

# SUBSTANTIATION OF THE TERM “DIGITAL ASSET”: ECONOMIC AND LEGAL ASPECTS

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**C** – Statistical analysis; *Received: 25.01.2019; Accepted: 20.02.2019; Published: 30.03.2019*

**D** – Data interpretation;

**E** – Manuscript preparation;

**F** – Literature search;

**G** – Funds collection

## **Background and Aim of Study:**

### **Abstract**

*The development of the digital economy has led to the emergence of new terms. The research work focuses on the introduction of the term “digital asset” into the scientific use. The scientific publications and research works on the interpretation of the term “digital asset” have been analyzed, and various fields of its use have been considered. It has been determined that today there is no clear definition and understanding of the term “digital asset”.*

*The aim of the study: to substantiate the essence and content of the term “digital asset” on the basis of etymological analysis in the economic and legal aspects.*

## **Materials and Methods:**

*To substantiate the essence and content of the term “digital asset” in the economic and legal aspects, the following complex of theoretical research methods has been used: deduction and induction, analysis and synthesis, comparison, generalization, systematization and interpretation of results.*

## **Results:**

*The term “digital asset” in the economic and legal aspects has been clarified in the research work. Digital asset is an information resource derivative of the right to a value and circulating in the distributed ledger in the form of a unique identifier. The components of the clarified term have been considered in detail in the economic and legal aspects; the interconnection and interdependence between them have been revealed.*

## **Conclusions:**

*The essence and content of the term “digital asset” have been analyzed on the basis of etymological analysis. The use of a*

*complex of theoretical research methods allowed determining the essential semantic features of the phenomenon under consideration, which are characterized by the following four components: economic, legal, information, value. This allowed substantiating the essence and content of the term “digital asset” in the economic and legal aspects, identifying features of the use of this term, as well as clarifying the interconnection and interdependence between its components. Further research will focus on identifying the characteristics of this phenomenon, fields and levels of application, as well as methodological tools.*

**Keywords:** Digital asset, distributed ledger, unique identifier, economic, legal, value, information resource.

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**DOI и UDC** DOI 10.26697/ijes.2019.1.06; UDC 33.053.22-028.63-029.33+340.13

**Conflict of interests:** *The author declares that there is no conflict of interests*

**Peer review:** *Double-blind review*

**Source of support:** *Project (Simcord LLC. (Company ID code 37657823)) No. 049 / 08.01.2019*

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## **Introduction**

The current stage of the economic development of society is characterized by the formation of a new field of economy – digital economy, which is caused by the increasing role of digital technologies as well as information and communication technologies in the development of all major branches of science. Digital technologies that have emerged over the past decade help to find sources of increased efficiency and the possibility of rapid competitive development of market business structures. At the same time, they require restructuring of existing business processes based on new values, priorities and focus on customers, innovation, uniqueness, right to use and transfer, synergize.

The development of the digital economy as a whole, and of digital technologies in particular, has led to the emergence of a new term “digital asset” and to the rapid development of related processes.

Today, the term “digital asset” does not have a single comprehensive definition that would fully reveal the essence and content of the term. This fact greatly complicates the understanding of many processes related to the use of digital assets and quite often affects the distortion and misinterpretation of information laid down in the basis of existence of digital assets. Such terminological confusion creates stable conditions for further establishment of the inconsistency and ambiguity not only of the term “digital asset” itself, but also of the prospects for its use. Therefore, it is relevant to clarify the definition of the term “digital asset”.

The analysis of modern scientific publications and research works on digital assets shows that today there is no clear definition and understanding of this term.

Thus, one group of scholars (Arianova, 2018; Averianov, Evtushenko, & Kochetova, 2016; Buntinx, 2017; Fiduciary Access to Digital Assets and Digital Accounts Act, 2014; Gray, 2016; Harbinja, 2017; Kud & Pypenko, 2018; Osterman, 2018; Sapozhkov & Kriuchkova, 2018; Walker, 2017) employs the term “digital asset”; the second group (Ethereum News, 2018; Tsegoev, 2018; Zaharova, 2018) employs the term “cryptocurrency”; the third group (Velikaia, 2018) employs the term “token”; the fourth group (The main legal portal of Ukraine, 2018) employs the term “virtual asset”; the fifth group of scholars (Lenz, 2012; Owens, 2017; Wink, Concannon, Jennings, Kates, & Gabay, 2018) employs several terms simultaneously as synonyms, i.e. close intertwining of terms can be observed.

When developing the terminological apparatus, we have referred to the recommendations of GOST 3966-2000 (2000).

*The aim of the study.* To substantiate the essence and content of the term “digital asset” on the basis of etymological analysis in the economic and legal aspects.

## **Materials and Methods**

To substantiate the essence and content of the term “digital asset” in the economic and legal aspects, the following complex of theoretical research methods has been used: deduction and induction, analysis and synthesis, comparison, generalization, systematization and interpretation of results.

## Results

The clarification of the term “digital asset” should be based on a clear terminological definition of “digit” (derivative “digital”) and “asset”.

Initially, the word “digital” was used to describe information expressed in numbers. Data, such as images, sounds, words, are represented as a set of digits (1 and 0) in the binary system, which is used directly in the computer field (Encyclopedic Dictionary of Science and Technology, 2018). In the Explanatory Dictionary (Efremova, 2001), the term “digital” is considered as the one translating information using electronic systems into a binary code intended for the sequential processing, storage and transmission of the corresponding information. These definitions confirm that the term “digital” is closely related to the processes of dissemination and integration of information and information technologies into various fields of activity, and is an integral part of the terms and processes that characterize changes occurring not only in the financial and economic sector, but also in society as a whole.

The essence and content of the term “asset” should also be considered. In the Explanatory Dictionary of Finance, the term “asset” is interpreted as a subject of objective reality, be it tangible or intangible, which has some value to the holder of assets (Osadchaja, 2000). In the Encyclopedic Dictionary (2018), the component parts of a property are determined as an asset, excluding existing debts, i.e. commodities, cash, securities, promissory notes, machines, tools, land and buildings, etc. In turn, in the Modern Economic Dictionary, one of the definitions of the term “assets” is clarified as the total amount of money and property that belongs to a business entity (firm, enterprise, company), which the funds of their owners were previously invested in (Rajzberg, Lozovskij, & Starodubceva, 2011).

When considering the term “digital”, it was revealed that it includes both numerical combinations and coding of various types and methods as well as the technology of converting anything into an electronic format (digitization). Most sources link the term “asset” with tangible or intangible resources and property rights. It represents a kind of value, whose owner can be one person as well as an enterprise or society as a whole. By combining these two terms, a digital asset can be defined as a value expressed in a digital form. Therefore, a digital asset is a set of digital (binary) data that are autonomous, uniquely identifiable and have a certain value.

The use of the term “digital asset” in its modern understanding is first and foremost caused by the emergence of the Blockchain technology and cryptocurrencies. In 2009, the first cryptocurrency Bitcoin was created, which became a new phenomenon in the field of economics. Simultaneously, the Blockchain technology was developed, which is a distributed ledger that is a

sequential chain of transaction blocks built according to certain rules, where each subsequent block contains information about the previous one. Such a Blockchain operation allowed ensuring safety and transparency of transactions and processes conducted in it, which is the reason why this technology found its application in many fields. Such tendencies have contributed to the rapid development of the digital economy and attracted a lot of interest from society towards the phenomenon of digital assets. However, due to an ambiguous interpretation and the absence of basic criteria of the definition, some things are called “digital asset”, when in reality they are not one.

Therefore, when clarifying the definition of the term “digital asset”, we will adhere to certain essential semantic features represented by the following four components:

- 1) economic;
- 2) legal;
- 3) information;
- 4) value.

Let us consider them in more detail on the basis of the following research methods: deduction and induction, analysis and synthesis, comparison, generalization, systematization and interpretation of results.

**1. Economic component** in the context of the definition of the term “digital asset”. This component’s significance in the financial field is represented by a unique identifier.

In order to substantiate appropriateness of using the component “in the form of a unique identifier” in the term “digital asset”, let us consider the definitions separately. According to the Explanatory Dictionaries (Efremova, 2001; Ozhegov, 2010), the word “unique” means single, rare, exclusive, exceptional, or one that exists in a single copy. The word “unique” originates from the Latin “unicum” and means “one and only”. Of the variety of interpretations of “unique”, it is necessary to take the meaning “one-of-a-kind” as a basis in order to properly understand this term in the definition of a digital asset.

In the age of information technology and the development of computer technologies, the term “identifier” is strongly associated with the information environment. For example, e-mail, phone number or code can be used as a network identifier.

The meaning of the word “identifier” in the Great Explanatory Dictionary of Modern Ukrainian Language (Busel, 2005) is as follows: identifier is the name of the program object (variable, array,

structure, function, etc.), which allows referring to the object; an attribute that generally defines an entity in a predetermined space. The identifier is always:

- a) unique – considered as an indivisible (atomic) lexeme;
- b) identical – indicates only one entity;
- c) valid in only one address space.

The essential characteristic of an identifier is reflected in the tasks of programming languages in determining applicability of local changes (Busel, 2005). In the Concise Dictionary of Cybernetics, an identifier is presented as a conventional name (label, word) of a collection of information or a group of data, which allows finding and, consequently, retrieving such information from the memory (Concise Dictionary of Cybernetics, 2018).

To clarify the procedure for submitting documents to the state register and to regulate the circulation of electronic documents of legal entities and natural persons, the term “unique identifier” is used. It means a logical sequence of characters using which the applicant, on the official website of the special authorized body on state registration issues, provides information on the status of electronic documents submitted by him/her in order to register a legal entity or a natural person (entrepreneur), as well as receives electronic documents sent to him/her by the state registrar (Ministry of Justice of Ukraine, 2011). The term “unique identifier” is also used in the field of electronic auctions and refers to a set of numbers and letters, which the auction platform automatically assigns to any distributed bandwidth that was distributed between users according to the results of the electronic auction (National Commission of Ukraine, 2017).

The unique identifier is used in information systems and is intended to identify a specific object in the network, as well as allows excluding any probability of duplication of this object and confirms its authenticity.

Based on the interpretations of the terms “unique”, “identifier” and the word combination “unique identifier”, we can conclude that the component “in the form of a unique identifier” indicates the form of representation of a digital asset and implies that it has a unique name. The alphanumeric code assigned by the system, in which the digital asset circulates, allows distinguishing a specific digital asset in the distributed ledger and obtaining the necessary information about it.

With the emergence of the distributed ledger technology, whose structure guarantees safe information storage and the possibility of asset verification, the digital asset obtained a unique property. Any changes made to the distributed ledger (Blockchain) automatically lead to the generation of a new unique identifier, which eliminates the possibility of duplication and illegal use

of the asset. The information about a digital asset contains the following characteristics: its location, registration, legal restrictions and other distinctive features and properties. The Blockchain provides the conditions for identifying a digital asset by giving it a unique hash code, which allows assigning such an asset to a specific entity.

**2. Legal component** in the context of the definition of the term “digital asset”. This component is represented in the legal field by a derivative of the right.

For the correct interpretation of the component “derivative of the right”, it is necessary to define “derivative” and “right”. First of all, let us consider the dictionary materials. Thus, according to the Explanatory Dictionary (Efremova, 2001), derivative must be understood as derived from another object or formed from another object. In the Explanatory Dictionary (Ozhegov, 2010), derivative is suggested to be understood as something that is obtained from something else, or something derived.

Now, we consider it appropriate to analyze the term “right”. It should be mentioned that the polyparadigmatic approach to the understanding of right is caused by the origins of this phenomenon and the centuries-old philosophical polemic around it and, as a result, the ambiguity of its interpretation. Moreover, this word has multiple meanings and is used in everyday speech to refer to various phenomena. In the Explanatory Dictionary of the Russian language (Ushakov, 2007), the following three interpretations of the term “right” are proposed:

- a) formalized set of rules of behaviour;
- b) science, which studies the corresponding formalized rules of behaviour;
- c) measure of possible behaviour, freedom of action provided by the state.

It should be mentioned that it is the third way of interpretation of right in the definition of Ushakov (2007) that is closest to the true understanding of the definition in the context of the term “digital asset”. The language structure “right to” will be used in the author’s definition of the term “digital asset”. In this case, “right” can be replaced with the “guaranteed possibility of something”, wherein the original meaning will be preserved.

The division of the right into its objective and subjective understanding was employed in the Large Legal Dictionary (Dodonov, Ermakov, & Krylova, 2009) as well:

- a) objective meaning of right – a combination of official rules of law that are established and enforced by the state (positive right); rules that derive from the nature of law, which is above formal law (natural right);

b) subjective meaning of right – a measure of the possible behaviour of an entity (rights).

Thus, it is the subjective meaning of the interpretation of right in this source that refers to the definition of the term “digital asset” under consideration. In terms of legal doctrine, Matuzov and Mal’ko (2015) define right as a normalized, orderly form of manifestation of freedom, which is guided in a legitimate direction.

Having analyzed different meanings of the word “derivative”, we can conclude the following: all these terms have a certain basic phenomenon, the subject (source), which determines the origin of a derivative. In other words, “derivative” emerges as a result of the transformation of the source (basic phenomenon) and is able to retain basic properties or rely on them. In turn, the properties of derivatives are predetermined by the properties of sources.

Based on the above-mentioned definitions of right, it can be concluded that in the definition of the term “digital asset”, the subjective approach to interpreting right as the type and measure of a person’s possible behaviour that are governed by legal norms will be used.

According to the analysis of the definitions of the component “derivative of the right”, we can state that they most fully reflect the essence of the principle laid down in the definition of the term “digital asset”. A digital asset is not the right to a value in its interpretation, but it has attributes of a derivative of the right to a value.

**3. Information component** in the context of the definition of the term “digital asset”. This component is represented in the IT field by an information resource circulating in the distributed ledger.

So far, the component “information resource” does not have a universal comprehensive definition. The interpretation of this term varies depending on the subject areas and approaches, in the context of which it is considered.

The term “information resource” is defined in legislative acts as:

a) a combination of documents in information systems: libraries, archives, data banks, etc. (Verkhovna Rada of Ukraine, 2016);

b) an organized combination of documented information, including databases, other combinations of related information in information systems (House of Representatives of the Republic of Belarus, 2008).

The term “information resources”, formed in Encyclopedia of Modern Ukraine (2011), defines these resources as information, which is presented in a specific form, stored, accumulated, processed



and used by interested parties in an appropriate manner. Information resources are characterized by an emergent property, as an information resource can contribute to the formation of new knowledge. Information resources can be interpreted by both a human and a computer program. Dolinko (2018) states that an information resource is data in any form, which are characterized by the possibility of their multiple use. In the Financial Dictionary (2018), information resources are defined as a set of data that are systematized for the subsequent effective acquisition of the necessary information.

Poljakov and Kosarev (2014) point out, that in the twentieth century, the value of information is increasing like never before. Therefore, this led to the emergence of such a fixed expression as “information resources” at one of the UNESCO congresses. According to the authors, information resources are a product of intellectual activity. Poljakov and Kosarev (2014) state that a special characteristic of information resources is that they do not disappear after a certain period of time. In turn, Shuremov (2017) defines information resources as knowledge recorded on a tangible medium, which can later be used by interested parties. At the same time, we should consider the point of view of Prokopenko (2010), who says that an information resource is not just any information, but only the information that is properly arranged and structured. As for Bachilo (2003), she notes that an information resource is only the information that has practical significance, which gives it social relevance.

From all the above-mentioned definitions and clarifications of this term, we can conclude that an information resource is information structured and organized in a certain way and recorded on a tangible medium. Information can be stored, transmitted, used, and updated. An information resource has the properties of practical significance and usefulness as well as the possibility of multiple use (“inexhaustibility”). Unlike other types of resources (natural, economic, temporary), the quantity and quality of information resources increase as they are used. Such a cumulative effect along with the development of modern technologies contributes to the rapid increase in the information potential of society as a whole.

Thus, a digital asset is an information resource in the sense that the information on a value presented in a digital form has such main properties of an information resource as:

- a) information is structured according to certain parameters and categories;
- b) information is recorded on a digital medium;
- c) information can be stored, transmitted, exchanged, used, etc.

In addition, a digital asset in our understanding has an additional property – information on a value is formed by the owner of this value. It should also be noted that an information resource in the context of the definition of the term “digital asset” is deprived of such a characteristic as the

possibility of being copied an unlimited number of times. This is due to the fact that in the distributed ledger, each such resource is expressed in the form of a unique identifier, which ensures stable conditions for the guaranteed ownership of a digital asset by a specific entity. Thus, the following important conclusion can be reached: the value of a digital asset lies in its uniqueness and credibility, which are ensured by circulation of the digital asset in the distributed ledger. Based on these characteristics, one can also designate the high practical significance of the digital asset in the economic and legal aspects.

The component “circulating in the distributed ledger” in the context of the definition of the term “digital asset”.

Let us consider the notion “circulating” on the basis of various sources of information. Thus, in the Financial and Investment Explanatory Dictionary (2018), the term “circulating” is used in the context of monetary or financial values that are to be transferred or sold to another entity. Taking into account that this concept is most often used with nouns, its meaning can be most fully revealed in the context. Thus, in the Financial Dictionary (2018), the definition of “negotiable instruments” (which can be classified as circulating) is given, which means financial instruments and securities, which can be the object of free civil (economic) turnover (for example, promissory notes, bonds, checks, warrants). In addition, it should be taken into account the synonyms to this term for a broader understanding of its meaning: circulating means transferrable, rotating, transitory.

It is also necessary to consider the semantic content of such a category as “distributed ledger”. The term “distributed ledger” has many definitions. Thus, according to the data of the US Federal Reserve System, the distributed ledger is a type of database that is distributed between network nodes; a specific combination of components, including, but not limited to, peer-to-peer networking, distributed information storage and cryptography, which can potentially change the way a digital asset is stored, recorded and traded (Lenz, 2012).

According to Walport (2015), UK Government Chief Scientific Adviser, a distributed ledger is essentially an asset database that can be shared across a network of multiple sites, geographies or institutions. It should also be noted that all participants within a network can have their own identical copy of the ledger. Any changes to the ledger are reflected in all copies in minutes. The assets can be legal, financial, electronic or physical. The security and accuracy of the assets stored in the ledger are maintained cryptographically. This new technology of a distributed information storage is called Blockchain. This technology allows, among other things, keeping records of transactions with both tangible and intangible assets. The Blockchain technology allows digitization of information and its safe transmission. The advantages of this technology are as follows: stability; security; transparency (Zavorina, Erohina, Selifanov, Zvjaginseva, & Sychugov, 2018, p. 3–4).

Savel'ev (2017) defines “decentralized data ledger” as an information system that includes a distributed database and contains information on concrete facts and (or) data on the property right, which is confirmed by certain algorithms.

One of the key properties of a digital asset is the ability to circulate in the digital environment, rather than being copied during transmission from one email address (storage, wallet, cell) to another. A circulating object (digital asset) must necessarily have not only its own circulation environment, but also clearly defined rules and conditions for its existence in such an environment. To be able to establish and monitor the implementation of such rules and conditions, a reliable digital scalable and decentralized ecosystem is needed, which will allow all participants to be confident that the uniqueness of information resources will be preserved. That is why the component “distributed ledger” occupies an important place in the definition of a digital asset.

The distributed data storage system of such ledgers is one of the most technologically advanced. It provides the highest possible level of confidence in the information due to the mandatory procedure of verifying it for accuracy by all nodes of the distributed environment through a certain method of building consensus. Thus, the problem of “double-spending” is also solved. The information contained in such a ledger cannot be deleted or modified, and the reliability and mechanism of this storage method allow creating records on the right to values (assets) in the ledger. This is a necessary procedure in the process of creating a digital asset, which, in turn, requires recording information about the assessment (audit) and other data of the owner of the digitized value in the ledger, including his/her property right to a value. To understand the nature of a digital asset, it is important to take into account the mandatory conditions: the possibility of confirming that a digital asset belongs to a particular entity, as well as the absence of any means of creating a copy of the same digital asset, including by duplicating its unique identifier. Such conditions can only be provided by the distributed ledger technology, which allows guaranteeing the uniqueness of digital asset identifiers and assigning specific identifiers to specific objects.

Thus, it can be concluded that the ability to circulate in the distributed ledger for a digital asset is one of the determining ones. Therefore, the distributed ledger as an information storage system is the only possible environment for the existence and circulation of digital assets, which are the numerical expression of real assets in the space of the distributed ledger.

**4. Value component** in the context of the definition of the term “digital asset”. This component is represented in the field of tangible and intangible assets by the “value” component.

The term “value” has a number of definitions and interpretations that depend on the subject area of their application. In the Explanatory Dictionary (Osadchaja, 1998), the term “value” is

considered as the value of a particular object of tangible or intangible assets. There are two approaches to defining value. Thus, from the point of view of classical political economy (Classical school), value must be considered as an objective reality, which is measured by means of effort put into the production of certain goods. In turn, representatives of the neoclassical school directly associate the cost with the rarity of the requested goods. The neoclassical approach is currently prevailing. In the Encyclopedic Dictionary (2018), value is defined as either positive or negative significance of objects of the material or spiritual world for a person. The Explanatory Dictionary of the Russian language (Ushakov, 2007) has various definitions of value. Thus, according to the author, value should be understood as importance, significance and price of a particular phenomenon or object.

Taking into account the term involved, we can conclude that value is relative worth, utility, or importance, which can also be expressed by different measurement units depending on the area of practical use of such a value and the ecosystem in which such a value exists.

The phrase “derivative of the right to a value” will be used in the definition of the term “digital asset”, since, in essence, digital asset is a kind of a guaranteed right to claim a certain value inherent in this digital asset. In other words, a digital asset serves as a digital display of value. Thus, it is the “value” component that should be used in the definition of “digital asset”, since it conveys most widely and comprehensively the meaning laid down in the definition.

On the basis of the specified essential semantic characteristics, we will substantiate the term “digital asset” in the economic and legal aspects.

**Digital asset** is an information resource derivative of the right to a value and circulating in the distributed ledger in the form of a unique identifier.

The proposed term “digital asset” is represented by components (economic, legal, information, value), which are interconnected and interdependent. This relation is illustrated in Figure 1.

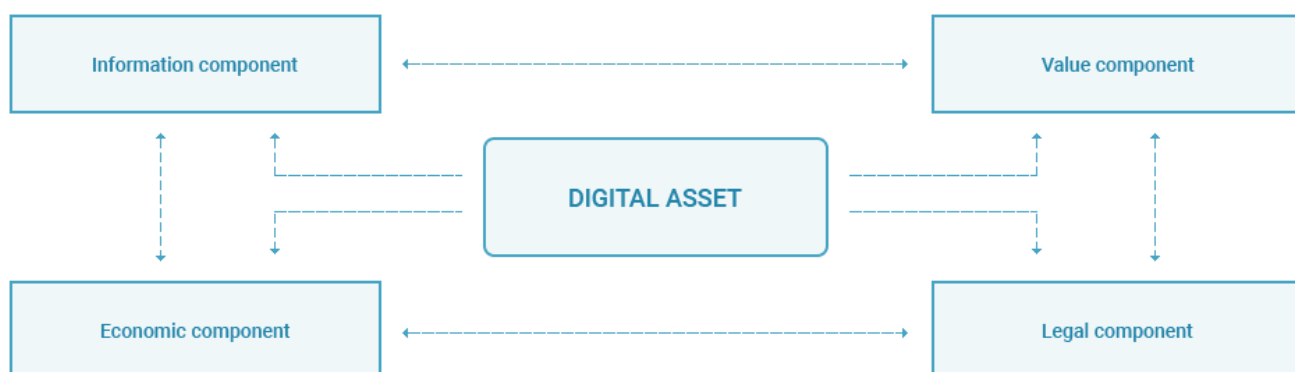


Figure 1. The essential semantic characteristics of the term “digital asset” in the economic and legal aspects.

## Discussion

Let us consider in more detail the terms used in modern scientific publications on the matter of a digital asset.

Today, a number of specialists define cryptocurrencies as a kind of digital assets. Thus, the leading crypto specialist of Cinnober fintech company, Wall (Ethereum News, 2018), defines Ethereum as a digital asset. Tsegoev (2018) applies a similar approach to the definition of Bitcoin. Garlinghouse, CEO of Ripple (Zaharova, 2018), also considers Bitcoin a digital asset, claiming that Bitcoin provides a user with the ability to solve specific real problems, which confirms that it has a value.

There is also an approach whereby certain categories of tokens are considered digital assets. Velikaia (2018) describes utility token as a digital asset that gives the holder of the relevant token the right to exchange it in the future for products or services that are directly provided by the issuer of the relevant token.

A separate group of experts likens digital assets to cryptocurrencies: Lenz, 2012; Wink, Concannon, Jennings, Kates, and Gabay, 2018.

A specific approach is observed in the research work of Owens (2017), where the author studied certain aspects of taxation of digital assets. Digital assets are objects that can circulate in the Blockchain systems. The scholar does not reduce digital assets exclusively to cryptocurrencies, as if deliberately leaving their list “open”.

Social and economic foundation of the implementation of blockchain-based systems of digital assets in developing countries has been examined in the research work of Kud and Pypenko (2018).

Some experts separate the terms “cryptocurrency” and “digital asset”, indicating the fundamental difference between these terms (Arianova, 2018; Averianov, Evtushenko, & Kochetova, 2016; Buntinx, 2017; Fiduciary Access to Digital Assets and Digital Accounts Act, 2014; Gray, 2016; Harbinja, 2017; Kud & Pypenko, 2018; Osterman, 2018; Sapozhkov & Kriuchkova, 2018; Walker, 2017).

Buntinx (2017) says that a digital asset exists in a binary form, and any type of digital data can serve as a digital asset: from a film to a desktop folder. He considers the type of stored values to be the main difference between digital assets and cryptocurrencies. Most cryptocurrencies have a supply

limit, whereas digital assets, if necessary, can be created (theoretically) an unlimited number of times.

A similar approach to the definition of the term “digital asset” was proposed by the researchers of groups of companies of the Centre for Innovative Technologies (Averianov, Evtushenko, & Kochetova, 2016), who consider digital assets to be any events, facts, their characteristics and descriptions, which have been transformed into a digital form and, consequently, have a certain value. Thus, digital assets include such items as passwords, digital images, medical information, briefing notes, and any other elements that are mainly accessed through digital means such as books, music, and films. At the same time, from a legal point of view, digital assets can also be objects of intellectual property, namely, copyrights, trademarks, patents, etc. (Osterman, 2018).

Harbinja (2017, p. 102) and Walker (2017, p. 53) consider any objects, which have a digitized form, to be a digital asset.

The definitions of a digital asset, which were formalized in legislative acts, are more comprehensive. The Fiduciary Access to Digital Assets and Digital Accounts Act (2014) formalized the following definition of a digital asset: digital asset means data, text, emails, documents, audio, video, images, sounds, social networking content, codes, health care records, health insurance records, computer source codes, computer programs, software, software licenses, databases, or the like, including the usernames and passwords, created, generated, sent, communicated, shared, received, or stored by electronic means on a digital device.

New York’s Fiduciary Access to Digital Assets Act (Gray, 2016) states that a digital asset means an electronic record in which an individual has a right or interest. This term does not include an underlying asset or liability unless the asset or liability is itself an electronic record. The given definitions were formalized in existing regulatory documents. Thus, we should also consider the definitions, which are enshrined in some draft laws. In the Draft Law of Ukraine No. 9083-1 (The main legal portal of Ukraine, 2018), virtual assets are defined as tokens and cryptocurrency. This approach to the definition of a digital asset can be described as a narrow, crypto-oriented approach.

Sapozhkov and Kriuchkova (2018) clarify that both rights from uncertificated securities and shares in the statutory capital of business entities can be certified by electronic data, i.e. “digital rights”. In turn, the combination of relevant rights assigned to a specific person is already determined as a “digital financial asset”.

Arianova (2018) distinguishes three main types of a digital asset, which include:

a) formal – fully centralized and can be referred to as those that transfer value only formally;

b) cryptocurrencies – completely decentralized;

c) hybrid – individual elements of the infrastructure of these assets are centralized, while others are decentralized or do not exist at all.

This indicates the resulting distinction in the use of this term in the field of information technology, and in the economic and legal fields. Despite the superficial similarity between the essence of a digital asset and the phenomena mentioned above, there are no uniform criteria that would fully describe its nature and properties.

Having analyzed the above-mentioned approaches regarding the term “digital asset”, it can be stated that today there is a substitution of concepts in society, and a cryptocurrency is often called a digital asset. Such tendencies can be explained by a rather ambiguous cryptocurrency status and, therefore, attempts to minimize the negative attitude towards the phenomenon under consideration.

### **Conclusions**

Thus, scientific papers and research works on the interpretation of the term “digital asset” have been analyzed. The essence and content of the term “digital asset” have been analyzed on the basis of etymological analysis. The proposed term takes into account the essential semantic features of the phenomenon under consideration and is characterized by four components: economic, legal, information, value. This allowed substantiating the essence and content of the term “digital asset” in the economic and legal aspects, identifying features of the use of this term, as well as clarifying the interconnection and interdependence between its components.

Further research will focus on identifying the characteristics of this phenomenon, fields and levels of application as well as methodological tools.

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