Digital Formalization and Russian Cyber Laws

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Abstract

Digital technologies are increasingly leading to the need for their reflection in law. On the one hand, social relations are changing, which are regulated by law, which inevitably entails the appearance in the legislation of indications of new facts that are associated with the emergence, change and termination of rights and obligations, their implementation and enforcement, the introduction of previously unknown objects and subjects of legal relations. On the other hand, the law itself is becoming more and more voluminous, since it is detailed by the legislator in response to the quantitatively increasing demands of members of the society for the most complete protection of their rights in conditions that have not previously existed. As a result, the relationship between the provisions forming the rule of law is lengthened and complicated, and their application, compliance, execution and use become difficult. Therefore, there are electronic reference and legal bases, Internet resources, programs for computer technology that provide orientation opportunities in the regulatory material. Algorithms and platforms are also created that act as a means of performing actions, the order of which is enshrined in law. Gradually, the law takes on a machine-readable look, and its full digital look is possible in the future. Problems in the field of digital formalization of civil law at the moment are associated with a lack of understanding in programming law as a multi-level system used in the regulation mechanism of public relations. Promising is the direction of scientific research as the "ontology of bills" or requests for dispute resolution. Such a mechanism shall contain words and expressions that people use when formulating a situation that has forced them to apply for legal regulation. It is possible to create ontology, within the framework of which the decision made by the court is stated in an understandable form. In any case, based on the results of this mechanism, one can get only a general idea of how the legally important relationships are reflected in laws. The accuracy of legal ontology can only be guaranteed on a dogmatic basis.

Introduction

Machine readability allows for an "inventory" of all legally established rules within a huge data set. Moreover, this opportunity can be used, first of all, to get rid of literal repetitions and contradictions in the texts of regulatory entries in the current law, which is already being implemented [1]. Of course, bearing in mind the power potential of computer technology, one shall count on more significant results. For example, to create a program similar to a calculator, where the actions subject to legal assessment are represented instead of the numbers one enter, and the result is the specified assessment based on the rule of law. In other words, it is the automatic selection of legal provisions related to the hypothesis, disposition and sanction of the rule of law, through which the qualification of a particular dispute and its resolution are possible. It seems that the creation of such a product would solve a number of problems of legal science and practice. However, in order to obtain such a result, which can be designated as creating a digital format of law, one should take into account the peculiarity of data that is extracted using the computer technology from various legal acts.

Methods

The main methods used during the writing of this work are as follows: comparative legal method, complex analysis method, interpretation method, sociological method, system analysis method, and intersectoral approach method.

Results and Discussion

Law is a phenomenon of an ideal order of fundamental value to society. In general, digital technologies shall serve to achieve the goal of law - to ensure the interests of citizens, since they are only a means to make its achievement more complete. In addition, one should proceed from the definition of law as a complex multi-level system, expressed in numerous acts, with the help of which public relations are regulated within the framework of a specific mechanism that functions due to the actions of people.

The world has already created many different software products that use and interpret the regulatory materials using the artificial intelligence to a particular degree (AL&Law) [2]. Some of them are aimed at facilitating access to justice [3], others - at improving the legal culture by helping people to implement their rights and obligations, and facilitating the implementation of the requirements established by law. There are other areas of using legal data: prepara-

tion of texts of the regulatory legal acts and contracts, including their examination, document management of various legal processes, including lawsuits [4], search [5].

It cannot be denied that the legal system can be simpler, more attractive and more user-friendly with the help of digital technologies [6]. As the manifesto of one of the communities involved in legal programming correctly states, "we strive to make the legal system more humane" [7].

Within the framework of the continental legal family, law is more based on logic, therefore, the prognostic approach cannot be fully used to help qualify the disputes, it is not a prognostic approach as such, but the fact that the forecast is based on an analysis of statistics (law of large numbers) in this case. Therefore, programmers have been trying to create formal models of legislation from the late 70s [8].

Today in programming, the specific nature of law is perceived with great difficulty. Axiomatic judgments for the lawyers look more like descriptive declarative statements, which ultimately does not allow the developers reliably reflecting the existing law within the framework of the formal models they create [9]. Awareness of the depth of the legal system, which manifests itself, inter alia, in understanding the rule of law as its subsystem, consisting of elements subordinate to the goal of law (the most important of which is sanction), is not yet reflected in the decisions proposed by programmers in a certain ratio [10]. They rethink law as part of the social sphere, trying to decompose it into elementary interactions [11]. This approach does not lead to adequate conclusions, and therefore, it seems that the efforts of most developers are focused on formalizing typical legal judgments that are used to qualify disputes of the same type at present [12]. It is unlikely that this will help the full-scale digitalization of law, but, of course, such processes shall be automated.

The lack of understanding of the depth of systematic law can be clearly seen in the framework of creating the so-called smart contracts. They are presented as independent regulators, which are formalized in isolation from the law as a whole. Therefore, smart contracts, in fact, are seen as standard forms, which mainly reflect information about the parties and, at best, about a part of the subject, for example, in a delivery contract - about the delivered goods, as well as an indication of the use of automatic order of certain actions, such as debiting funds from the buyer's account and gaining access to data relevant to the goods, blocking funds on the account, their deduction, etc. The question arises: how can the records of the parties and the subject of their relations, as well as references to the technical parameters of individual actions, govern any relationship if neither the rights, nor the obligations of the parties, nor their responsibilities are indicated?

Obviously, the answer to this question lies in the consistency of law, because the contract is a relatively holistic legal regulator, therefore it aprioriso holds all the elements of the mechanism of legal regulation of public relations. At the same time, it should be understood that the contracts defined as smart contracts are binding, the "density" of provisions in which is very high.

The developers proceed from the fact that the parties to smart contracts will not need either security or responsibility, since the digital technologies with which they are concluded, act as a technical protection means. When using even the most modern platforms, there are already, for example, cases of double use of payment means [13]. The persons making transactions suffer property losses and reimburse their legal entities using such digital technologies in their activities. Therefore, allegations that the rules on security and liability, as well as on rights, are unnecessary, at least, do not correspond to the interests of the parties: it is possible to automate the process of concluding and even partially fulfilling the contract, calculating the penalty size, but this will not help to determine the defendant and the responsibility measures in case of violation of rights.

Summary

It is necessary to take into account the relationship between the elements of the rule of law - hypothesis, disposition and sanction, as well as the provisions of contracts, without which the law does not work. If one creates digital rules that relate exclusively to factual circumstances, the onset of which entails the emergence of rights and obligations in a regulatory aspect, then the law will remain without its most important part, that is, protective. They need to be combined. Therefore, we need a general concept, an ontology of law, but, of course, more "legal" than that one proposed in 2007 as part of the European Estrella project.

Due to the complexity of compiling the ontology of law, proposals arise for its automatic formation. However, this cannot be considered a solution to the problem, since such an ontology will not be accurate. The result is only a free retelling of how people perceive the law, what they expect from it and how they try to independently obtain a legal solution to their problems.

It should be noted that from this point of view it is only possible to evaluate the opinion on legal regulation, which reflects its effectiveness in a sense. It should be borne in mind that everyone can judge how fully their needs are met, since the latter are of an individual nature. The interests are of a socially recognized nature and therefore, when assessing them, the correlation of the security of interests of all participants in interactions shall be taken into account. It is possible to establish, for example, when formulating questions about whether privileges have been created to ensure the interests of individuals or groups, whether the rules are mutually beneficial for the relationship participants.

Conclusions

The problems of digital formalization that we have identified within the framework of the field of civil law are extremely relevant and debatable. Promising is the direction of scientific research as the "ontology of bills" or requests for dispute resolution. Such a mechanism shall contain words and expressions that people use when formulating a situation that has forced them to apply for legal regulation. In any case, with this approach, one will get only a general idea of how legally important relationships are reflected in the laws.

Acknowledgements

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[6] In particular, the development of visualization of the conclusion of contracts is underway, including through comic books, see: Haapio, Helena and Plewe, Daniela and de Rooy, Robert, Next Gen-eration Deal Design: Comics and Visual Platforms for Contracting (February 25, 2016). InEr-ichSchweighoferetal. (Eds.) Networks. Proceedings of the 19th International Legal Informatics Symposium IRIS 2016. Österreichische Computer Gesellschaft OCG, Wien 2016, pp. 373. - URL: https://ssrn.com/abstract=2747821

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[9] Thus, for example, within the framework of Legal Rule ML, the developers proceeded from the fact that legal rules are divided into the following types: constitutional rules that define concepts or represent activities that cannot exist without such rules (especially legal definitions, such as "property"); technical rules that state that something shall be done in order to achieve something else (especially the rules governing taxation); prohibitive rules that govern actions, making them binding, permitted or prohibited (especially obligations in contracts), see: Charter of the Technical Committee Legal Rule ML OASIS. - URL: https://www.oasis-open.org/committees/legalruleml/charter.php#item-5

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