them to go beyond their current responsibilities and take on more strategic roles inside their organisations. 81 per cent, on the other hand, said it was difficult to keep up with the rate of technological development at work. Understanding the manner in which AI is transforming the industry is more critical than ever before for human resources professionals. Implementing AI software removes boring chores and time-consuming data processing in order to function as an ongoing issue solution for HR (Kestenbaum, J.,2016). Developments in talent knowledge analytics and computing (AI) can provide talent management practitioners with the resources they need to be more strategic and observant while making recruitment decisions and simplifying the transactional aspect of employment (Maurer, 2018).

According to a KPMG research poll of 1200 global HRs from 64 countries, more than 39% said their firms are searching for analytics, digital applications, and artificial intelligence (AI) in all HR applications (Rao 2019). People matters research findings, according to Sahaye (2020), show that over 70% of MNCs in India have automated approximately half of their HR tasks, while approximately 20% are expecting to invest in excess of Rs. 1 million in technology for HR functions. 40% of managers polled say they are already utilising some sort of AI in their HR activities. Furthermore, according to an industry poll, around 40% of recruiters want to employ AI and big data in their recruiting processes by the end of 2020, which has the potential to decrease hiring time by roughly 80%. As per Harver, (2020), at the present, just 10% of enterprises are employing AI in a high context, while 36% of organisations are predicted to fully utilise AI in the near future.

(B) Objectives of the study

1) To investigate the use of artificial intelligence in simplifying different HR functions.
2) To investigate the use of artificial intelligence in the talent acquisition process.

(C) Rationale of the study

The rationale of this research stems from the increasing technology improvements and problems that businesses confront in managing their business operations, particularly their human resource activities. The key aim of this paper is to highlight the application of artificial intelligence in simplifying HR departments' labour in the talent acquisition process. AI aids in

the development of more value-added HR tasks and the improvement of operational efficiency.

(D) Research methodology

The current research is based on a comprehensive examination of secondary data from peer-reviewed national and international journals, reports, magazines, periodicals, blogs, newspapers, and other internet sources. The researcher looked through the literature to find examples of artificial intelligence being used in the talent acquisition process.

(E) Analysis and discussion

The main aims of human-Centered Artificial Intelligence (A.I.) should be (Fei-Fei Li, 2018):

1) It should attempt to augment rather than replace human cognition.
2) It should include more complex and contextual components of human intelligence, including assistance from other domains such as psychology and sociology.
3) The advancement of artificial intelligence technology should be directed by a concern for its impact on humanity.

Most Artificial Intelligence talent management systems have concentrated on the more time-consuming and error-prone chores of applicant sourcing and assessment. There is a variety of cross-industry applications of artificial intelligence that can be viewed within this partnership framework which uses artificial intelligence in the talent acquisition process. The study includes case studies of firms that have effectively implemented artificial intelligence. It also examines the role of various start-ups that give AI services to a variety of businesses to help them with their HR functions.

II. APPLICATION OF ARTIFICIAL INTELLIGENCE (AI) IN TALENT ACQUISITION (TA)

Artificial Intelligence (A.I.) technology simplifies application procedures by employing design strategies that result in more user-friendly forms, making it easier for a job seeker to finish the application. This substantially minimizes the number of applications that are incomplete or abandoned by potential applicants.

By keeping a database of former candidates, technology has played a vital role in candidate rediscovery. These applications may be examined using AI from a pool of existing candidates, and a strong fit for new jobs in the business can be found if and when opportunities arise. Rather than wasting time and money looking for fresh talent every time, HR professionals may find qualified individuals faster than ever before, saving a significant amount of time.

In the talent acquisition arena, the widespread use of AI technologies in HR functions is noticeable. From screening candidates to managing databases, arranging candidate interviews,

and addressing and resolving candidate inquiries, AI reduces the time and effort necessary to complete these and other standard HR duties.

This technology greatly decreases hiring time, allowing HR professionals to focus on other tasks like sourcing, recruitment marketing, and employee management. The AI-assisted screening method will assist in identifying the individuals with the most appropriate skill sets and relevant expertise that the firm requires. As a result, the screening process becomes easier and faster.

Chatbots based on Artificial Intelligence technology may be used to communicate with potential applicants and match their profiles to the job requirements. It will help in the selection of a few candidates who meet the employment requirements. The AI-enabled system can then schedule the interviews and hire the best fit among the applicants, freeing up the HR team's time and effort to focus on other productive tasks.

III. ARTIFICIAL INTELLIGENCE TOOLS FOR TALENT ACQUISITION (TA)

Many AI-enabled Talent Acquisition solutions are being used by various companies to enhance their recruiting function, reducing cost per hire, shorten time to hire and help them to identify the best applicants available, among other things. The following table shows some ready-to-use talent acquisition tools which are being used by different companies:

Table- Selected AI Tools Optimizing Talent Acquisition

Selected AI Recruitment Platforms	Companies using AI Tools	Application usage in Talent Acquisition
AllyO www.allyo.com	Dave & Buster's, Fried Man, G4S, Real estate, Staples, The Andersons etc.	It integrates with an organization's HR system, schedule interviews, maintains a secure environment, and gather analytical insight for TA.
Eightfold www.eightfold.ai	Bayer, Booking.com, Dexcom, Dolby, Fortune500, Micron, Netapp, Nutanix, Tata Communications	Talent management, acquisition, development, and diversity platform are driven by AI. Automatically update data from the organization's ATS, HRIS and

		CRM systems.
Fetcher www.fetcher.ai	Drone deploy Getty images, Lyft, Maersk, Sony Music, Velcro etc.	Monitor the database and delivers a source of varied and quality applicants in no time by combining AI with people in the circle. Uses an automated email centre, team monitoring, and individual performance metrics.
Hiretual www.hiretual.com	Angel List, Ceridian, Continental, Facebook, GitHub, Intel, LinkedIn, Nike, Novo Nordisk, Quora, Reddit, Twitter, Wayfair etc.	Hiretual is the applicant data engine that powers all recruitment initiatives. Integrate with tech stack to centralise talent management.
Humanly www.humanly.io	Armoire, Brady, Guide, Inyore, NexGent, Swiss monkey, The Klienbatch group	Candidate screening, scanning, reference checks, and follow-up with an AI-powered chatbot tailored for mid-market organisations.
Loxo www.loxo.co	Amazon, Bank of America, Lockheed Martin, Randstad, Trinity Health etc.	AI recruiting automation software on CRM Platform utilising ATS with 530 million people's personal information saves time and money.
My interview www.myinterview. com	Formstack, Greenhouse, Hubspot, Pinpoint, Salesforce, Zappier etc.	It might be used as a stand-alone product or incorporated into an HR system.
Paradox www.paradox.ai	Disney, McDonald's, Go wireless, Unilever, Wendy's etc.	Make job applications simpler, quicker, and more mobile. Schedule Interviews with reminders.
Pymetrics	Boston Consulting Group,	In the Pymetrics environment,

www.pymetrics.ai	Colgate Palmolive, Kraft Heinz, McDonald's, PWC etc.	behavioural science and evaluation are used to eliminate any human bias effects, as well as audited AI technology and talent algorithms.
Seekout www.seekout.io	Me, Rover, VMware, Salesforce, X23 etc.	More search capabilities than LinkedIn acts as an intelligent talent market solution and can be integrated into a firm's ATS system
Talkpush www.talkpush.com	Adecco, Amazon, iCollege, McDonald's, VXI, Walmart, [24]7. AI etc.	Uses a CRM-enabled communication technology (Chatbot) for both voice and chat, as well as a customised pipeline for various jobs.
Textio www.textio.com	Atlas Sian, Atos, McDonald's, Micron, Nestle, Zillow Group etc.	Textio employs Natural Wording Processing (NLP) and Text Analytics to assist recruiters in removing biased language from job postings.
XOR www.xor.ai	Exxon, Manpower, MAR, McDonald's, MolGroup etc.	XOR connect, XOR application, XOR video, and live chats at recruitment fairs are all excellent Recruiting Chabots as modern communication tools.

(Source: Oswal et. al., 2020)

pymetrics PARADOX

IV. SOME CASE STUDIES

LinkedIn- This professional social networking site investigates gender-based recruiting patterns and gives statistics and insights to companies on how their job postings are performing in light of current trends. The top search results in LinkedIn's database have been re-ranked to reflect current trends more accurately. They've also enhanced their new Talent Insights bundled with new features.

Glint, a start-up that specialises in employee surveys insights, has been purchased by LinkedIn, which will help companies better attract, develop, and retain people.

They also have a greater grasp of the talent landscape, including how skill sets change over time, how to find talent pools, and so on. Recruiters will be aided by the new artificial intelligence skills in hiring more diverse candidates.

L'Oréal — L'Oréal has used artificial intelligence (AI) and machine learning (ML) to automate non-value-added tasks and free up recruitment teams to focus on higher-value activities. During the screening phase, they deployed a Chabot named Mya to help job seekers choose potential candidates for the company.

This chatbot asks questions, checks credentials, and responds to candidates' concerns about company culture, policies, and benefits using artificial intelligence (AI) and natural language processing (NLP) technology. Mya then sends recruiters updates, notifying them of the best-fit candidates for the job opportunities in question.

Bajaj Allianz - Bajaj Allianz General Insurance Company uses an automated video interviewing tool developed by Microsoft in cooperation with Talview to employ candidates from various places around the country. Talview Behavioural Insights (TBI), a job competency tool, employs psycholinguistics to analyse responses and develop behavioural profiles for all possible applicants, allowing hiring managers to choose the best candidate for the job based on data-driven insights.

Tech Mahindra - Tech Mahindra focuses on automating routine processes so that HR may focus on more complicated jobs that offer value to the organisation. Using an AI-led approach, Tech Mahindra analyses applicant profiles from a massive database of resumes and filters the suitable profile for the specified job description. Basic employee questions are now handled by

UVO, a chatbot that also helps employees get their leave approved, handle requests for cash advances, and travel advances, among other things. UVO also automates the establishment of employee IDs, the management of employee data, and other areas such as job matching, learning prediction, and employee health. The use of AI has resulted in a rise in employee satisfaction as well as a reduction in HR staff attrition.

Mindtree - Mindtree Consulting makes considerable use of AI solutions across the board, especially in HR. In their selection process, AI plays a critical role. Mindtree has been employing artificial intelligence (AI) to analyse enormous amounts of data, locate proper resumes, eliminate human bias, and uncover fake resumes sent by candidates. It has drastically altered business procedures, such as the hiring process, resume screening, and real-time employee questions, among others.

Unilever- Unilever employs HireVue, a video interviewing technology that employs artificial intelligence to digitally analyse and rate video interviews in order to establish applicant matches.

The top applicants are then advanced to the Discovery Centre, where they will participate in an in-person "day in the life of Unilever" simulation.

The company's recruitment procedure has been digitised as a result of this. The hiring procedure has improved significantly, according to the recruiters. Previously, it was necessary to screen six applicants in order to put one through the process; now, thanks to this technology, it is now possible to screen only two candidates in order to put one through. They also use Pymetrics (another technology-enabled assessment tool) to screen all entry-level candidates before moving on to HireVue. As a result, more people have been hired, increasing gender and racial diversity.

V. CONCLUSION

This paper's research and discussion focus on the role of artificial intelligence as a helpful tool used by businesses to manage different aspects of talent acquisition. Technological improvements have had a far-reaching influence on several company activities, including human resources. It has resulted in a significant shift in the way humans and technology interact. It has altered working methods and produced a need to simplify HR operations through the use of artificial intelligence. Organizations will have to adjust their usage of artificial intelligence to their own needs.

A well-planned and well-developed strategy is required for successful implementation. The

competing problems that companies confront in a worldwide setting have heightened the requirement for adaptability to technology techniques. The Covid-19 epidemic has also cleared the door for many firms to investigate the application of artificial intelligence in numerous elements of human resource management.

*****

VI. REFERENCES

- AI in HR: Importance of Artificial Intelligence Technology in HR (July, 2020). Retrieved March 4, 2021, from https://www.mobinius.com/blogs/importance-of-artificial-intelligence- technology-in-hr

- Artificial Intelligence in Recruitment: A Research by People Matters and ABC Consultants (August 2019). Retrieved March 5, 2021, from https://www.abcconsultants.in/wp-content/ uploads/2019/08/ABCConsultants_Research.pdf

- Fei-Fei Li, (2018, Jun 14) Human centered AI. In Tomaszczok, M. (2018, Jun 14). Human-centered AI is the future of talent management. Retrieved from https://medium.com/cultivate-ai/humancentered-ai-is-the-future-of-talent-management-bade90084104

- Martin F.R (2019). Employers Are Now Using Artificial Intelligence To Stop Bias In Hiring. Retrieved March 5, 2021, from https://analyticsindiamag.com/employers-are-using-ai-stop- bias-hiring/

- Maurer, R. (2018). Talent Acquisition - Technology Will Reshape Talent Acquisition in 2018, 13 Feb 2018. https://www.shrm.org/resourcesandtools/hrtopics/talent-acquisition/pages/technology-will-reshapetalentacquisition-2018.aspx.

- O'Connor, S. W. (2020). Artificial Intelligence in Human Resource Management Retrieved March 4, 2021, from https://www.northeastern.edu/graduate/blog/artificial-intelligence-in- human-resource-management/

- Oswal, N.,Khaleeli, M., and Alarmoti, A. (2020). Recruitment In The Era Of Industry 4.0: Use Of Artificial Intelligence In Recruitment And Its Impact-- Palarch's Journal Of Archaeology Of Egypt/Egyptology 17(8),39-47 ISSN 1567-214

- Rao, P. (2019) The future is now: The changing role of HR, https://economictimes.indiatimes.com/small-biz/hr-leadership/leadership/the-future-is-nowthe-changing-role-of-hr/articleshow/68229542.cms

- Sahaye, V. S. (2020). How AI is now being used to hire instead of replacing people. Retrieved March 4, 2021, from https://cio.economictimes.indiatimes.com/news/next-gen-technologies/ how-ai-is-now-being-used-to-hire-instead-of-replacing-people/74586694

- Strohmeier, S., & Piazza F. (2015) Artificial Intelligence Techniques in Human Resource Management—A Conceptual Exploration. In: Kahraman C., Çevik Onar S.

(eds) Intelligent Techniques in Engineering Management. Intelligent Systems Reference Library, vol 87. Springer, Cham. https://doi.org/10.1007/978-3-319-17906-3_7

- The Impact of AI in Human Resource Decision-Making Processes (January 2020). Retrieved March 5, 2021, from https://www.hrtechnologist.com/articles/ai-in-hr/the-impact-of-ai-in- human-resource-decisionmaking-processes/

*****