

CHANGING RECRUITMENT LANDSCAPE WITH AI POWERED CHATBOTS**Ms. Shafaq Heyat Khan**

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ABSTRACT

Many digital technologies and e-recruitment platforms are progressively influencing how organisations conduct their hiring operations. Human resource management is not complete without recruitment, and as the competition for top talent grows, businesses are finding creative new ways to find and hire the best applicants. With the introduction of artificial intelligence, the recruitment landscape has undergone a change. Using chatbots powered by AI to interact with job searchers, automate screening, and set up interviews is one of the newest trends in hiring. Artificially intelligent chatbots for recruitment serve as communication intermediaries between job seekers and recruiters. As the ideal assistant for the time-constrained recruiter, chatbots are attempting to replace recruiters in the hiring process. Chatbots are the dream assistant for the busy recruiter, and chatbots are trying to make sure they take away monotonous and tedious tasks. The purpose of the paper is to assess the influence of artificial intelligence chatbots on the recruitment process. The aim of the study is to identify chatbots impact across the recruitment process and analyse chatbots role in improving communication between organisations and candidates. The study also attempts to assess how chatbots speed up the hiring process, which is critical in the early stages. The study is completely based on secondary sources like conceptual papers, peer-reviewed articles, and websites, which were used to present the current paper. The paper found that artificial intelligence chatbots are very productive tools in the recruitment process, and they will be helpful in preparing a recruitment strategy for the industry. The recruitment process is gaining attention among researchers due to the incorporation of artificial intelligence, but there is still room for exploration in the field.

Keywords: Artificial intelligence ,chatbots, e-recruitment, recruitment process, recruiters.

INTRODUCTION

The challenges encountered throughout the employment process are a blot on the business world. Businesses have always had trouble finding the right talent pool to meet their demands, and they are continually looking for answers. Rising expectations, shrinking budgets, and a competitive labour market are all indicators that the entire hiring process has to be redesigned in today's dynamic economy. The productivity of an organization's workforce is currently the key emphasis of business in order to boost an organization's profitability and efficiency.

Companies are investing a lot of money in HR technology, which is where hiring with artificial intelligence is taking off. The process of interacting with candidates and clients will be improved by the business integration of automation and machine learning. Several things contribute to the issues.

Companies' inability to address a candidate's path across an organisation, their inability to engage them meaningfully, and the lack of an honest and timely feedback channel all serve to exacerbate the issue. Using chatbots, where recruiters stand to gain greatly from their aid, is one example of artificial intelligence in action in recruiting that addresses these concerns (and many more). Artificial intelligence-driven software called a chatbot can answer to people on a messaging platform. A chatbot is a computer software or artificial intelligence that carries on conversations via text or audio. Several simple chatbots are built utilising a functional programming language in order to build smarter chatbots. When it comes to managing human resources, some of the tasks include sourcing, filtering, ranking, and scheduling.

As a result, chatbots with artificial intelligence (AI) entered the technology landscape. Now, chatbots have become widely available, and many businesses have quickly adopted them.

Chatbots can operate on a variety of platforms, including SMS, email, social media, messaging services like WhatsApp, and software designed specifically for recruitment. Beyond a certain point, the majority of candidates never hear back from a company. Employers find it difficult to have constructive conversations with all of their applicants. The challenging work would be communicating with thousands of candidates during high volume recruiting, on top of a recruiter's regular screening tasks and other responsibilities.

By providing a degree of contact that candidates are often searching for, chatbots are enhancing the hiring process. It has the ability to take notes from the responses, respond, and end the exchange. The solution is to use chatbots, which will improve applicant experience without adding to the workload of recruiters. The chatbots are to blame for the recruiters' work-load overload. Understanding the benefits and drawbacks of using a chatbot to screen and prequalify individuals can be helpful.

AI-chatbot technologies can assist with the first selection of resumes, ensuring that candidates without "must have" abilities do not wind up in the mix. The significance of AI recruitment technology resides mostly in the early stages of the hiring funnel as well as in scheduling. During video interviews, AI is also being utilised to analyse the candidate's statements, body language, and facial expression. The technology will evaluate how engaged and involved the candidate is in the conversation and will select words that refer to traits like engagement. Recruiters don't need to worry about upholding the relationship because chatbots help candidates and give them real-time updates on the status of their applications. As chatbots are accessible around-the-clock, the applicant.

REVIEW OF LITERATURE

Artificial intelligence (AI) is one of the most ambitious technical developments since it can think and act like a person and mimic human intelligence (Canhoto & Clear, 2020; Lexcelent, 2019). Throughout the past five years, there has been a surge in the volume of literature that examines AI and its applications. Some of the subjects that have received the most research attention in the literature are cloud computing, big data, and AI algorithms. It has been established that AI's main purpose is to accurately analyse both internal and external inputs in

order to generate knowledge and information (Frey & Osborne, 2017; Wamba et al., 2021). The unlimited potential of automated cognitive processes, it should be emphasised, has brought academics' attention to AI in the context of industrial revolution 4.0 (Frey). Because of the symbiotic relationship between ourselves and AI, optimists forecast that it will soon contribute to improving our daily lives (Paschen et al., 2020). Businesses are currently redesigning their workforces in response to AI, which has an effect on both overall productivity and employee performance. AI has an impact on hiring, training, performance evaluation, and succession planning (Jarrahi, 2018).

The exponential development of artificial intelligence is expected to lead to even more significant changes in the human species (Mahmoud, Tehseen, et al., 2020). According to tech analyst Peter H. Diamandis, "We are changing from Darwinism evolution by natural selection to evolution by human direction," and AI will be the next phase of human evolution. 2019 (Ashley). That happened not too long after the American AI research organisation OpenAI revealed in 2018 that it had created a robotic arm that could interact with and solve the Rubik's cube on its own.

This change has focused on the use of AI in the employment process (Black & van Esch, 2020). One of the HR tasks that takes the most time is the hiring process. HR professionals invest a great deal of time and effort into the process to select the ideal candidate. In the conventional hiring procedure, applications are considered, resumes are physically checked, and interviews are scheduled and held (Chapman & Webster, 2003). When seen through the lens of digital recruiting 3.0, employers might make advantage of contemporary technology by using AI in the recruitment process. These advantages would allow recruitment officials to finish their work more quickly and efficiently, which would reduce overall costs (Vardarlier & Zafer, 2020). Additionally, enhance the HR professionals' contribution to creating strategic value to the company (Lee & Shin, 2020; Upadhyay & Khandelwal, 2018).

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The primary advantages of AI in hiring come from its ability to handle data much more quickly and in large quantities than is humanly conceivable (Black & van Esch, 2021). For instance, data from LinkedIn, Facebook, Instagram, Pinterest, and Twitter about potential employees may be gathered, and the information would then be compared to the specifications for the post (Campbell et al., 2020).

Typically, the first step in starting and establishing a firm is employing new personnel (Acikgoz, 2019). It comprises putting forth an effort to attract suitable individuals who satisfy the organization's needs.

An analysis of the available AI solutions shows that chatbots are presently among the most popular AI solutions (Hill et al., 2015). Chatbots are interactive computer programmes and virtual assistants that can have conversational conversations with users (Albert, 2019; Nawaz & Gomes, 2019). This technology is a form of human-machine interaction because it is designed to connect with consumers using natural language based on AI breakthroughs (Przegalinska et al., 2019). It's crucial to know that 80% of customer service departments in companies already use or intend to use chatbots as a conversational tool for handling customer inquiries (Ashfaq et al., 2020). (Adams, 2018) The recruitment process is being revolutionised by chatbots, who help with questions and answers, the identification of qualified candidates, scheduling conversations, learning about the candidate experience, learning about the candidate's requirements before the candidate joins the company, and more. Today's recruiters are expected to perform more tasks than ever before, including coming up with plans to meet predetermined corporate goals, keeping an eye on the competition, establishing realistic challenges through benchmarks, and continuously checking employee satisfaction levels. Because they have a database of regular talks that can be utilised to tackle difficult problems, chatbots are useful in this sense. Joshi (2019). (2019). Nawaz and Gomes make an effort to assess how chatbots would affect the recruiting procedure. The author goes on to describe how chatbots helped with applicant engagement and recruitment.

Chatbots will soon help with meeting scheduling, bill payment, handling simple consumer enquiries, and processing expense claims, assert Gupta et al. Yet, this just means that the functions of the administration, accounting, customer service, and human resources departments will shift rather than that these departments would become obsolete.

Chatbot applications in the hiring industry

Chatbots are being used in recruitment by an increasing number of businesses, including those in high-volume retail, restaurants, manufacturing, warehouse, haulage, staffing, and healthcare. Some instances:

- **Marriott** – Facebook Messenger – Hospitality
- **US Army** – Sgt. Star -Web Chat – Military
- **Merrill Technologies Group** – Web and Text Apply- Manufacturing

Examples of Recruiting Chatbots

Job postings featuring a pre-screening text chatbot for applying through text.

The majority of bigger businesses have posted jobs to job boards during the past ten years, along with links to apply on a corporate career site. 90% of the time, visitors don't actually apply through this process in the majority of circumstances. People browse the website but don't provide their contact information. This is changing with chatbots. Candidate use of an SMS/Text Messaging chatbot is suggested.

Send "Jobs" by text to 888-271-8898.

(The aforementioned text chatbot can create candidate profiles, conduct pre-screening, and schedule meetings.)

Job postings with Text Application

This is a terrific strategy for part-time hourly jobs in retail, hospitality, and other industries. Hiring managers must make it simple for people to apply for openings given the close to full employment rate. Candidates are usually directed to the corporate career site by standard in-store recruiting messaging, however we are aware that 90% of

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visitors depart the site without applying. Candidates can initiate the hiring process while on-site by texting the company's chatbot when it is based on text messaging. Applicants can fill out pre-screening questions and add their contact information and preferred location.

Pre-Screening of Candidates

Candidate screening takes up a significant amount of recruiting time. In the majority of cases, during a first-round pre-screening phone call, recruiters confirm the candidates. This cannot be scaled. Wouldn't it be simpler to simply SMS a candidate with a series of brief questions that guides them through a pre-defined pre-screening process for a position? In comparison to days or weeks with phone calls and emails, recruiters may send hundreds of these text messages in a matter of minutes and receive hundreds of responses in a matter of minutes.

Scheduling of Interview

Interview scheduling is a significant undertaking that requires a lot of time. Calling prospects directly is no longer very successful. Calls from unknown phone numbers go unanswered by candidates. Making a call to a candidate while they are still working is inconvenient, and asking the applicant "what time works for you" back and forth is a dreadful waste of time for everyone. Recruiting Chatbots are excellent at automating scheduling, which makes it simple for recruiters to encourage applicants to book an appointment on the recruiter's calendar or at a store. Consider a scenario in which a candidate goes through a pre-screening procedure and is then offered the option to schedule a pre-screening phone conversation or even an in-person retail meeting. Try the demonstration below; it does exactly that

Send "Jobs" by text to 888-271-8898.

(The aforementioned text messaging chatbot for recruiting comprises the creation of candidate profiles, pre-screening, and scheduling of interviews.)

Online chat for candidates' engagement with careers (Live Agent and Chatbot modes)

Just 8.52% of visitors to employment websites actually submitted an application, according to the Jobvite 2017 Recruitment Funnel report. This indicates that roughly 91% of applicants who visited a career site did not leave their contact information for future contact. Candidates can search for jobs and even set up interview appointments with Career Chat, which can be used in Live Agent or chatbot modes. It can also answer questions, pre-screen candidates, create candidate profiles, and engage candidates. A online chat solution has almost infinite interaction potential and significantly higher conversion rates than the majority of corporate recruitment websites.

Engagement on the Facebook Careers Page

Facebook recruiting is growing in popularity. For many employers, Facebook Groups and Facebook Promoted Posts are a source of applications. But what should a candidate do once they land on your Facebook careers page? Candidates can "Send a Message" to the Facebook page chatbot using an automated Messenger recruitment chatbot. The candidate can then be engaged by the Messenger chatbot, who can then show them open positions, movies about working at your business, and even job alerts over Messenger.

Administrative problems

Chatbots can be used to submit and approve vacation requests, simplifying the process for both managers and staff. Additionally, the bot may go deeper into administrative issues including payrolls, benefits administration, and business policies. Advantages include increasing employees' knowledge of their legal rights and facilitating their ability to handle daily bureaucracies with ease.

CONCLUSION

Several experts think that AI-chatbots and recruiting technologies will improve person-to-person interactions in recruitment rather than making it more automatic. Due to the responsibilities of scheduling and emailing, hiring managers and recruiters do not have enough time for relationship building. AI-chatbots can spend more time getting to know candidates and moving them farther down the employment funnel while still assisting candidates with queries and determining suitability for the position. Artificial intelligence has made a strong entry into the

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human resource area. It assists in removing the tedious job and reducing the workload for HR workforces. It's time for businesses and HR departments to utilise technology so they can stay competitive and benefit from it.

For a busy recruiter, chatbots are the ideal assistant because they can handle all the labor-intensive and monotonous tasks quickly and in large quantities. A good chatbot improves life. Chatbots are able to fill some gaps much like humans. Individual connections with candidates are beneficial, and bots will play a significant part in raising organisation quality. Applicant experience is all about how candidates view the hiring process, and it is sometimes grossly undervalued. Hiring a candidate with an excellent experience considerably boosts your chances of doing so. No one limits their job hunt to a single employer at a time. If a candidate has a better experience at another organisation, they are very likely to stay with that company.

FURTHER RESEARCH INITIATIVES

The papers covered various aspects of the technology utilised in the recruitment sector for the hiring process. The present study provides important ground for future research work in field of AI chatbots and recruitment process. The researchers will have the opportunity in the future to add to the body of literature on the subject at hand. Researchers might approach empirical studies from several angles. A comparison between the recruitment process before and after the introduction of AI chatbots is possible, and it may be done by industry and HR designation.

REFERENCES

- Aubert, B. A., Rivard, S., & Patry, M. (2004). A transaction cost model of IT outsourcing. *Information & Management*, 41(7), 921–932.
- Pessach, D., Singer, G., Avrahami, D., Ben-Gal, H., Shmueli, E., & Ben-Gal, I. (2020). Employees recruitment: A prescriptive analytics approach via machine learning and mathematical programming. *Decision Support Systems*, 134. doi:10.1016/j.dss.2020.113290
- Kulkarni, S., & Che, X. (2019). Intelligent software tools for recruiting. *Journal of International Technology and Information Management*, 28(2), 2-16.
- Mohan, R. (2019). The Chatbot revolution and the Indian HR professionals. *International Journal Of Information And Computing Science*, 6(3), 489-499. doi:16.10089.IJICS.2019.V6I3.18.2931
- Kulik, C. T., & Perry, E. L. (2008). When less is more: The effect of devolution on HR's strategic role and construed image. *Human Resource Management*, 47(3), 541–558. <https://doi.org/10.1002/hrm.20231>
- Tambe, P., Cappelli, P., & Yakubovich, V. (2019). Artificial intelligence in human resources management: Challenges and a path forward. *California Management Review*, 61(4), 15– 42. <https://doi.org/10.1177/0008125619867910>
- Yawalkar Vivek V. (2019) A Study of AI & its role in Human Resource Management, *International Journal of Research & Analytical Reviews*, Volume 6, Issue 1 E-ISSN 2348-1269, P ISSN 2349-5138 Pp20- 24, Retrieved from www.ijrar.org
- Tian X., Pu Y. (2008) An Artificial Neural Network Approach to Hotel Employee Satisfaction: The Case of China. *Soc Behav Person: Int J* 36(4):467-482.
- Reilly P. (2018) The impact of AI on the HR function, *Institute for Employment Studies*.
- Rathi D.R, (2018). Artificial Intelligence & the Future of HR practices. *International Journal of Applied Research*, 4(6), 113-116, Retrieved from www.allresearchjournal.com
- B. Sheth, "Chat bots are the new HR managers," *Strateg. HR Rev.*, vol. 17, no. 3, pp. 162–163, Apr. 2018.
- E. He, "Can artificial intelligence make work more human?," *Strateg. HR Rev.*, vol. 17, no. 5, pp. 263–264, Nov. 2018.

International Journal of Applied Engineering & Technology

- Andreas M. Kaplan and Michael Haenlein, “Rulers of the World, Unite! The Challenges and Opportunities of Artificial Intelligence,” working paper, 2019.
- Dattner, B., Chamorro-Premuzic, T., Buchband, R., & Schettler, L. (2019). The legal and ethical implications of using AI in hiring. Harvard Business Review, 25.
- Eubanks, B. (2018). Artificial intelligence for HR: use AI to support and develop a successful workforce. Kogan Page Publishers.
- Bhardwaj, R. (2019). How AI is revolutionizing the human resource functions. Entrepreneur Asia Pacific, 4.