Abstract

Artificial intelligence is gradually spreading into all sectors of human activity, and law is no exception. However, law and computer technology are very different disciplines. This paper explores a situation where they intersect. Specifically, it focuses on the use of predictive models in the criminal justice sector in forecasting possible recidivism.

The thesis first describes the historical development of predictive mechanisms and seeks to use this background to introduce the basic theories applied in prediction. In this section, the thesis also uses the case study of the UK and Wales to demonstrate the limitations of such a models. Furthermore, the thesis offers a basic understanding of how AI models work, which is essential for understanding the legal side of the matter. This part of the thesis concludes by asking whether predictive models are even effective enough to make their deployment meaningful. Is the use of AI the next evolutionary phase in the field of recidivism prediction, or is it a dead end? To answer this, it uses a review of the major studies that have been published on this topic around the world.

In the Czech Republic, this topic has been very little researched, so in the next part the paper first analyses the basic elements of the part of the legal system that are relevant for the use of predictive models. The thesis finds that the Czech legal order is not yet fully prepared for such a change. First of all, it does not provide for the instruments that would enable the involvement of models, but most importantly, it does not have clearly resolved some basic questions regarding punishment, which are necessary for a fair and effective involvement of such a sophisticated institute. However, the thesis also shows that these shortcomings can be addressed. Although no predictive model is currently involved in sentencing in the Czech Republic, the thesis examines the most similar tool used in practice. This is SARPO, which is used by the "Czech Prison Service" in the context of penitentiary care. Finally, the thesis brings together all the findings to try to establish the intersection between realistic possibilities that could contribute to a better functioning of the justice system and the possibilities that the domestic legal order allows. Therefore, the thesis also includes two de lege ferenda proposals on the possible use of predictive systems in the Czech Republic.

Key words: predictive justice, artificial intelligence, recidivism prevention