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# THE ECONOMIC CRISIS OF THE REGULATION OF THE WORKING SYSTEM: ARTIFICIAL INTELLIGENCE

#### Abstract

In this study, it is aimed to examine the role of artificial intelligence in human resources management. At the same time, it has been tried to examine how artificial intelligence provides support in basic processes such as recruitment, training, talent and career development, performance evaluation and remuneration. It has been determined that when artificial intelligence is integrated into the candidate finding and selection process, human resources employees and managers have the perception that this technology will save the job from monotony, reduce the stress experienced in finding the appropriate candidate, and provide access to more candidates with the desired quality.

Keywords: human resources, artificial intelligence, performance, management

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## İş sisteminin tənzimlənməsi iqtisadi böhranı: suni intellekt

### Xülasə

Bu tədqiqat insan resurslarının idarə olunmasında süni intellektin rolunu öyrənməyə yönəlib. Eyni zamanda, süni intellektin dəstək, təlim, istedad və karyeranın inkişafı, səmərəliliyin qiymətləndirilməsi və mükafat kimi əsas proseslərdə dəstəyi necə təmin etdiyini öyrənməyə çalışılıb. Müəyyən edilib ki, süni intellekt namizədlərin axtarışı və seçilməsi prosesinə inteqrasiya edildikdə, kadr şöbəsinin əməkdaşları və menecerlər hesab edirlər ki, bu texnologiya işini monotonluqdan xilas edəcək, uyğun namizədin axtarışında yaşadığı stresi azaltacaq və istədiyi keyfiyyətə malik namizədlərin daha çox olmasına imkan verəcəkdir.

Açar sözlər: insan resursları, süni intellekt, məhsuldarlıq, idarəetmə

### Introduction

In this study, it is aimed to examine the role of artificial intelligence in human resources management. At the same time, it has been tried to examine how artificial intelligence provides support in basic processes such as recruitment, training, talent and career development, performance evaluation and remuneration. Artificial intelligence, which mimics the functions of the human brain, is no longer a fictional idea, but a return to concrete reality. Today, it is seen that artificial intelligence applications have become an indispensable part of both daily and business life. From a human resources perspective, it is noticed that artificial intelligence applications are being used effectively in many complex processes (Winfield, 2020: 97).

The concept of artificial intelligence, defined in 1956 as the engineering of producing intelligent machines, was first introduced by John McCarthy. In its most general definition, artificial intelligence is the computer arm that deals with the designs of agents that can detect stimuli and develop action in the context of stimuli. It is to design technological devices that can exhibit behaviors within the framework of human mind logic. Programs developed for this purpose are the most important component of artificial intelligence.

The technological structure has improved day by day and has increased the possibilities of artificial intelligence. Thanks to the rapidly developing infrastructure in fairly recent history,

devices that were even imaginary in the past have been introduced to use. The components that contribute to the development of artificial intelligence are listed as follows:

• Expert systems: the demonstration of performance in the form of an expert.

• Intuitive problem solving: How artificial intelligence can find the most suitable options for problem solving.

• Natural language processing: Refers to language-based communication between machine and human.

• Vision: refers to the ability to automatically recognize shapes, symbols and features (Yılmaz, 2022: 16).

Artificial intelligence has the power to make fundamental changes in both daily life and business habits. It is shown with the devices produced that artificial intelligence can be used in every area where man lives. Artificial intelligence technology can be used in everything from simple home cleaning to highly complex human relationships. Artificial intelligence devices have started to be used effectively in every field such as education, science, economy and daily life. (Yıldız, 2010: 129).

The process of finding candidates is one of the first stages of human resource management. It is necessary to have suitable candidates to provide the workforce required by the organization. Thanks to artificial intelligence, it is possible to reach the candidates who are suitable for the organization and find the relevant candidates very quickly. In this process, thanks to artificial intelligence, filtering and pre-screening operations can also be performed, saving time and labor (Tomar, 2015: 46).

Among the applicants, natural communication is established with those who remain after listing those who have the appropriate criteria. Chatbots designed with artificial intelligence communicate with candidates and are held in the foreground. These tools, which are similar to social platforms, provide the first interaction between the candidate and the organization.

Candidates eligible for the job may not be identified through the traditionally conducted interview and testing processes. Wrong decisions made in the personnel selection process can increase the workforce turnover rates of organizations in the long run. Interviews can sometimes be influenced by environmental factors. Sometimes human resources managers can make biased choices. Artificial intelligence technologies are trying to guide human resource managers in identifying and matching candidates suitable for business requirements. In the process of selecting personnel, artificial intelligence testing, video interview and selection decision are discussed within the framework of the headings (Bundy, 2017: 285-287).

With artificial intelligence applications, it has become possible to make psychometric measurements through machines. Detailed information about the candidates can be obtained with various games developed with artificial intelligence. In this way, data can be collected about many situations such as personality characteristics, cognitive skills, endurance levels and endurance under stress. Providing this process through artificial intelligence also allows candidates to compete with each other. The candidates who take sides in the developed games interact with each other and give an idea of their own characteristics (Bersin, 2017: 27).

The candidates selected after the recruitment process are now employees of the organization. Beginners need to go through the orientation process in order to be able to adapt to their work, to acquire the organizational culture and to feel like they belong. Trainings designed to provide orientation can be provided with robotic technologies. In the trainings given by robot trainers, mutual interaction can be established just as in human-to-human communication. Robot trainers are qualified to provide training to groups of 4-7 people on average and have the ability to analyze. At this stage of the recruitment process, interviews are made with candidates who have undergone test procedures and are deemed appropriate. Thanks to artificial intelligence, the candidate and the screen can be confronted in these interviews and the human resources manager does not need to be in the environment. In the video interview environment, various questions are asked to the candidates and the interview is recorded. These records are then analyzed and a perfor (Ford, 2018: 2).

In terms of the human resources department, it is very difficult to evaluate the performance of the employees. Because managers sometimes fall into some traps such as mixing performance and potential, seeing everyone the same, evaluating people who look like them above, discriminating, evaluating people who are loved by managers as higher performance (Bersin, 2017: 27).

He expressed talent development as a process that helps a company develop and succeed by making it possible for employees to show all the potential they have and pursue a fulfilling career path. Talent development is just as valuable to companies as human resources. Because talent development brings operational success to companies. AI-powered talent development solutions identify the skills the company and employees will need in the future according to the field they work in and help drive transformative and innovative changes in the business (Tegmark, 2017: 6).

Artificial intelligence helps in career management because it has a guiding feature in making important promotion decisions. It does this first with data verification. In other words, according to the results of the performance evaluation, it checks and verifies the input data for the promotions of the employees who have shown good development. With data verification, the hidden aspects and abilities that employees do not specify in their resumes but gain from the trainings and performance they receive are revealed. In line with the hidden directions and abilities revealed, the candidates suitable for promotion are listed (Winfield, 2020: 97).

Catalant is programmed to expand their knowledge of the task and their teammate's ability to work. Machine learning begins to process information that can be learned through task descriptions. This data then influences machine learning algorithms to offer advice on which employee is right for the team. In other words, Catalant is looking for the most suitable talents to create the best performing team among the employees. Credit Suisse, a financial company, invented Internals First. This practice evaluates existing employees for the team when there is a gap. The app also saved the company \$75 million in team building costs (Sabuncuoğlu, 2013).

Wage management is one of the complex processes that takes shape in the context of each organization's own characteristics. Even in the most advanced organizations, it is seen that various mistakes can be made in wage management. Artificial intelligence tools are used to minimize these errors. This situation is examined under the headings of artificial intelligence wage determination and detection of financial crimes (Wang, 2019).

Using artificial intelligence instead of traditional methods in wage determination can reduce the errors that may occur by 6%. For this reason, some of today's businesses benefit from artificial intelligence technologies in determining wages. However, it is foreseen that the use of artificial intelligence technologies in wage determination will be much more in the coming years. Artificial intelligence is based on the skills and performance results of employees when determining their wages. This makes it possible to be objective in determining the wage (Winfield, 2020: 97).

With artificial intelligence technologies fighting financial crimes, companies can be more agile, effective and efficient. Because in the detection of financial crimes in the human resources department, artificial intelligence is both an early advocate and a rich ground for innovation-savvy initiatives. Mizuho Bank, for example, is trying to build an AI-powered IBM Financial Crimes system. The system offers advanced research techniques for human resource management and attempts to prevent financial crimes that employees plan to commit. It also analyzes the behavior of employees with its detection systems and activates the security mechanism. Supported by IBM Watson software, the system has the ability to extract big data and produce meaningful content from the obtained data (Yawalkar, 2019; Zeng, 2020).

### Conclusion

The results of the study show that the process of finding and selecting candidates with the support of artificial intelligence is perceived positively by employees and managers. Another result obtained from the study is the perception that the lack of attention experienced in traditional

trainings will decrease in the trainings carried out with artificial intelligence technology. The results of the study show that in performance evaluation applications supported by artificial intelligence, human resources managers are in the perception that they will not lose motivation, that the right criteria for performance evaluation will be determined and that accurate estimates will be made for future performance.

According to the results of the study, it was seen that human resource management experts are in the perception that artificial intelligence will help in the field of career planning, that it will facilitate the correct determination of promotions, that the remuneration can be done correctly, and that fair remuneration will be possible in this way. Human resources workers and managers should be advised to be open to digitalization.

In the trainings given within the scope of human resources management, it is recommended to provide courses to improve the digital skills of the employees. It is thought that it will be functional to plan appropriate trainings to motivate employees who do not have sufficient knowledge and skills in this field and are afraid of the use of technology. According to the results of the study, experts working in the field of human resource management should benefit from artificial intelligence-supported software. In the changing world conditions, too much demand for work causes the recruitment process to be difficult. Artificial intelligence technologies contribute to the greatly reduced time allocated for finding and selecting candidates. In addition, it is recommended that those working in the field of human resources have knowledge about data production and machine learning, which are sub-branches of artificial intelligence. In this way, communication with different units can be strengthened and it can be easier to develop the software needed in the field of human resources. It is recommended to consider what can be done to improve the performance of employees who are understood to have low performance in performance evaluation measurements made with artificial intelligence. In these applications, it is thought that the use of artificial intelligence-supported trainings may be functional. In the applications of artificial intelligence in human resources management, it may be one of the disadvantages that an emotionoriented communication with the candidate is not possible.

For this reason, it is recommended to carry out studies in which the effects of artificial intelligence and emotional intelligence in human resource management applications will be discussed together. During this study, it was observed that the studies in the field of human resources management and artificial intelligence were quite limited. For this reason, it is recommended to increase the studies where different variables are also discussed.

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