

**ARTIFICIAL INTELLIGENCE IN HR: HOW TECHNOLOGY HELPS COMPANIES
MANAGE EMPLOYEES**

Katsiaryna Tsybulskaya, Management

HR is currently constantly evolving. To be at the peak of development, companies must introduce new technologies. Artificial intelligence is one of the fastest-growing areas, which has long gone beyond the simple management of personnel. Artificial intelligence is embedded in everything that surrounds us. Mobile and social technologies are spreading and affecting the lives of employees, especially the neural network. Sustainable systems are being destroyed and culture of constantly introducing something new is taking root. The task of HR leaders is to properly integrate human and software resources. As a result of a survey conducted by IBM among 6 thousand company managers, 66% of managers consider it necessary to introduce intelligent technologies in the internal processes of the company.

Goal of this paper. Find out the practical application of artificial intelligence in HR

Relevance. This topic is relevant in the modern world because artificial intelligence in the 21st century contributes to the faster development of companies. An object of research: information, mental and emotional processes in companies

My tasks:

1. Using educational and popular science literature, magazines, Internet resources to get acquainted with the information features of the introduction of artificial intelligence in the company
2. Using the analysis of scientific facts to refute or prove that artificial intelligence is a good assistant for HR specialists
3. Conclude.

Artificial intelligence is becoming more and more accessible to everyone. For the last 5 years, it has been present in the life of every modern person. Alice from Yandex, Siri from Apple, Alexa from Amazon have become real friends and assistants. Siri can make a call at your request, view information on the Internet, set an alarm or turn on a timer, type a message through dictation, provide the necessary information about the device. Alice has similar functionality. Alexa is often used for comfortable work in meeting rooms, because on devices such as the Echo Dot, and use such devices to manage systems for video conferencing, including Cisco TelePresence Systems, Cisco Webex Rooms, Polycom Group Series, Zoom Rooms, and Crestron 3 series. Alexa for Business is integrated with Office365, Google G Suite, and Microsoft Exchange calendar to monitor scheduled meetings and automatically connect to them when a meeting starts. If we talk about business, with the help of a voice command, Alexa

can start meetings, send out invitations to all employees, instantly book rooms, and remind them how long the meeting ends.

Artificial intelligence is so important in HR because it is a tool for improving this area. It contains smart algorithms for structuring, analyzing, and collecting data in a company. IBM predicts that 120 million employees in the world's most advanced economies will have to retrain and move into the artificial technology market to develop its potential.

There is a problem of the unwillingness of companies and employees to implement artificial intelligence, hence the sharp jump in the development of some companies, and the decline of others.

In HR, artificial intelligence analyzes employees and their growth prospects, builds a rating of managers and calculates their strengths and weaknesses, evaluates the effectiveness of personnel, analyzes the company's need for new specialists, reduces the amount of work, and increases its quality due to the absence of the human factor, conducts cognitive calculations. Artificial intelligence helps manage strategic advantage while better supporting the workforce and driving intent into action.

«AI can help us better inform people's judgment and take bias out of the system. We must do that. We're dealing with people and their data and their lives. We have a responsibility to use AI for good.»- Tanya Moore, Director, Career & Skills, IBM

AI is a general term that covers similar fields, such as machine learning and cognitive computing. AI is a branch of the computer science tree that deals with the modeling of mental behavior in devices used in an organization.

AI is used in visual perception, natural language processing, speech recognition, speech-to-text conversion, language translation, tone analysis, and other areas.

Artificial intelligence (AI) is a term that refers to the introduction of human-like intelligence into machines that are programmed to think similarly to humans and use programs to reproduce human actions. This term can be applied to any machine that exhibits traits related to the human mind, such as learning and problem-solving.

“AI is an accelerator – it allows us the ability to ingest a variety of data and provide context to a decision-maker or employee or business leader. It allows us to deliver the right intelligence at the moment and achieve personalization at scale.” – Tom Stachura, Vice President Talent Solutions & People Analytics, IBM

Artificial intelligence in HR provides many opportunities. These are mainly business operations and consumer solutions. Among the main reasons for the introduction of artificial intelligence in HR, it is possible to distinguish its use for solving urgent business problems. Artificial intelligence makes it possible to provide a new approach and ideas without increasing the working staff and financial costs for this.

Artificial intelligence-designed solutions can solve the problems associated with the need to have financial and human resources to implement business strategies.

A neural network is a series of algorithms that try to calculate the main similarities of data in a set of actions using a process that simulates the work of the human brain. The concept of neural networks has its roots in artificial intelligence. Neural networks is rapidly gaining popularity in the development of trading systems.

Artificial intelligence contributes to the development of new skills in employees. New technologies are constantly being updated, which, by implementing them in a neural network can collect data about employees, conduct their statistics and highlight key points of activity, predicting what is best for an employee to become the best and not be fired. For a specialist to remain in demand in the market, it is necessary to constantly learn and not be afraid to radically change their activities by introducing something new. Companies also need to respond to changes in the market and work quickly, otherwise, competitors will adapt first. AI allows HR to acquire and develop the skills of employees by focusing on the overall diagnostics of the company.

AI allows you to make an employee more valuable to the organization. There has always been a problem of the lack of an individual approach for each employee in companies, and this directly affects the success of the company. At the moment, people have expectations about the approach to them. Everyone wants to be a valuable employee for whom the conditions will be adapted so that the employee remains until the end.

If we talk about the personnel department, it has always performed purely administrative functions, focusing on keeping records of the workforce, filling out documents, and monitoring personnel. The view of HR has changed markedly in thirty years. Strategic HR began to be introduced for the practice of management and the study of the competitive advantage of the organization. The focus in the field of HR has become focused on key employees, and not on all at once. The advantage of artificial intelligence is to increase the efficiency of employees because the speed of performing the same work has increased several times.

“When we piloted AI for candidate attraction we saw a big increase in candidates applying for jobs at IBM, and there was greater stickiness. Besides, Net Promoter Score feedback said the AI was engaging. People felt it answered their questions, was relevant and useful.” – Joanna Daly, Vice President Talent, IBM

The approach to the recruitment process has changed. For effective recruitment, HR specialists perform several tasks at once. They write down the criteria for certain roles and choose a way to differentiate candidates for the same position. If the work is done poorly, it will lead to the selection of the wrong candidates for the vacancy. In this case, artificial intelligence is used to fill out job requirements based on historical data to more accurately determine the correspondence between the resume and the requirements. In many companies, it is more common to recruit people via the Internet, assessing whether their skills are suitable for the company and analyzing whether the person will be successful in this position. With the help of cognitive modeling technology, a company can understand whether a person is lying about their skills or not. HR specialists began to pay more attention to the skills of a specialist, rather than to education because educational institutions do not have time to update the program at the same pace as innovations appear. They began to give preference to employees with experience working with artificial intelligence and technologies based on it. This is an example of how AI is changing the situation so that the development allows HR to solve critically business tasks, focusing on the contribution of human resources specialists.

«The AI solution IBM developed to address this challenge is called Watson Candidate Assistant (WCA). WCA has changed the way job seekers engage with IBM. Previously, candidates and employers would meet for the first time at the job interview, after learning about the

opportunity from an online jobs board or career website.» The Business Case for AI in HR With Insights and Tips on Getting Started Nigel Guenole, Ph.D. and Sheri Feinzig, Ph.D

Through artificial intelligence, the employer and the candidate can exchange information in real-time via a chatbot, respectively, both parties receive more extensive information. Even before the interview, candidates who are not suitable for the role are eliminated. Chatbots are becoming more personalized and user-friendly. Companies also use videos describing what the work in their organization is like.

Artificial intelligence also affects job creation. According to a report by TeamLease in India, artificial intelligence technologies have created 2.3 million jobs, while laying off 1.8 million in advance. Thus, the situation in the companies has developed in such a way that only technically more competent specialists remain.

Under the influence of AI, the speed of decision-making has changed and there is evidence of making a named specific decision. Business decisions today are made analytically because of the huge amount of structured information. AI makes it possible to act immediately as soon as a question appears. This saves money that could have been spent on staff, and the money is reinvested in other more important areas.

«Ask yourself: what things would be better if they were done 24/7? What would be better if it were done at scale? What would benefit from greater consistency? What would be possible if we leveraged broader expertise to see beyond our current limits? These are good candidates for AI.» Debora Bubb, Vice President, and Chief Leadership, Learning & Inclusion Officer, IBM

At present, the potential of artificial intelligence is very high, despite all the difficulties that follow. Over time, companies will increase the budget allocated for management decisions, because many tasks can be solved by artificial intelligence. Soon, artificial intelligence will continue to evolve and improve the productivity and efficiency of workers.

Bibliography

1. Uzialko, A., 2019. *Businessnewsdaily*. Available at: <https://www.businessnewsdaily.com/9402-artificial-intelligence-business-trends.html>
2. Guenole, N., Ferrar, J., & Feinzig, S.L. (2017). *The Power of People: Learn How Successful Organizations Use Workforce Analytics to Improve Business Performance*. Pearson FT Press.
3. Cappelli, P., & Keller, J. R. (2014). Talent management: Conceptual approaches and practical challenges. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 305-331.
4. BERSIN, J., 2018. *JOSH z BERSIN*. Available at: <https://joshbersin.com/2018/06/ai-in-hr-a-real-killer-app/>
5. Ployhart, R. E., & Hale Jr, D. (2014). The fascinating psychological microfoundations of strategy and competitive advantage. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 145-172.
6. IBM (2018). *Trusted AI for Business*. Available at: <https://www.ibm.com/watson/ai-ethics/>
7. Combs, J., Liu, Y., Hall, A., & Ketchen, D. (2006). How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance. *Personnel Psychology*, 59(3), 501-528.
8. LetsAlign, 2019. *LetsAlign*. Available at: <https://medium.com/@LetsAlign/siri-on-iphone-is-it-advantageous-18ceacf8bb08#:~:text=Siri%20is%20a%20voice%20assistant,make%20phone%20calls%20%20and%20more>
9. Lewis, R. E., & Heckman, R. J. (2006). Talent management: A critical review. *Human Resource Management Review*, 16(2), 139-154.
10. TechRSeries, 2019. *HRTECHSERIES*. Available at: <https://techrseries.com/others/5-ways-artificial-intelligence-is-reinventing-hr-technology/>
11. Meister, J., 2018. *Forbes*. Available at: <https://www.forbes.com/sites/jeannemeister/2018/09/24/the-future-of-work-three-new-hr-roles-in-the-age-of-artificial-intelligence/?sh=4cdf85b94cd9>
12. Tarud, J., 2021. *koombea*. Available at: <https://www.koombea.com/blog/7-recent-ai-developments/>
13. Markotkin, N., 2020. *carnegie*. Available at: <https://carnegie.ru/commentary/82422>
14. Jacobs, V., 2018. *myhrfuture*. Available at: <https://www.myhrfuture.com/blog/2018/6/22/artificial-intelligence-in-hr-faqs-you-need-to-be-able-to-answer>