

# Chapter 14

## The Use of Artificial Intelligence in the Turkish Judiciary

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### ABSTRACT

*The Turkish judicial system is very fragmented and each unit has its own rules, it is more accurate to focus on the benefits of AI to the Turkish judicial system in general rather than examining the units in the Turkish judicial system one by one. In addition, preliminary preparations are vital for governmental duties, education and legal strategies in order to use AI more efficiently. The proposed ways for the application of AI-based tools for the utilization of the AI-based technology in Turkish courts will be analyzed. The problem of acceptability and serviceability of AI in the Turkish judiciary will be analyzed by the help of previous studies, legal reasonings, current examples and existing theories. Firstly, examples around the world regarding the usage of AI systems in law will be discussed. Secondly, examples from Türkiye regarding the usage of AI in law will be discussed. Finally, whether the decision-making mechanism in Turkish law is compatible with the AI systems will be discussed and recommendations will be made to increase the use of the AI systems.*

### INTRODUCTION

Artificial intelligence (AI) technology is a system that can perform certain tasks by imitating human intelligence so as to fulfill orders and improve itself by repeating the information it collects. The progress of the AI-based technology led to an

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upsurge in the features of computers and the ability to store millions of information efficiently and the use of the data effectively. AI started to perform numerous connections and tasks and became useful in various fields. Also, AI made a great progress and increased significantly in value since it was first put forward in 1956 at the Dartmouth conference (Moor, 2006, p. 86). Today, the speed of technology in AI is at an unprecedented level. Thanks to technological advances like deep learning, machine learning and big data, AI affects humans' lives positively by providing work productivity, cost reduction and resource optimization (Ulaşan, 2023, p. 303). Intelligent robots with natural language processing, image analysis and computer vision have been produced (Zhang and Lu, 2021). AI-based systems develop and are transformed into higher systems thanks to their interactions with people. AI transforms data into a self-reinforcing cycle, making it easier for people to do their jobs financially, scientifically, and socially. AI systems make great contributions to humanity by simplifying many situations that are difficult for people. AI systems that determine the most appropriate route to use to find any address, applications that find the most suitable products by creating a personal recommendation list for shopping, autonomous cars that minimize the risk of accidents, systems that perform risk analysis, systems that analyze people's preferences and make personal recommendations to them, chatbots and many other AI products provide people with huge advantages in terms of time, labor, cost and workforce (Coşkun & Gülleroğlu, 2021, p. 954). Due to this, today, AI has become popular and widely used in almost every area of life. AI studies in a lot of fields such as law, public finance, public administration and national defense give opportunities which make humans' lives easier.

Especially, one of areas where the usage of the AI technology is widespread is public administration. Public administration is related to a wide area that deals with structures and functioning of countries in theoretical and practical terms. Public administration, defined as the organization established for the purpose of producing and providing public services, represents the face of the country reflected to citizens. Public administration, which aims to meet the needs of the public, has been shaped by different understandings in different periods of history. The New Public Administration approach emerged after the 1970s and was an administrative approach that interpreted and directed the changes in the activities and structure of the administrative and economic system as an alternative to traditional management thought (Çamur & Aydın, 2022, p. 149). This understanding is basically defined as an approach that tries to give place to a market or semi-market understanding in services by going to a structure where decentralization and corporatization will be dominant in public services (Demirel, 2015, p. 140). This trend has many dimensions. First of all, a new management focused on public services has been adopted instead of the old-style public management and the need for contracts and performance-oriented incentives of employees have increased the possibility of implementing

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