

The project aims to create a universal model of legal data protection with particular attention to Big Data technologies, results generated by artificial intelligence (AI) and data collected by sensors as part of the Internet of Things (IoT) solutions.

Lawrence Lessig wrote on the possibility of regulating the Internet as early as 1999. According to Lessig, there are four regulators: law, social norms, market and architecture (infrastructure). These together constitute a whole that limits our actions, both directly and indirectly, ex-post and ex-ante. However, the Internet is governed by specific differences, as the code becomes the overarching regulator. We can create cyberspace that allows us to protect fundamental values. However, we can just as well create code that makes those values disappear.

At the same time, artificial intelligence and machine learning techniques are developing. Machine learning involves working with small and large data sets by examining and comparing them to find common patterns and explore their nuances. For example, suppose we provide a machine learning model with many songs that match our tastes and their statistics (such as tempo, musical genre, instruments used, etc.). In that case, we should create a recommendation system to suggest new songs to the user (with a high degree of probability) in the future that match their tastes, as streaming platforms such as Spotify or Netflix do today.

Virtually every internet user also has his or her email inbox, uses social media platforms or acquires virtual items in online games. However, hardly anyone reads all the terms and conditions they have to accept to start using a given solution. Meanwhile, it turns out that none of the above belongs to us as users. The operator can switch off the service at any time, cutting us off from what we have accumulated so far.

In response to the dictatorship of the stronger, the IT concept of blockchain was created, i.e. "private" networks based on blockchains, operating in a peer-to-peer model, in which each user has exclusive rights to their data. For such networks, programming code takes on a special significance because their users do not sign any contract or tick any checkbox that they accept the terms and conditions before connecting - they merely implicitly agree that the boundaries of their operation are set by technology and agreement between users. Furthermore, blockchain technology has been used to create cryptocurrencies, i.e. virtual assets with no material basis. Based on these, various virtual tokens are being created today, a digital representation of specific values, a kind of certificate of "ownership" of detailed digital data.

However, the law does not keep up with reality and changes. Most new solutions remain outside the scope of application of the existing standards. Many people draw attention to the term "law of the horse" formulated by Judge F. H. Easterbrook. According to its proponents, the fact that a horse can be owned, sold, rented or raced in particular does not mean that special legal regulations dedicated to horses should be created. However, in my opinion, this concept has one drawback - a horse is an animal. At the same time, most legal orders contain legal regulations concerning animals. Digital goods are digital data recorded on appropriate media. While the regulation of codes is residually covered by copyright protection, it still raises many questions. However, regulation of digital data is found in vain in the vast majority of jurisdictions.

This project assumes a detailed analysis of the current regulations, searching for foundations for a universal data protection model. The main problem faced by the project manager is the attempt to answer the question of whether the existing data protection regulations are sufficient in the context of technological development, and thus whether they ensure an adequate level of protection of the interests of data "owners" and free circulation of data while protecting the public interest. In addition, however, it may be necessary to create new data rights. In that case, the project seeks to answer the question of what types of data should be protected and what kind of data rights should be created.

Thus, the development of the presented problem, focusing on the key but still unsolved aspects of data "ownership", will allow to solve the fundamental issues for the further development of the field of new technology law (for the effective regulation of data processing rules, it is first necessary to identify data as an object of legal relations correctly), as well as to fill the gap in the science of law, which so far has not been able to combine the existing regulations and the above problems. Moreover, I also see potential in using the research results by the entities applying the law. Because of the above, the research results will significantly impact the development of science in the field of certainty of trade and use of data and may also become a theoretical basis for regulation of data rights at the Community and national level.