LETTER TO THE EDITOR

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Impact of Digital Assets on a New Way of Organizing Social Relations Based on Trust

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Dear Editor!

Rapid pace of distribution of information technologies in all activity fields caused the emergence of blockchain-based information platforms a long time ago, and now this area is in active development. Under the influence of digitalization and instability of the global financial system, which is evident from the global crisis that started in 2020, further development of such information platforms creates the foundation for global transformation of social and socioeconomic relations into a new form. Such information platforms will be able to realize the needs of society to integrate the model of independent resource (tangible and intangible assets) management without intermediaries regardless of time and location of platform users.

Obviously, the development of the blockchain technology creates the conditions for the emergence of a new economic model of society based on a progressive mechanism of using any resource following its digitization. This means using "digital assets" as information resources for a new stage of developing market and social infrastructure, which would be universal for the majority of countries.

The aim of this paper is to concisely present the possibilities of using digital assets through blockchainbased information platforms for a new way of organizing social relations based on trust.

The previous research works of opportunities to integrate digital assets (Kud, 2019a) allowed identifying methodological gaps and even contradictions between the globally and domestically announced need to develop the economy as a whole and specifically the market of information resources, products and services, and the absence of the developed theoretical, methodological and applied provisions for the mechanism of using digital assets in developing the market infrastructure.

Despite the growing number of publications on "restarting" the global economy, we can state that:

1) the potential of blockchain-based tools still requires

more research and is not accepted by society. Governments take a closer look at it clearly showing their interest in this phenomenon. This derives from our conclusions of analyzing the relevant state strategies in certain countries (Germany (Federal Ministry for Economic Affairs and Energy, 2019), Australia (Australian Government, 2020), Singapore (Smart Nation Digital Government Group, 2018), USA (Chamber of Digital Commerce, 2019), Estonia and others) for 2018–2020;

2) the existing blockchain solutions on the market do not have a uniform approach to resolving the relevant issues of economy and public administration.

In other words, we see the potential of blockchain, but there is a certain hesitation and lack of clarity when it comes to breakthrough solutions in this area, which would allow us to offer our country a new economic "norm" and stable development trajectory. As a result, this allows us to further develop our scientific logic that the mechanism of using digital assets is the one that initially implies comprehensive solutions to numerous economic issues from micro- to macro-level. So, how can social relations change with the use of digital assets and the blockchain technology?

The mechanism of using digital assets as a way of organizing social relations will create the opportunity to build any economic and legal relations based on the blockchain technology in compliance with all requirements and regulations of both the current legislation and international law. The use of this mechanism will potentially allow for an unpersonalized (automatic, without the human factor, through smart contracts) regulation of relations between the parties to (or participants of) a contract using certain algorithms in order to fulfill the obligations of each party to such relations.

Having unique attributes and properties, digital assets circulate in a blockchain system according to certain terms and conditions, which are recorded in an information resource of this digital asset. This fact ensures an entirely automatic management of legal relations without third parties (e. g. a judge, public servant or regulating body).

Another important advantage of applying the mechanism of using digital assets is the protected hardware and software infrastructure of the full circulation cycle of these information resources in the form of accounting units of an access token (information platform), the operation of which does not depend on external factors and develops in accordance with specific stages. This platform is based on a "blockchain access token" created as part of tokenization of an information resource, which differentiates a digital asset from any cryptocurrency. This is another argument in favor of establishing trust between the parties: digital asset is confirmed, backed and does not depend on exchange quotations unlike cryptocurrencies.

In addition, we analyzed the possibilities of applying the mechanism of using digital assets to organize new social relations, which made us realize that its implementation: 1) does not require a lot of time and money or special legislative framework (at least for Ukraine);

2) does not require significant human resources because essentially digital asset is an intangible asset (according to International Accounting Standard 38, Intangible Assets) (Ministry of Finance of Ukraine, 2018).

As a result, this method will allow (a) ensuring a more comprehensive and balanced development of the market infrastructure and (b) satisfying the global social demand for a new driving force of economic growth due to progressive investments and, what is more important, for a new way of regulating socioeconomic relations by the government.

Of course, the practical need to implement this mechanism caused the urgency to develop new methodologies for diagnosing blockchain tokens. We have already developed such a methodology in order to confirm the correspondence of a blockchain token to a digital asset to use it in the existing international legal field (Kud, 2019a). This methodology allows listing a digital asset in accounting as an "intangible asset" in accordance with the International Financial Reporting Standards.

Therefore, the mechanism of using digital assets is a new applied direction of managerial, economic and legal solutions to form a new system for organizing social relations. In such relations, the rights and duties of the parties will be recorded in decentralized ledgers based on the blockchain technology and, therefore, their fulfillment is guaranteed automatically, while the activity of all participants is transparent and clear for state bodies (including with regard to taxation).

Further development and implementation of blockchain-based information platforms with the mechanism of using digital assets will lead to a progressive transformation of existing socioeconomic relations at both local and global levels.

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Conflict of interests

The author declares that there is no conflict of interests.

References

- Australian Government. (2020, February 7). The national blockchain roadmap: Progressing towards a blockchain-empowered future. Retrieved February 24, 2020, from Analysis & Policy Observatory Web site: https://apo.org.au/sites/default/files/resourcefiles/2020-02/apo-nid276541.pdf
- Chamber of Digital Commerce. (2019, February). National action plan for blockchain: The need for a comprehensive, coordinated, pro-growth approach to developing blockchain technology in the United States. Retrieved February 28, 2020, from Chamber of Digital Commerce Web site: https://digitalchamber.org/wp-

content/uploads/2019/02/National-Action-Planfor-Blockchain-2-25.pdf

Federal Ministry for Economic Affairs and Energy. (2019, September 18). *Blockchain strategy of the federal government: We set out the course for the token economy*. Retrieved February 25, 2020, from Federal Ministry for Economic Affairs and Energy Web site: https://www.bmwi.de/Redaktion/EN/Publikatio nen/Digitale-Welt/blockchainctrate.org.df2. https://www.bmwi.de/Redaktion/EN/Publikatio

strategy.pdf?__blob=publicationFile&v=3

- Kud, A., Kucherjavenko, M., & Smychek, Ye. (2019). Tsyfrovi aktyvy ta yikh ekonomiko-pravove rehuliuvannia u svitli rozvytku tekhnolohii blokchein [Digital assets and their economic and legal regulation in the light of the development of blockchain technology]. Kharkiv: Pravo. [in Ukrainian]
- Kud, A. A. (2019a). Methodology for determining whether a blockchain token corresponds to a digital asset. Kharkiv: KRPOCH. doi:10.26697/9786177089079.2019
- Kud, A., & Pypenko, I. (2018). Social and economic foundation of the implementation of blockchainbased systems of digital assets in developing countries. *International Journal of Education* and Science, 1(3-4), 42. doi:10.26697/ijes.2018.3-4.30
- Kud, A. A. (2019b). Substantiation of the term "digital asset": Economic and legal aspects. *International Journal of Education and Science*, 2(1), 41–52. doi:10.26697/ijes.2019.1.06
- Ministry of Finance of Ukraine (2018, October 18). International Accounting Standard 38, Intangible Assets. Retrieved February 25, 2020, from Ministry of Finance of Ukraine Web site: https://mof.gov.ua/storage/files/IAS-38_ukr_2016.pdf
- Pypenko, I. S., & Kud, A. A. (2019). Genesis of IT economy: from cryptocurrency to digital asset. *International Journal of Education and Science*, 2(2), 56. doi:10.26697/ijes.2019.2.41
- Smart Nation Digital Government Group. (2018). Digital government blueprint (Summary): A Singapore government that is digital to the core, and serves with heart. Singapore: Smart Nation Digital Government Group. Retrieved from https://www.tech.gov.sg/files/digitaltransformation/dgb_summary_june2018.pdf

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