

Artículo de investigación

Legal Consequences of the Invalidity of a Transaction made by Using Information Technology: Problems of Theory and Practice

Consecuencias legales de la invalidez de una transacción realizada utilizando tecnología de la información: Problemas de teoría y práctica

Consequências jurídicas da invalidade de uma transação feita pelo uso da tecnologia da informação: problemas de teoria e prática

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Abstract

The article deals with the problem of determination of the peculiarities of legal consequences of invalidity of transactions committed with the use of modern information technologies. The authors believe that the development of modern information technologies has led to the emergence of «new» and «transitional» transactions. The object of the study is completely «new» transactions (for example, IT-transactions that are concluded on the Internet, including using the Blockchain technology) and «transitional transactions», which are only partially different in form and/or manner than traditional ones (for example, electronic transactions, transactions where the object is related to the IT-environment, etc.). As to the consequences of the recognition of transactions invalid, then, in the opinion of the authors, the basis is to take the general model of recognition of invalid transactions, which provides for restitution and compensation for damage. Particular attention should be paid to the recognition of invalid IT-transactions to the «a priori validity» of such transactions, which can

Resumen

El artículo aborda el problema de determinación de las peculiaridades de las consecuencias legales de la invalidez de las transacciones comprometidas con el uso de las modernas tecnologías de la información. Los autores creen que el desarrollo de las modernas tecnologías de la información ha llevado a la aparición de transacciones «nuevas» «transitorias». El objeto del estudio son transacciones "nuevas" (por ejemplo, transacciones de TI que se concluyen en Internet, incluida la tecnología Blockchain) "transacciones de transición", que son solo parcialmente diferentes en forma y / o forma que las tradicionales (por ejemplo, transacciones electrónicas, transacciones en las que el objeto está relacionado con el entorno de TI, etc.). En cuanto a las consecuencias del reconocimiento de transacciones no válidas, entonces, en opinión de los autores, la base es tomar el modelo general de reconocimiento de transacciones no válidas, que establece la restitución y la compensación por daños. Se debe prestar especial atención al reconocimiento de transacciones de TI no válidas

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create significant risks for users of the blockade software platform and make it difficult to protect their rights in the future. The results obtained is seen in the creation of a new concept of the law in the information society with the development of an appropriate legal mechanism for the protection of the rights of their participants, in particular, the concept of the invalidity of ITtransactions and their legal implications.

Keywords: IT-transactions, Blockchain, IT sphere, legal regulation, invalid transactions, legal norm, modern information technologies, restitution.

a la "validez a priori" de tales transacciones, que pueden crear riesgos significativos para los usuarios de la plataforma de software de bloqueo y dificultar la protección de sus derechos en el futuro. Los resultados obtenidos se ven en la creación de un nuevo concepto de ley en la sociedad de la información con el desarrollo de un mecanismo legal apropiado para la protección de los derechos de sus participantes, en particular, el concepto de la invalidez de las transacciones de TI y Sus implicaciones legales.

Palabras claves: transacciones de blockchain, ámbito de TI, regulación legal, transacciones no válidas, norma legal. tecnologías de información modernas, restitución.

Resumo

O artigo trata do problema de determinação das peculiaridades das conseqüências jurídicas da nulidade de transações comprometidas com o uso das modernas tecnologias da informação. Os autores acreditam que o desenvolvimento de modernas tecnologias da informação levou ao surgimento de transações "novas" e "transicionais". O objeto do estudo são transações completamente "novas" (por exemplo, transações de TI que são concluídas na Internet, incluindo o uso da tecnologia Blockchain) e "transações de transição", que são apenas parcialmente diferentes de forma e / ou maneira do que as tradicionais (por exemplo, transações eletrônicas, transações em que o objeto está relacionado ao ambiente de TI, etc.). Quanto às consequências do reconhecimento de transações inválidas, então, na opinião dos autores, a base é tomar o modelo geral de reconhecimento de transações inválidas, que prevê a restituição e indemnização por danos. Deve-se prestar atenção especial ao reconhecimento de transações de TI inválidas à "validade a priori" dessas transações, o que pode criar riscos significativos para os usuários da plataforma de software de bloqueio e dificultar a proteção de seus direitos no futuro. Os resultados obtidos são vistos na criação de um novo conceito de lei na sociedade da informação com o desenvolvimento de um mecanismo legal apropriado para a proteção dos direitos de seus participantes, em particular, o conceito de invalidez de transações de TI e suas implicações legais.

Palavras-chave: transações de TI, Blockchain, esfera de TI, regulação legal, transações inválidas, norma jurídica, modernas tecnologias da informação, restituição.

INTRODUCTION

The problem of invalidity of transactions is one of the main problems of modern civil law science. The role played by the transactions in society is the explanation for this.

It should be mentioned, that the essence of civil society is that it is the result of reconciling the interests and relationships that are formed between private individuals and their established associations that exist and operate in a market (Kharytonov, Kharytonova, environment Tolmachevska, Fasii & Tkalich, 2019).

As a rule, in the modern literature on civil law, legal and property consequences of invalid transactions are not distinguished. However, some authors insist that there should be a clear

distinction between legal and property consequences that come to the parties of the invalid transactions (Pidvysotskyi, 2006).

So, under the legal consequences of an invalid transaction or part of it, the fact of recognition of a transaction invalid, if there are grounds for nullity or contestation and the suspension of the existence of an invalid transaction in a legal context, is understood primally. In this case, an invalid transaction ceases to exist from the moment of its commission and is not subject to execution.



METHODOLOGY

The social and legal nature of an invalid transaction was considered on the basis of the Ukrainian, foreign and international laws and special and scientific literature analysis. Social relations arose in the sphere of an invalid transaction were material for study.

In the process of research, general scientific and special methods were used. For example, methods of analysis and synthesis were used to determine the nature and the purpose of an invalid transaction as an object of civil legal relations. Moreover, the formal and logical method was used to formulate the definition of an invalid transaction.

PRESENTATION OF KEY RESEARCH FINDINGS

There may be cases where the transaction is fully or partially executed by one or more (all) parties. In this case, the following property consequences are applied:

- 1) the restitution by the parties to each other of all received on the transaction, and if it is impossible to return the received in-kind the reimbursement of its value in money (bilateral restitution);
- 2) the indemnification to the other party or a third party of damages (in accordance with the procedure established by law) and moral damages incurred in connection with the commission of the transaction.

Property consequences of invalid transactions – are the consequences that arise depending on the grounds for invalidity of transactions, the existence of intent in the actions of the part (parties) of the transactions and apply depending on whether there is a complete or partial execution of the invalid transaction by the parties (party), or the transaction was not carried out at all. On this basis, it is proposed to differentiate the legal consequences of invalid transactions on the legal and property, with an aim to unambiguous perception and avoidance of contradictions by regarding the nature (essence) of the consequences of invalid transactions, to make appropriate changes to the current civil law (Pidvysotskyi, 2006).

Such a position seems to be interesting from a theoretical point of view. It should be noted that in civil law there are general (or legal) and property (special) consequences of invalidity of transactions.

An analysis of existing practice suggests that the parties often perform partially or completely the terms of an invalid transaction (they transfer the property, perform certain work, render services, pay for it, etc.), however, the commission of such actions on an invalid transaction does not have a legal basis, and hence it becomes a sign of wrongdoing.

As a result of the application of the consequences of the invalidity of the transaction, the parties return to the legal position in which they were before its conclusion, in particular, each party is obliged to return to the other party in-kind all that the party has received in pursuance of this transaction, and if this is impossible, in particular, if the received is the use of the property performed by the service provided - to reimburse the value received at prices at the time of the refund (Zavalniuk, Kucherenko & Kharytonov 2010). In particular, it is about bilateral restitution, which is a general consequence of the invalidity of the transaction.

The term «restitution» («restitutio») is also known from Roman law, which in translation means «to restore, to reimburse, and to organize».

Let us turn to the analysis of foreign legislation and practice on this issue. Thus, the civil law of Germany attaches great importance to the requirement of the return of all performed by an invalid transaction. All transferred under an invalid transaction is subject to return under the rules of unjust enrichment (§ 812 of the German Civil Code (hereinafter - GCC)) (Shapp, 1996). In addition, in German law, the consequences of an invalid transaction are directly classified as damages. In case of insignificant or challenged will of the person, § 122 of the GCC provides the obligation for losses incurred by the other party or a third party as a result of relying on the validity of the will, but not higher than the amount of benefit that they could receive in case of reality expression of will. In English law, the term «restitution» is used mainly to indicate the requirement to return what is received «unfairly», that is, «restitution» refers to all the requirements for the unjust enrichment of one person at the expense of another. This means that in order to sue an unjust enrichment, must be mistakes, misleading, inappropriate influence (Kot, 2009).

In France, the transfer of an individually identifiable item for the execution of an invalid transaction does not entail the transfer of

ownership of the thing. Therefore, in the event of the invalidity of such a transaction by a seller who, despite the transfer of property, remains its owner, a vindication claim is filed, and if the thing is lost or alienated to a bona fide acquirer, which can not be claimed, only «condictio» is possible (Hodeme, 1948).

Consequently, the right of foreign countries did not produce any special mechanism for the return of parties in their original state.

The current civil law of Ukraine provides the reimbursement of the value of what was received in-kind (and in case of the impossibility of such a return, in particular, if the received is the use of property, performed work, provided service) by an invalid transaction, at prices existing at the time of compensation (Civil Code of Ukraine, 2003).

Thus, it is proposed to indemnify for an invalid transaction, based on the prices existing at the time of settlement between the parties. The assessment of the amount of compensation must be made at the prices existing at the time of reimbursement.

Bilateral restitution is a general consequence of invalid transaction. which independently of the fault of the parties to the transaction due to the fact that the transaction is invalid. An example of the consequences of the invalid transaction in the form of a bilateral restitution is the following: with disadvantages of the subjectivist (for example, Article 221 of the Civil Code of Ukraine - the commission of a minor person outside his civilian capacity, Article 222 of the Civil Code of Ukraine - the commission of an act by an underage person outside its civilian capacity); cases of procedural defects (for example, Article 218 of the Civil Code of Ukraine - failure to comply with the requirement regarding the written form of the transaction, Article 219 of the Civil Code of Ukraine – non-compliance with the requirement of the law on notarization of a unilateral transaction, Article 220 of the Civil Code of Ukraine - non-compliance with the requirement of the law on notarization of the contract); transactions with disabilities of the will (for example, Article 229 of the Civil Code of Ukraine - transactions committed under the influence of mistakes, Article 230 of the Civil Code of Ukraine – transactions committed under the influence of deception, Article 231 of the Civil Code of Ukraine - transactions committed under the influence of violence, Article 232 of the Central Committee Ukraine – transactions carried out under the influence of grave circumstances, etc.). Restitution can be considered as a separate way of the protection of civil rights that are violated in connection with the invalidity of the transaction. List of methods for the protection of civil rights in Art. 16 of the Civil Code of Ukraine, is not exhaustive. Proceeding from the fact that for a victim as a result of an invalid party's contract restitution is one of the independent ways of the protection of civil rights, it is necessary to determine its value for the guilty party or parties to the invalid transaction.

Consequently, the foregoing applies, first of all, to traditional transactions entered into in writing. However, every day, modern information technologies penetrate deeper into all spheres of public life. In this regard, the question arises as to how exactly the procedure for the conclusion, execution, termination, invalidation, etc. of transactions concluded with the use of modern information technologies will take place.

It should be noted that, in spite of the rapid development of the field of information technology, in many cases, the forms of organization of human relations remain the same as without the mentioned technologies.

This statement concerns, inter alia, contractual relations. As an illustrative example, the concept of electronic contracts, which even modifies the concept of «contract» in connection with the introduction of people of various kinds of auxiliary information and electronic technologies in the everyday life, nevertheless borrow the very idea of the «contract».

Without a doubt, the use of modern information technologies in the field of contractual relations accelerates and facilitates the relations of the parties in such a contract. This applies to both the stages of pre-contract negotiations and all stages of the dynamics of contractual relations (conclusion, execution, termination of the contract). The concept of «smart contracts» is a good illustration of the symbiosis of the idea of a «contract» and modern advances in information technology.

At the same time, we must not forget that such an expansion of such a dynamic sphere as information technology into a sphere that is fairly resistant to change - the law, leads to a collision of the fundamental ideas of these spheres. For example, the use of Microsoft's video messaging system, Skype, makes it possible today, in a number of countries of the Latin notary system, to issue a power of attorney without being in a



notary's office. Thus, one of the basic principles of notarial activities is ignored - the physical presence of the subject in the office of the notary at the time of the notarial act (Electronic notarial acts and paperless processes, 2016).

The International Union of Latin Notaries expressed its position on development of electronic notarial acts and smart contracts at the 28th International Congress (10-19 October 2016 Paris, France). The position of the UINL was that a notarial deed could exist in three possible forms: 1. A paper document with handwritten signatures of the parties; 2. An electronic document signed with a digital signature of a notary's handwritten signature with a notary stamp attached; 3. An electronic document with the signatures of the parties, created on a digital tablet via a digital signature of a notary. However, despite the chosen form of presentation of a notarial act, the client and the notary must be physically present in the notary's office or other specified place (without violating the local notarial legislation on the territoriality of notaries' powers) in order to ensure a proper document authentication process (certification or certification) in compliance establishment of the client's actual will, the availability of a sufficient level of capacity and proper authority of the client to carry out the relevant notarial action, anti-money laundering and terrorism financing, etc.

In spite of the fact that the motives of the UINL are to defend some of the historically established boundaries of the concept of the «Latin notary» in the world speak of the extreme rigidity of the notaries, yet these aspirations are not without objective necessity.

The need to establish the appropriate level of client capacity is dictated by the fact that most countries of the world recognize a transaction made by a person outside of his capacity either invalid from the moment of its execution (void), or voidable with the possibility of further approval of the transaction by the parties and confirmation of it judicially.

A contract which is concluded by a person lacking the necessary legal capacity is or may be rendered invalid. The modalities differ a great deal among the Member States, eg in Germany the contract is void, in England & Wales the contract is alsovoid (in most cases) in the case of minors but voidable in the case of mental illness, in France the contract can be avoided by the court, and in the Netherlands the contract can also be avoided by anextra judicial declaration

(For Germany see § 105 BGB, for England see Re Walker [1905] 1 Ch 60 (cf Mc Kendrick, n 19 bove for further references), for France cf Fabre-Magnan, n 5 above 262, for Italy 1125 CC, and for the Netherlands see 3:49 BW) (Hesselink, 2005).

In turn, it is necessary to distinguish the process of establishing (identifying/verifying) a client and establishing the scope of his capacity. As for today, by using an electronic digital signature, we can exclusively establish (identify/verify) the identity of the subject, but not his capacity in terms of responsibility and adequacy (understanding what is happening here and now; reporting the client to himself in his actions, etc.).

At the same time, the notary is not sufficiently competent to establish the mental responsibility of the client, these are the powers of the respective doctors and the notary does not make the diagnosis, however, as stated in paragraph 2, chapter 4 of Section 1 of the Notary Actions of Notaries of Ukraine: «In case of doubts regarding the amount of civil capacity of an individual who applied for a notarial act, the notary must contact the appropriate guardianship and trustee arising under place of the respective individual residence for the establishment of the absence of guardianship and custody of such person».

Thus, on the one hand, modern technologies facilitate and speed up the process of obtaining the relevant notarial services by the client, and on the other hand, they can be a problem and cause of litigation in case of abuse of the capabilities of such technologies by clients contrary to the principle of Bonae fidei (the principle of contract law).

Given the conditional division of forms of transactions into «traditional», «transitional» and «new», reflecting the peculiarities of the formation of the information society and the use of information technology in the course of the relevant transactions, we note that the consequences of the invalidity of such transactions can be applied in accordance with the general principles of justice, reasonableness, the necessity of compensation for damages, fixed in the current legislation.

Speaking about so-called «transitional» transactions, which include electronic transactions; transactions done with the help of specialized platforms (such as Prozorro); transactions, where the object is related to the IT-environment (site, domain, Internet stuff, etc.), it should be noted that they are regulated by special

legislative acts (Laws of Ukraine «On ecommerce», «On Public Procurement»), which in many respects refer to the Civil Code of Ukraine. However, in practice there are problems related to the inconsistency of certain norms (such as the question of the possibility of recognizing «electronic transactions» as being committed in writing or orally, foreseeing the possibility of committing in electronic form not all transactions, but only some of the (Part 2 of Article 1 of the Laws of Ukraine «On E-Commerce», etc.). There is a practice of issuing new legislative acts regulating certain types of relations that arise in the information society (for example. the Law of Ukraine Confidentiality Services», the current law from 07.11.2018). On the one hand, the publication of such legal acts testifies to the recognition of changes taking place in the information society, but on the other hand - they are issued without taking into account the necessity of creating an integrated system of legal regulation of transactions concluded with the use of information technologies, acquiring specific features, inherent only in certain «newest» types of transactions, etc.

As for «new» transactions, namely, «ITtransactions», it is necessary to take into account the peculiarities of their recognition as invalid and the application of the consequences of such invalidity. We believe that bilateral restitution as a general consequence of the invalidity of transactions can be applied to IT transactions through the use of the analogy of the law (provisions of norms defining the consequences of the invalidity of «traditional» transactions). In this case, taking into account the specifics of such transactions, it is necessary to consider the disputed transactions, which can be declared invalid only by the court. Given the implementation of distributed registry systems (such as for example, Blockchain), it would be advisable to foresee the implementation (program) of the consequences of an invalidated transaction on the basis of a judgment given by the court. For example, restitution may be in the form of automatic data entry in the state register of property rights.

With regard to void transactions, the use of verification of the terms of the transaction using the platform Blockhain with the application of smart laws provides for the prevention of the commission of transactions that do not comply with the existing rules of law (for example, the commission of an act: outside the civilian capacity of the person without the consent of the

authorities of guardianship and guardianship; such, contrary to public order).

The analyzed features of IT transactions also affect the peculiarities of additional consequences of the invalidity of such transactions. Like bilateral restitution, compensation for damage and non-pecuniary damage should be applied as a consequence of the invalidity of certain types of such transactions. Provided that there is a court decision on the occurrence of additional consequences of invalidity of transactions in a computer program, it would be possible to foresee an automatic transfer of funds to the benefit of the victim, which would greatly simplify the process of implementing decisions. The access to state real estate registers etc. will provide objective information in short a short period of time about available resources from the debtor, which may also be useful in executing a decision on damages.

CONCLUSIONS

Thus, in the context of the development of the information society and the introduction of the technologies, distributed latest registry technologies (such as Blockhain) can become a new way of the protection of the civil rights, a guarantee of the protection. Understanding the same actions taken with the help of the Blockchain platform, as IT-transactions requires a number of issues regarding their implications. Particular attention should be paid to the «a priori reality» of such transactions, which may create significant risks for the Blockchain platform users and further impede the protection of their rights. The solution is seen in the creation of a new concept of the law in the information society with the development of an appropriate legal mechanism for the protection of the rights of their participants, in particular, the concept of the invalidity of IT-transactions and their legal implications. Currently, such algorithms as blocking a card with debts for utility bills and so on are widely used. By spreading the application of technologies to all transactions without exception, a standard algorithm can consist in recognizing the legitimacy of actions of the participants of the Blockhain, the recognition of the invalidity of IT-transactions committed with violation of legal norms and the application of the consequences of such invalidity.

We also note that the feature of «machine thinking» is the failure to consider such subjective factors as intent, error, deception, the inadequate experience of the victim, etc., which



should be taken into account in legal transformations in this field. Therefore, we emphasize the need to foresee the consequences of the invalidity of IT transactions only if the court decides to declare such a transaction invalid, without relying solely on automatic programs (algorithms) that do not take into account the «human factor».

REFERENCES

Civil Code of Ukraine (2003). Retrieved from http://zakon4.rada.gov.ua/laws/show/435-15 Electronic notarial acts and paperless processes: Technical and legal issues. (2016). Retrieved from

https://www.uinl.org/documents/20181/44832/T HEME II ENG/d28a02a9-cd48-420e-9af9-30fc44bc5a53

Hesselink, M. W. (2005). Capacity and Capability in European Contract Law. Retrieved from

 $https://papers.ssrn.com/sol3/papers.cfm?abstract_id=869246$

Hodeme, E. (1948). General theory of obligations. Moscow: Yuryzdat.

Kharytonov, E., Kharytonova, H., Tolmachevska, Y., Tkalich, M., & Fasii, B. (2019). Information Security and Means of Its Legal Support. REVISTA AMAZONIA INVESTIGA, 8, 255-265. Retrieved from https://www.udla.edu.co/revistas/index.php/amazonia-investiga/article/view/1341/pdf.

Kot, O. (2009). The nature of invalid transactions. Bulletin of the Academy of Legal Sciences of Ukraine, 4, 108-118.

Pidvysotskyi, V. (2006). Property consequences of invalidity of transactions. Bulletin of the Ministry of Justice of Ukraine, 12, 146-151.

Shapp, Y. (1996). Basics of German Civil Law. Moscow.

Zavalniuk, V., Kucherenko, I., & Kharytonov, E. (2010). Civil Code of Ukraine: Scientific and practical commentary (E. Kharytonov, O. Kharytonova, & N. Holubieva, Eds.). Kharkiv: Odissei.