Legal Issues in the Digital Age. 2022. Vol. 3. No. 3.
Вопросы права в цифровую эпоху. 2022. Т. 3. № 3.

Research article
УДК: 347; 347.65/.68.
DOI:10.17323/2713-2749.2022.3.68.85

Digitalization of Society and Objects of Hereditary Succession

Aleksei Aleksandrovich Volos

National Research University Higher School of Economics, 20 Myasnitskaya Str., Moscow 101000, Russian Federation, volosalexey@yandex.ru, https://orcid.org/0000-0001-5951-1479.

Abstract

The article explores the key issues that arise when digital assets make part of the estate. It considers how the classical theory of inheritance law could be used in the case of digital inheritance and what clarifications should be made to this theory. The purpose of the study is to examine the features of the category "heritable digital assets" and how it evolves as society undergoes digital transformation. To achieve this purpose, the first part of the study is focused on the general issues of the theory of heritable assets while the second part explores the problems of qualifying assets under civil law produced by digitalization of society (digital rights, cryptocurrencies, social network accounts) as heritable. Finally, the third part based on inductive reasoning formulates general conceptual problems of developing legislation for heritable digital assets. Based on the findings, the study concludes that the following legislative solutions to the identified problems are possible: prohibiting digital inheritance altogether; introducing regulation of inheritance specifically for digital assets; allowing digital assets to pass to estate only if they can be realistically made tradable; admitting that inheritance of digital assets is specific. Obviously, the choice of approach will largely depend on public policies regarding the digital economy that in their turn should rely on evidence-based concepts and realistic proposals. The author believes that regulation of legal relationships of digital inheritance in Russia could be based on a mixed method that combines traditional and technology-driven solutions. This is the best option if the assumption is made to allow digital assets into the estate only where they can be realistically made tradable.

Keywords

digital law; digital rights; cryptocurrency; social networks; inheritance; heritable assets; estate; will.

Acknowledgments: The study was funded by a grant from the President of the Russian Federation for governmental support of young Russian scientists (PhD) within the framework of research project MK-165.2021.2 on "Digital Challenges of Modern Inheritance Law".

For citation: Volos A.A. (2022) Digitalization of Society and Objects of Hereditary Succession. *Legal Issues in the Digital Age,* vol. 3, no. 3, pp. 68–85. DOI:10.17323/2713-2749.2022.3.68.85

Background

The digital change has become a major trend and a symbol of progress in all spheres of social life. Researchers and legal practitioners are increasingly used to blockchain, cryptocurrencies and smart contracts while digital technologies are now customary features of contractual, corporate and labour relationships, not to mention intellectual property rights where economic processes have been impacted by the Internet for decades and could not be understood outside this influence.

Inheritance law has traditionally been among the most conservative spheres of legal regulation. While digital technologies have so far had little impact on this branch, it cannot be altogether immune from the processes taking place worldwide. The current situation is simplified to some extent by a small number of real cases but any such case brings up a bitter controversy (one memorable dispute concerned access of a deceased person's heirs to his Facebook account). Meanwhile, disputes of this kind often focus on a particular case since there is no concept of digital inheritance.

The need in this concept will apparently arise sooner or later when owners of cryptocurrencies, valuable social network/computer game accounts, or other digital assets leave an estate while their potential heirs become entangled in litigation. The question at this point will be to what extent the classical theory of inheritance is helpful in such matters. This paper is an attempt to make a pertinent contribution to the solution of the said problem and propose a view on this situation.

Thus, the study purports to look into the features of the category "heritable digital assets" and how it evolves as society undergoes digital transformation. The paper will focus on the general issues of the theory of heritable assets and on the problems of qualifying assets under civil law produced by digitalization of society (digital rights, cryptocurrencies, social network accounts) as heritable. To conclude the paper will formulate general con-

ceptual problems of developing legislation for heritable digital assets based on inductive reasoning, with the author proposing his own view on how the relevant legislation should evolve.

1. Theory of inheritance law

The civil law theory did not know of any major dispute regarding assets to be inherited — at least before digital assets have made their appearance. While it was debated whether specific rights and obligations[1] can be heritable, the principle that property rights pass to estate while non-property rights do not has never been challenged.

This rule traditional for private law is enshrined in Article 1112 of the Civil Code of Russia: an estate shall comprise things owned by the testator as of the date of probate as well as other property including property rights and obligations. The rights attached to a person, non-property personality rights, other intangible goods shall not make part of the estate.

Based on interpretation of these provisions, it is generally acknowledged that property rights should meet certain requirements to qualify as heritable. Firstly, a potential testator should possess them as of the date of probate. Secondly, they should not be linked to the potential testator's personality. Thirdly, inheritance of such rights by succession should not be prohibited by law.

In practice, disputes would arise largely due to inadequate formalization of rights by testators rather than qualification of assets as heritable. Disputes of this kind concerned the inheritance of housing whose privatization was not complete[2], structures which were not authorized[3] etc. While courts often adopted different rulings in such cases, this problem suggests a need to improve procedural aspects of formalizing rights to real property rather than controversial interpretation of the rules applicable to heritable assets.

1 For instance, courts adopted different views on the possibility of inheriting a debt resulting from the testator's subsidiary responsibility envisaged by bankruptcy (insolvency) law. See: Review of legal practices of the Supreme Court of Russian Federation. 2020. No. 1, approved by the Supreme Court Presidium on 10.06.2020 // Supreme Court of Russia Bulletin. 2020. No. 10.

2 See: Review of legal practices of the Supreme Court of Russia, 2017. No. 1, approved by the Supreme Court Presidium on 16.02.2017. Ibid. 2018. No. 3.

3 See, for example, Supreme Court of Russia Ruling No. 18-KG20-91-K4 of 19.01.2021. Available at: URL: http://vsrf.ru/stor_pdf.php?id=1960006 (accessed: 22.09.2021)

Of theoretical discussions the following is noteworthy. The argument that debts were not heritable and did not pass to estate followed from the fact that heirs were responsible for debt encumbrance only within the actual cost of the inherited assets. According to V.I. Serebrovsky "debts are… only encumbrance on but not part of the estate" [Serebrovsky V.I., 2003: 60].

However, once inheritance is regarded as a process of transfer of rights and obligations, the difference between encumbrance and heritable assets is not quite clear. Debt-encumbered property (for instance, by servitude) is also heritable and makes part of the obligations attributable to the estate.

Internationally, the concept of heritable property is generally the same as the one adopted in Russia, except that a number of regulations apply to relationships arising from legal concepts unknown to the Russian law. Thus, usufruct does not pass to estate in France and Germany. Meanwhile, the continental law assumes that property rights and obligations are heritable while non-property ones are not.

However, while theoretical profile of heritable assets is not challenged at the moment, the ever emerging and rapidly progressing digital *assets* can question the relevance of this concept.

Firstly, the property and non-property components of a number of digital assets are not easy to distinguish. Thus, social network or computer game accounts that originally served the purpose of communication and entertainment have given rise to high-value transactions. Possible inheritance of an account means automatic transfer of property rights (guaranteed by inheritance law) and non-property rights (prohibited by inheritance law).

Second, there will be a problem of inadequate formalization of the rights to digital assets to be inherited since the effective inheritance law does not obviously have the mechanisms would be good enough for this.

Thus, the development and improvement of digital assets and digitization of society as a whole will require to revisit the core approaches to heritable assets or at least to specify the underlying concepts.

2. Civil law relationships resulting from digitization of society

The technological change that accelerated during the pandemic has resulted in the emergence of things unheard of in classical civil law. Obvi-

ously, civil law assumes the principle of contractual freedom, with agents free to transact in any asset except those explicitly prohibited by law or to do so subject to the established restrictions. Meanwhile, technological aspects have become so important that legal experts do not always grasp the peculiarities of the emerging relationships.

In 2019 the Civil Code of Russian Federation (hereinafter CCR) came to include a special article on digital rights (Article 141.1). It was explicitly established that such rights were property rights (Article 128), but the situation as a whole was not made any clearer. Firstly, the legally established definitions of digital rights turned out to be not quite laconic and employed the terms which themselves need to be specified (exercise of digital rights, information system rules, disposition of digital rights — all these legal categories have so far failed to elicit a shared understanding of either theoreticians or practitioners). Secondly, civil law has failed to adopt a legal regime applicable to a number of things not explicitly attributable to digital rights as defined by Article 141.1, but which entail real economic relationships (cryptocurrencies, social network/computer game accounts etc.).

Importantly, economic practice is here considerably ahead of the law. Thus, the trade in social network or computer game accounts has become quite common: anyone can purchase, for example, a World of Tanks account with a wide range of choice both in terms of price and quality (power level)[4]. Thus, the relationships are visibly real. Are such relationships governed by law and how they should be governed, is another story.

For example, certain social networks have a clause in their user agreement to regulate the transfer of account after the user's death. This approach is technically reasonable. Moreover, researchers propose to set up an encrypted online bequest system based on blockchain and smart contract technology [Chen C.-L. et al., 2021: 1].

Meanwhile, E. Yu. Petrov is right when he writes that "where a digital asset has the economic attributes of ownership, the contractual restrictions of inheritance approved by the user can be waived by courts" [Petrov E. Yu. et al., 2018: 67]. The situation is tricky. On the one hand, a technological solution is necessary to transfer an account after the user's death (for example, by specifying a heir's email); on the other hand, this option is contrary to provisions of inheritance law and likely to cause reasonable objections on the part of both notaries and heirs omitted in such a "will".

[4] See FunPay (game account exchange). Available at: URL: https://funpay.ru/lots/77/ (accessed: 25.09.2021)

The theoretical problem can be generally described as follows: a digital asset should be part of the estate as meeting the core requirements to things subject to legal relationships of inheritance (primarily giving rise to economic relationships). However, this recognition will make it impossible to implement the core principles and rules of inheritance law in terms of both procedural aspects (mentioned above) and protection of rights of the parties to legal relationships.

Taking smart contracts as an example, imagine what rights and obligations they would entail after the death of a person deciding to use this technology. It was argued that "the problem of apparently impossible assignment of a right/claim under the original smart contract is solvable" [Efimova L.G., Mikheeva I.V.,Tchub D.V., 2020: 98]. The researchers went as far as to propose specific ways to address this problem largely shared by the author of this study.

Succession inheritance is apparently possible in this situation. However, it is not quite clear what is the procedure and the agency to refer to for implementation of such rights. Let's imagine that the transfer is automatic: cryptocurrency has been transferred to heirs but is not available for lack of a key.

As another example: let's recall that para 1, Article 1149 of the CCR about the right to mandatory share in an estate serves the purpose of providing financial protection to those in precarious situation due to old age or poor health. The right to mandatory share in a digital asset appears strange both from a perspective of its essence (transferring a computer game account as a protection from old age or poor health?) and from a perspective of the procedure (transferring codes and passwords to those not mentioned in a will?). While this problem will be apparently solved by transferring other than digital property as a mandatory share, it will be necessary to determine the value of the said digital asset anyway.

This paper will focus on certain types of digital property (digital assets) — digital rights, cryptocurrencies, social network accounts — in light of the principles of inheritance law and a possibility of passing to estate. It is not possible to discuss all possible digital assets deriving from digitization of society since new ones keep coming into existence[5].

[5] Thus, there was a discussion in mid-2021 on tradability of exclusive digital tokens to images of all Hermitage paintings. While their inheritance has not been an issue so far, it is logical to assume that, once such digital assets are tradable, they should apparently pass to estate. For details see, for example, Ivanov A.A. *Stop the Hermitage!* Available at: URL: https://vk.com/ivanov.pravo?w=wall-126165392_1917 (accessed: 01.10.2021)

Meanwhile, there is no sense in discussing all such assets. A study of some of them will provide an insight into the main development trends of the legislation and legal practices, as well as into the approaches developed by business practices, and will allow to propose ways to improve the legislation.

As a matter of convention, a "digital asset" (digital thing, thing existing in a digital form) means in this paper a data resource deriving from the right to value and tradable in a blockchain as a unique identifier[6]. Importantly, such assets exist in a computer code and give rise to real relationships, primarily economic.

2.1. Digital rights

A long-awaited introduction of this concept to law has done little to simplify the general understanding of how digital assets are traded, with strange legislative restrictions only to make this situation especially confusing. Many researchers are amazed at the solution chosen by the legislator whereby digital rights are deemed the rights to claim and other rights named as such in the law, with their content and terms of exercise to be determined by the rules of a qualified data system. "Thus, the law should not only name certain rights as digital ones but explicitly qualify the data system under whose rules these rights will be deemed tradable" [Blazheeeva V.V., Egorova M.A., 2020: 266].

The author of this paper believes that the rule of Article 141.1 runs the risk of becoming a dead letter almost never used in practice. A distinctive feature of digital assets is that they emerge and improve on a permanent basis. This is what digitization of society is about. However, the logic of Article 141.1 is to "squeeze" digital rights into the boundaries of only those rights that are named in the law, something that is contrary to the principles and trends of digitization taking place worldwide.

The following wording from para 1, Article 141.1 deserves special attention: "No exercise, disposal of a digital right including transfer, pledge, encumbrance or other restriction of disposal shall be possible *unless performed in the data system without recourse to a third party* (italics added. — A.V.)".

How this rule should be interpreted in respect of a will? Is it conceivable that a will regarding digital rights may be made in a data system without

[6] See for instance: URL: https://www.banki.ru/wikibank/tsifrovoy_aktiv_/ (accessed: 01.10.2021)

recourse to a third party? The answer will obviously be negative since testamentary rules are specific in respect of other transactions.

On the other hand, para 1, Article 141.1 may be interpreted differently: once a will cannot be made "unless within a data system and without recourse to a third party", no disposal of digital rights in the event of death will be allowed. From a perspective of formal logic such interpretation is quite plausible. The only hope is that the legal practice will, rather than following this path, regard digital rights as a special kind of property rights that make part of an estate.

Among students of digital rights Yu. S. Kharitonova is willing to qualify them as heritable but believes that "only tradable digital assets can pass to estate as part of universal succession". Further she adds: "Digital inheritance in law is restricted, depending on a particular asset, by the contractual terms and/or statutory right of individuals to privacy" [Kharitonova Yu. S., 2020: 5]. That is, the problem of whether a particular digital asset will pass to estate should be solved on a case-by-case basis irrespective of the regulatory model chosen by the legislator.

A simple statement of the fact that digital rights are property rights has not obviously settled the question of qualifying them as heritable once and for all. This issue is unlikely to be solved without technical solutions supported by legislatively established rules.

In this regard, it is hard to share the optimism of certain authors who believe that specific problems in this sphere could be removed already now. For instance, it is argued that information on the existence of digital rights owned by a testator can be obtained through a review of email messages, banking transactions, entries to a register of rights reflecting transactions with assets, certified tokens etc. At the same time, it is admitted that access to e-wallets of testators identified by the heirs cannot be enforced so far in absence of a code [Bessarab N.S., 2020: 370].

Any action to study email messages, analyze banking transactions etc. will inevitably run into problems of legal (who will provide access to a banking secret or email messages?), physical (how many such actions should a heir perform and will they result in "discovery" of a digital asset?) and technical (what are the tools to be used?) nature. Therefore, it is very likely that where a heir was not aware of the existence of digital rights while the testator failed to mention them in his will, there is no chance at all to inherit them.

2.2. Cryptocurrencies

Bitcoins and later other cryptocurrencies have made a splash in the economy over the last decade. While a growing interest in cryptocurrencies is unlikely to be observed at the moment, they still hold an important place in civil transactions (including from a perspective of value and as a cash asset).

The legal profile of cryptocurrencies is controversial. While in formal terms they cannot be qualified as digital rights, researchers treat them as part of a non-exhaustive list of properties or as "other property" [Saveliev A.I., 2017], or special "digital property" [Efimova L.G., 2019] regulated by the CCR. In the international literature it is generally recognized that relationships in respect of cryptocurrencies are those of ownership [Low G., Tan T., 2020].

In Russia, there is no formal confirmation of it although the Supreme Court actually established that the relationships in respect of cryptocurrency were by law those of ownership. Thus, the following conclusion was made in one of the cases: by having transferred his property (cryptocurrencies) in exchange for cash receipts through a cryptocurrency sale transaction, the person in question pursued a certain economic purpose. Thus, there was a legal basis for the receipt of cash[7]. It follows that cryptocurrencies should pass to estate as assets qualifying as heritable.

A discussion of the procedure for inheritance of cryptocurrencies raises up questions as well. T.S. Yatsenko rightly observes that "it is currently impossible to enforce access to an e-wallet identified by heirs unless there is a code" [Yatsenko T.S., 2019: 14]. In addressing the issue of passing cryptocurrencies to estate, one needs to take into account the functional features of cryptocurrencies as a whole and specifics of a particular cryptocurrency. An approach whereby inheritance in law of cryptocurrency assets is technically impossible due to peculiarities of the asset itself is worthy of discussion [Omelchuk O., Iliopol I., Snizhanna A., 2021: 103–122].

In fact, cryptocurrencies are used according to the rules of a network where users have unique logins and passwords (and possibly other means of identification such as fingerprints). With regard to digital assets, notaries are already aware that "once a testator has failed to communicate his

[7] Civil Chamber of the Supreme Court of Russia Ruling No. 44-KG20-17-K7, 2-2886/2019 of 02.02.2021 // SPS Consultant Plus.

login and password to heirs, they are unlikely to inherit the right to a social network page or valuable network game character"[8]. The same is true for cryptocurrencies.

It is worth noting that legal experts have already made recommendations to cryptocurrency owners on how to proceed to make sure their assets are inherited by other persons after their death[9]. Meanwhile, these recommendations do not fully follow the law for lack of a specific procedure to make a will in respect of such cryptocurrency assets. It is impossible to predict how representatives of the notary profession and courts will react.

There are evidence-based approaches to mechanisms for cryptocurrencies to pass to estate. A possible procedure includes a "classical will and use of a deferred payment system (transfer of all cryptounits to the proposed heir within certain dates" [Dovlatova A.M., 2020: 50]. Meanwhile, both these options are fraught with practical problems. Making a "classical" will with a public notary may run into the problem of describing the heritable asset in question while the deferred payment system assumes that a cryptocurrency owner should be active and review this function on a permanent basis.

It is telling that upon his study of the cryptocurrency regime in Russia R.M. Yankovsky came to a discomforting conclusion that there was a trend to prohibit any such transactions. This author points out that, while cryptocurrencies are not formally included into the estate, "the regulator will shortly resort to sanctions for violation of the new law, and identify the obligations and prohibitions applicable to the issuance and transactions with cryptocurrency" [Yankovsky R.M., 2020: 43, 68]. The statement follows a certain logic as the legislator has introduced numerous prohibitions in respect of cryptocurrencies over the last few years, with legal rights of the parties to such transactions drifting away from regulation.

Let's imagine what happens if cryptocurrency transactions are prohibited in Russia. There will be a tricky situation of a conflict of laws related to regulation of the relevant relationships. As there are countries where cryptocurrency transactions are allowed and even encouraged, it is unclear how

[8] See *Moscow notaries investigated how to inherit digital assets.* Available at: Moskovskiye notariusy razbiralis kak peredat po nasledstvu tsifrovyie aktivy (notariat.ru) (accessed: 11.05.2021)

[9] See Inheriting cryptocurrency in Russia: what is important to know. Available at: Peredacha kriptovalyuty po nasledstvu v Rossii: chto vazhno znat: RBC (rbc.ru) (accessed: 11.05.2021)

the rights of a cryptocurrency owner's heirs will be protected if the law governing the inheritance relationships will be that of the Russian Federation.

While there is currently no reason why cryptocurrencies should not pass to estate, their technical and economic features are such as to make the succession by inheritance not only problematic one, but altogether impossible.

2.3. Social network accounts

Social networks were originally used exclusively for personal purpose (such as correspondence, making friends, disseminating information about oneself). Now social network accounts have evolved into business tools for quick and efficient marketing of goods and services. There is a belief that a social platform account can never serve individual purpose alone. It operates as a network component for the benefit of all users through an exchange of digital content. Other authors argue that the main purpose of each account is to satisfy the needs of both economic and non-economic nature [Grochowsi M., 2019: 1198].

There are different approaches to the legal nature of an account: an entry to the server of a social network's owner; an agreement between the user and network organizer; mixed nature [Panarina M.M., 2018: 29-30]. However, there are doubts whether the proposed options apply to all situations. A social network account can be used for a variety of purposes by one or more persons and have a unique content etc. All these things combined are supposed to affect its legal nature and thus the rights and obligations of the parties to the relationships in question. For example, while the name of one account can be registered as a trademark or service mark, that of the other cannot. Another example: the use of a business account to process consumer claims.

Interestingly, in considering one case the court ruled that a business account can be part of a business sale agreement[10], that is, incorporated into an enterprise as defined by the CCR. Obviously, an account could be treated in this original way as well.

While there is no legal provision on inheritance of social network accounts in Russia, a number of international researchers argue that the law should explicitly establish a procedure for their inheritance. It is asserted

[10] See: Third general cassation court ruling No. 88-18815/2020 of 09.12.2020 (unpublished) // SPS Consultant Plus.

that, while digital services and digital content are defined in various legal documents at the EU level, there is yet no universal definition which has to be introduced by way of amendments to EU directives.

However, the situation is not straightforward even within the EU as there is currently no EU-wide method of managing a digital estate though some countries (Estonia, Croatia, Netherlands, Poland, Italy) have their own special (and different) rules. For example, while digital rights including those to accounts are heritable in the Netherlands [Berlee A., 2017: 256–260], the Croatian legal theory and practice treat this issue with certain doubt [Vučković R.M., Kanceljak I., 2019: 724–746]. The Estonian regulation is unique in the EU as it is explicitly acknowledged by law that digital assets are heritable. Even personal belongings of the deceased (such as letters, diaries, email correspondence and personal messages in social networks) pass to their heirs provided they are stored on a hard disk or flash memory [Kolk K-A., 2020: 22].

Regarding international legal practice, the German Federal Court of Justice has made a splash when it recognized the heirs' right of access to a social network account of a deceased person. The extent of access to the account was specified in the ruling published on 15 September 2020: parents of the deceased were given the same access rights as those of the original user. When representatives of the social network provided a flash storage with a PDF file containing the account details, the court considered it to be not sufficient[11].

Thus, a social network account should theoretically make part of the estate, once its economic value (for example, for the purpose of doing business) has been proved. Meanwhile, the procedure for its transfer is not altogether clear from the perspective of law.

3. Digitization of society and digital inheritance: legal development prospects

A study of the prospects to pass to estate certain assets existing in the digital form brigs up similar findings almost in all cases.

[11] Germany: Federal Court of Justice Clarifies Scope of Postmortem Access to Social Media Accounts. Available at: https://www.loc.gov/law/foreign-news/article/germany-federal-court-of-justice-clarifies-scope-of-postmortem-access-to-social-media-accounts/ (accessed: 25.03.2021)

Firstly, all digital assets and other things under study qualify as heritable assets. Thus, cryptocurrencies (like digital rights or business accounts in a social network) are owned by the potential testator at the date of probate; they are not linked to the potential testator's personality (with exception of some aspects related to the asset's distinctive features, such as personal correspondence in the account). Moreover, the law does not explicitly prohibit — at least for the time being — to pass such rights and assets to estate.

Second, it is not always simple to calculate the value of such asset. This criterion, which should not be decisive in qualifying rights and obligations as part of the estate, can cause estate distribution problems, for example, when calculating a mandatory share. Moreover, certain valuation mechanisms — for example, of a computer game account — are possible as they determine the market demand and supply this way or another.

Third, "digital assets" are peculiar in that third-party access is complicated and often impossible. While sometimes access is possible only after a court ruling (see, for example, a German case regarding Facebook), there are cases when assets (cryptocurrencies) cannot be used at all without a code/password. In this situation, the "digital asset" is not heritable in practice, unless the testator has made a special disposition.

Fourth, as follows from the previous point, a transfer of "digital assets" from the testator to a heir is complicated even with both parties willing. While it is technically possible to envisage certain ways of transfer, the problem is whether they will be allowed by law.

Fifth, it may be that nobody except the testator is aware of the digital asset's existence. Where the testator used his business account or made transactions in cryptocurrencies on his own (including under an alias), his heirs are unlikely to ever know of the estate's existence.

In light of the above, the following legislative solutions are feasible, with the choice largely depending on public policies in respect of the digital economy.

First option: completely prohibiting to inherit digital assets; this would be contrary to the worldwide trend of digital economic development but would solve many problems in this sphere (for instance, complications inherent in the transfer of digital assets to heirs). Although there are practically no theoretical grounds for such solution, it may be possible to assert that all digital *assets* are linked to the testator's personality. This is a controversial but quite feasible approach, once we assume that codes/passwords

identify a person to the point of establishing personal link between the agent and the asset.

Second option: establishing special legal regulation for inheritance of digital assets. As such, this involves a possibility of making a special "will" (within a data system, social network etc.) or instituting a special procedure for transfer of rights and obligations under the rules of a technological network rather than procedures established by the CCR. However promising, this option cannot be implemented without infringing on the core principles of inheritance law and will also restrict the involvement of the notary profession — which in Russia holds a monopoly on formalizing the inheritance rights — in succession procedures. Whether the state is ready for this situation is an open question.

Third option: allowing digital *assets* to pass to estate only where they can be realistically made tradable. For example, where a cryptocurrency key/password is lost (failed to be specifically passed by the testator), the cryptocurrency cannot be transferred to heirs. Thus, the cryptocurrency will not be regarded as part of the estate in this situation. This solution is well-founded from a practical point of view but will considerably restrict the rights of heirs (imagine a testator spending all his savings on cryptocurrencies and failing to communicate the password to anyone). This option can be good for a "transition period", until the economic relationships in respect of digital assets are sorted out.

Fourth option: admitting by law that inheritance of *digital assets* is specific (for example, providing for a "will" to be made under the rules of a technological system — in particular, a "will" in respect of a VKontakte page, with a duplicate to be later provided by a notary) but leaving the general inheritance rules as they are. This options is obviously a compromise in the current environment.

Some legislative solutions proposed internationally partially follow the lines described above. It is reported that the introduction of an e-will and extension of the private will regime are promising lines of research and legislative work as the user should be able to dispose of his assets in the virtual space on his own.

The methods to inherit cryptocurrency assets are described as traditional, technological and mixed. Traditional methods assume a classical or private will. Technological methods: deferred payment systems built directly into crypto wallet client software; use of specific web resources to

inherit digital assets; systems for deferred access to wallets. Mixed methods assume that crypto wallets are hetitable both in the paper and hardware forms [Saleh A. et al., 2020: 235, 245].

The author of this paper believes that the mixed approach is the only option for Russia since the traditional approach does not take into account technological features of digital assets, only to result in "grey" schemes to evade inheritance law by any possible way.

Technological methods are possible, only once the departure from the core principles of inheritance law (such as protection of forced heirship rights) is made official. Moreover, such methods will add loopholes for tax evasion and/or capital flight to other countries, and, this way or another, are unlikely to be allowed in this country.

The mixed methods, in their turn, will enable to strike the right balance and involve notaries in the work to pass digital assets to estate and guarantee the rights of heirs.

A legislative solution to the problem of inheritance of digital assets should also strike the right balance between heirship rights and personal data protection. The legal science has stressed the following point: the right of uncontrolled access to assets existing in digital form — even given to a designated person or his heirs — could in most cases collide with the right to privacy, personal data protection and secrecy of correspondence. As a possible solution, such stated will — once the testator has designated a specific person as heir — should be given consideration including for access to all personal data.

As another aspect worthy of the legislator's attention, digital assets should be differentiated and assume different inheritance procedures. For example, there should be different procedures whereby business accounts and ordinary accounts pass to estate. In each specific case it should be explored whether a specific asset is linked to the testator's personality. It may be that it should not pass to estate at all.

Thus, there are certain legal development prospects regarding the inheritance of digital assets in Russia. Anyway, while distinctive features of such assets should be taken into account, the legislator will need to choose a regulatory option based primarily on the chosen regulatory policies in respect of the digital economy.

To conclude, it is worth pointing out at the Spanish experience of regulating digital inheritance where the legislator in an attempt to regularize the

relationships in question introduced confusing and chaotic rules without caring to propose any technological solution, only to make matters worse despite a laudable pedagogical function [Crespo M., 2019: 101,129]. The Catalonian law of 2017 already provides for a possibility to appoint a digital agent to act vis-à-vis digital service providers who maintain active accounts of the testator [Molins M., 2020: 908].

The difference of approaches adopted in Spain as a whole and Catalonia that is part of Spain is striking. But the most important thing is that laws in this sphere will not work unless they take into account the technological features of the digital estate and are underpinned by universal and understandable concepts. In fact, this is what the Russian legislator is encouraged to do.

Conclusion

Inheritance law in Russia (both in legislation and practice) appears to be the last stronghold against digitization attacks. In fact, civil law rights explicitly include digital rights; in the sphere of corporate relationships, blockchain has been already used for voting for a number of years; contracts and intellectual property have long been discussed through the prism of digitization etc. Meanwhile, the problems in inheritance practices are just emerging — it would be good if the theory and law are up to the challenge.

The following legislative options are possible, with the choice depending on public policies in respect of the digital economy: completely prohibiting to inherit digital assets; establishing a special legal regime for regulating digital inheritance; allowing digital assets to pass to estate only where they can be realistically made tradable; admitting that inheritance of digital assets has certain specifics.

Meanwhile, the legal regulation of digital inheritance relationships in Russia could be based only on a mixed method combining traditional and technological methods. This method best correlates with allowing digital assets to pass to estate only where they can be realistically made tradable.

The traditional approach does not take into account technological features of digital assets, only to result in "grey" schemes to evade inheritance law by any possible way. Technological methods are possible, only once the departure from the core principles of inheritance law (such as protection of forced heirship rights) is made official. Moreover, such methods will add

loopholes for tax evasion and/or capital flight to other countries, and, this way or another, are unlikely to be allowed in this country.

In any case, it is necessary to legislatively allow certain assets (listed in the law) to pass to estate under the rules of a technological system (including a social network, computer game) rather than legal provisions. This will guarantee digital assets, in particular, cryptocurrencies, to be inherited while allowing individuals to make a disposition in case of death within the technological system itself and will thus ensure the principles of testamentary freedom and inheritance by succession to the fullest possible extent.

References

1. Berlee A. (2017) Digital Inheritance in the Netherlands. *Journal of European Consumer and Market Law,* no. 6, pp. 256–260.

2. Bessarab N.S. (2020) Digital Right in the Field of Inheritance. *Advances in Economics, Business and Management Research,* vol. 138, pp. 366–370.

3. Chen C.-L. et al. (2021) A Traceable Online Will System Based on Blockchain and Smart Contract Technology. *Symmetry*, vol. 13, no. 466, p. 19.

4. Crespo M. (2019) La Sucesion en los "Bienes Digitales". La Respuesta Plurilegislativa Espanola. *Revista de Derecho Civil*, vol. VI, no. 4, pp. 89–133 (in Spanish)

5. Digital Law: textbook (2020) V.V. Blazheeva, M.A. Egorova (eds.). Moscow: Prospekt, 640 pp. (in Russ.)

6. Dovlatova A.M. (2020) International experience of cryptocurrency inheritance as a tool for the realization of the right to inheritance in society. *Vestnik YURSTU*= Bulletin of South Ural Technical University, no. 2, pp. 47–51 (in Russ.)

7. Efimova L.G. (2019) Cryptocurrencies as assets under civil law. *Khoziaystvo i pravo* = Economy *and* Law, no. 4, pp. 17–25 (in Russ.)

8. Evimova L.G., Mikheeva I.V., Chub D.V. (2020) Comparative analysis of doctrinal concepts for regulation of smart contracts in Russia and abroad. *Pravo. Zhurnal Vysshey shkoly ekonomiki*=Law. Journal of the Higher School of Economics, no. 4, pp. 78–105 (in Russ.)

9. Grochowsi M. (2019) Inheritance of the Social Media Accounts in Poland. *European Review of Private Law,* no. 5, pp. 1195–1206.

10. Kharitonova Yu.S. (2020) Inheritance of digital assets. *Notarial'nyj vestnik* =Notary Bulletin, no. 1, pp. 5–16 (in Russ.)

11. Kolk K-A. (2020) Digital inheritance in the European Union. Bachelor's thesis. Tallinn, 36 pp.

12. Low G., Tan T. (2020) Cryptocurrency — Is It Property? *Journal of Investment Compliance*, vol. 21, no. 2/3, pp. 175–179.

13. Molins M. (2020) Voluntades Digitales en Caso de Muerte. Cuadernos de Derecho Transnacional, vol. 12, no. 1, pp. 908–929 (in Spanish)

14. Omelchuk O., Iliopol I., Snizhanna A. (2021) Features of Inheritance of Cryptocurrency Assets. *Ius Humani Law Journal,* vol. 10, no. 1, pp. 103–122.

15. Panarina M.M. (2018) Inheritance of social network accounts and issues of digital inheritance: legal research. *Nasledstvennoe pravo*=Inheritance Law, no. 3, pp. 29-30 (in Russ.)

16. Petrov E.Yu. et al. (2018) Inheritance Law. Commentary on Articles 1110-1185, 1224 of the Civil Code of the Russian Federation. Moscow: Logos, 656 pp. (in Russ.)

17. Saleh A. et al. (2020) Legal aspects of the management of cryptocurrency assets in the national security system. *Journal of Security and Sustainability,* vol. 10, no. 1, pp. 235–247.

18. Serebrovsky V.I. (2003) Selected works on inheritance and insurance law. Moscow: Statut, 558 pp. (in Russ.)

19. Saveliev A.I. (2017) Cryptocurrencies in the system of assets covered by civil rights. *Zakon*=Law, no. 8, pp. 136–153 (in Russ.)

20. Vučković R.M., Kanceljak I. (2019) Does the right to use digital content affect our digital inheritance? *EU and comparative law issues and challenges series*, no. 3, pp. 724–746.

21. Yankovskiy R.M. (2020) Cryptocurrencies in the Russian law: monetary surrogates, "other assets" and digital money. *Pravo. Zhurnal Vysshey shkoly ekonomiki*=Law. Journal of the Higher School of Economics, no. 4, pp. 43–77 (in Russ.)

22. Yatsenko T.S. (2019) Inheritance of digital rights. *Nasledstvennoe pravo*=Inheritance Law, no. 2, pp. 11–14 (in Russ.)

Information about the author:

A.A. Volos — Candidate of Sciences (Law), Associate Professor.

The article was submitted 20.06.2022; approved after reviewing 11.07.2022; accepted for publication 19.08.2022.