POSSIBILITIES OF APPLYING INDIVIDUAL IFRS PROVISIONS FOR ACCOUNTING DIGITAL ASSETS

Maryna Skoryk
Ph.D. (Economics), Associate Professor, Head of Department at the Department of Economic Policy and Sustainable Development, State Tax University
ORCID: https://orcid.org/0000-0003-3291-706X

Inna Kovalchuk
Obtaining the Second (master's) Level of Higher Education, State Tax University

ABSTRACT. Digital assets are becoming increasingly popular and useful as technological advancements integrate into our personal and professional lives. Data, images, videos, written content, and much more have long been considered digital assets with property rights. Most digital assets, such as a company's brand, can be assigned a value (worth), whether monetary or intangible. Some digital items may only be valuable to the creator or an individual, for example, a family photo on your phone. Others may be valuable to a wider audience. In the past, digital assets, such as data or scanned documents, belonged to organizations and were used to realize their utility. However, when blockchain and cryptocurrency were introduced to the public in 2009, digital assets gained new life and purpose. Everything in digital form became something that could be used to create value in the form of tokenization on the blockchain. The heightened interest in digital assets has led to the need to understand their place among an organization’s assets, in developing approaches to formalizing the term "digital assets," options for their assessment, and the methodology of accounting and presentation in financial reporting. The attempt to address the aforementioned issues is the focus of the proposed research.

Keywords: digital assets, virtual assets, crypto currency, accounting for digital (virtual) assets, intangible assets, accounting for International Financial Reporting Standards.

Анотація. Цифрові активи стають все більш популярними та корисними в міру того, як технологічні досягнення інтегруються в наше особисте та професійне життя. Дані, зображення, відео, письмовий контент та багато іншого вже давно вважаються цифровими активами з майновими правами. Більшість цифрових активів, таких як бренд компанії, може бути оцінена вартістю (цінністю), грошова або нематеріальна. Деякі цифрові об'єкти можуть бути цінними лише для творця або однієї людини, наприклад, сімейна фотографія на вашому телефоні. Інші можуть бути цінними для більш широкії аудиторії. У мінулому цифрові активи, такі як дані або відскановані документи, належали організаціям і використовувалися для реалізації їх корисності. Мета. Аналіз актуальних підходів до визначення поняття цифрового (віртуального) активу та дослідження можливостей застосування окремих положень МСФЗ для обліку цифрових активів та використання класифікації віртуальних активів.

Методи. Для досягнення мети застосовано метод критичних оцінок, групування та узагальнення.

Результати. До цього часу між науковцями ще не існує однодність у поглядах щодо сутності поняття віртуальних активів. Проте більшість країн намагається врахувати стрімкий розвиток цього явища, розробляючи відповідні нормативно-правові акти для його регулювання. Аналізуючи діюче законодавство та законопроекти у сфері регулювання віртуальних активів, можна виявити певні тенденції визначення поняття «віртуальний актив». По-перше, на рівні законодавства спостерігається перехід від терміну «віртуальна валюта» до понять «віртуальний актив» або «цифровий актив», що відображає більший спектр. По-друге, існують спроби класифікації віртуальних активів за їхню функціональністю на певні категорії. Запропонована Українським законодавством класифікація віртуальних активів, що обхоплює більший спектр, включає в себе поняття «віртуальний актив». Проте, відповідно до рівні законодавства, він споспіллюється з відомим поняттям віртуальна валюта, що відображає більший спектр.

Ключові слова: цифрові активи, віртуальні активи, криптовалюта, облік цифрових (віртуальних) активів, нематеріальні активи, облік за МСФЗ.
Problem statement. A digital asset typically refers to anything created and stored in digital form, identifiable and useful to an organization. As technological advancements become integrated into our personal and professional lives, digital assets are becoming increasingly popular and beneficial. Data, images, videos, written content, and much more have long been considered digital assets with property rights. Most digital assets, such as a company's brand, can be assigned a value (worth), whether monetary or intangible. Some digital objects may only be valuable to the creator or an individual, for example, a family photo on your phone. Others may be valuable to a wider audience. In the past, digital assets, such as data or scanned documents, belonged to organizations and were used to realize their utility. However, with the introduction of blockchain and cryptocurrency to the public in 2009, digital assets acquired new life and purpose. Everything in digital form became something that could be used to create value in the form of tokenization on the blockchain. The increased interest in digital assets has led to the necessity of understanding their place among an organization's assets, in developing approaches to formalizing the term "digital assets," options for their assessment, and the methodology of accounting and presentation in financial reporting. The attempted resolution of the aforementioned issues is the focus of the proposed research.

Review of recent research and publications. Scientific works by scholars such as R. Maidanik, V. Sergienko, V. Ivanyuk, D. Pogribnyi, V. Logoida, N. Arkhireiska, Ye. Bondarenko, L. Akimova, K. Kovalchuk, O. Kud, and others are dedicated to analyzing the concept and legal nature of virtual assets. At the same time, legal regulation of the virtual asset market is one of the most relevant issues within legislative initiatives. Given this, there is a need for theoretical research on the analysis of the concept of "virtual assets," their legal nature, and classification.

The aim of the article is to analyze current approaches to defining the concept, explore the possibilities of applying individual IFRS provisions for accounting digital assets, and outline the classification of virtual assets.

Presentation of the research material. We currently live in a digital world, in the era of the 4th industrial revolution, which means that we encounter digital assets everywhere. Data, images, videos, audio, and documents that we traditionally associate with this term. When Bitcoin was introduced in 2009, it brought with it blockchain—a distributed public ledger secured by a consensus mechanism. While this concept was not new, as data itself became a valuable digital asset requiring security measures, management, and storage. Distributed ledgers and the information contained within them had already existed for some time.

However, this was new to most people who lived and worked outside the realms of data science, management, analysis, or any other area requiring large distributed data networks.

For a digital asset to be considered an asset, it must have the potential to create value as it can be used in a way that creates value for the owner. Then, the digital asset must have the ability to transfer ownership rights through purchase, gifting, or other means of transferring rights to anyone else along with the value it can bring. It should also be discoverable or storable so that it can be found.

Digital assets have evolved into something more than just words, images, videos, audio, and documents that we traditionally associate with this term. When Bitcoin was introduced in 2009, it brought with it blockchain—a distributed public ledger secured by a consensus mechanism. While this concept was not new, as data itself became a valuable digital asset requiring security measures, management, and storage. Distributed ledgers and the information contained within them had already existed for some time.
The concept of "digital assets" has not been formalized until now, despite numerous attempts to provide at least a basic definition of such assets, mainly undertaken by IT technology specialists and lawyers.

A digital asset is anything in digital form that can create value (utility).

As before, you can create something in digital form, but it won't be a digital asset if it lacks value (utility) to you.

In our view, the peculiarity of digital assets and their distinction from traditional property objects, which can exist both in tangible and digital form, lies in the fact that they are not only intangible by nature but also do not require materialization in the real world for their existence and use.

Thus, Digital assets are any type of files with values created and stored in digital form and owned by the organization on proprietary rights (at least by the right of use). In other words, a digital asset is any asset that exists in digital form, has value for the organization, and includes the right to use.

The IFRS Interpretations Committee in the Conceptual Framework for Financial Reporting defines an asset as a "resource controlled by the entity as a result of past events and from which future economic benefits are expected," and that "physical form is not essential to the existence of an asset." "An economic resource is a right that can bring economic benefits."

While some researchers adhere to the view that the uncertainty as to whether future economic benefits will flow from a digital asset to the organization means that the asset does not exist, it is generally considered that a digital asset is an asset (based on the fact that there is sufficient control and certainty regarding future economic benefits).

In our opinion, the real challenge of accounting for digital assets is primarily related to their classification and valuation.

However, in practice, organizations will need to assess whether each of their digital assets meets the concept of an asset.

When discussing the accounting issues of digital assets, there are various perspectives on whether digital assets meet the definition of assets or not. Proponents of such an approach have noted in their research that the Conceptual Framework developed by the Committee does not require the physical existence of an asset, although organizational control over benefits often results from legal rights.

In my opinion, the presence of a digital asset meets the definition of an asset. This is because the organization either purchases or creates the digital asset (i.e., a past event), and can control the digital asset object, meaning it can decide when to sell or use it in its operations (digital assets represent controlled resources). Finally, if the organization sells or exchanges digital assets for any other goods or services, it is expected that this organization will receive economic benefits.

Some researchers believe that if the recognition criteria for assets under IFRS are met and apply to digital assets, then they should be recognized as assets.

1 I believe that digital assets meet the established IFRS criteria, which include three main aspects, namely:

1. Digital assets are a current economic resource.
2. They are controlled by the organization as a result of past events.
3. They have the right and ability to receive economic benefits.

Thus, digital assets as assets have the following characteristics:

There are certain volumes of digital resources that the organization has the right to control and control over which can be transferred to third parties.

They are current economic resources - rights or access to future economic benefits (digital assets are a digital representation of value or contractual rights).

Future economic benefits are expected – digital assets have value (utility) in exchange and/or utility in use.

Legally controlled by the legal entity-owner, as well as other circumstances depending on contractual arrangements, jurisdictional regulation, etc.

Arising from past transactions – acquired from other organizations or created by the organizations themselves for consumption.

In summary, digital assets are mostly likely a component of intangible assets.

There are many different types of digital assets. A list of the most well-known assets, compiled from open sources, is presented in Table 1 below.

<table>
<thead>
<tr>
<th>Types of Digital Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Text files</td>
</tr>
<tr>
<td>2. Images</td>
</tr>
<tr>
<td>3. Websites</td>
</tr>
<tr>
<td>4. Computer programs</td>
</tr>
<tr>
<td>5. Videos</td>
</tr>
<tr>
<td>6. Graphic files</td>
</tr>
<tr>
<td>7. PDF files</td>
</tr>
<tr>
<td>8. Slide decks</td>
</tr>
<tr>
<td>9. Spreadsheets</td>
</tr>
<tr>
<td>10. Code files (such as HTML, CSS, JavaScript, Python, ...)</td>
</tr>
<tr>
<td>11. Photos</td>
</tr>
<tr>
<td>12. Databases</td>
</tr>
<tr>
<td>13. Books</td>
</tr>
<tr>
<td>14. Audio/music</td>
</tr>
<tr>
<td>15. Animations</td>
</tr>
<tr>
<td>16. Illustrations</td>
</tr>
<tr>
<td>17. Manuscripts</td>
</tr>
<tr>
<td>18. Email and email account records</td>
</tr>
<tr>
<td>19. Logos (trademarks)</td>
</tr>
<tr>
<td>20. Social media accounts</td>
</tr>
<tr>
<td>21. Gaming accounts</td>
</tr>
<tr>
<td>22. Tokens</td>
</tr>
<tr>
<td>23. Cryptocurrency</td>
</tr>
</tbody>
</table>

The approach arising from a legal perspective involves considering digital assets as property based on the following indicative attributes of ownership:

Digital assets can be defined or identified.

Uniqueness and control, where the owner of the private key has exclusive control over the digital asset.

The transferability of digital assets may be permitted by third parties.

Certainty about digital assets – analogous to other physical assets, which can exist only until they are fully depreciated, disposed of, or lose their digital form.

The issues of financial reporting and accounting for digital assets include:
Additionally, they are not considered legal as traditional money. However, unlike traditional money, cryptocurrencies might have been expected to be recognized accounted for as traditional money or its equivalent. A factor underlying their decision.

Card platforms, citing “high volatility and risk” as leading as legal tender in most jurisdictions. Additionally, some traditional currencies such as the US dollar and the Euro, national currencies. This is partly due to the fact that unlike cryptocurrencies. However, it seems that cryptocurrencies this was the original purpose of Bitcoin and some other assets could be used as a medium of exchange; indeed, it is necessarily cash for accounting purposes. It may be the suggests that it is currency; however, this does not mean that typically recognized as cash.

When considering this in the context of accounting, IAS 7 "Statement of Cash Flows" [3] does not provide a definition of cash, merely stating that "cash includes cash on hand and demand deposits." However, in IAS 32 "Financial Instruments: Presentation," it is stated that "[6] currency (cash) is a financial asset because it is a medium of exchange and therefore the basis on which all transactions are measured and recognized in financial statements." Looking at this description, it is clear that cryptocurrencies cannot be considered equivalents to traditional money, as defined in IAS 7” [3], because they cannot be easily exchanged for goods or services.

Cash Equivalents. In addition to cash, IAS 7 defines another category, "cash equivalents" – instruments that are almost as good as cash because they are similar in nature. The question arises: can cryptocurrencies fit this definition? According to IAS 7, "cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and are subject to an insignificant risk of changes in value." Based on this definition, it seems evident that cryptocurrencies cannot be classified as cash equivalents, as they are subject to significant price volatility (for example, Bitcoin lost around 28% of its value in January 2023) [3].

IAS 38 contains two possible approaches to accounting – cost or revaluation. Cost. Under this approach, intangible assets are initially measured at cost and subsequently measured at cost less accumulated amortization and impairment losses. Cost is defined as "the amount of cash paid or the fair value of other consideration given to acquire an asset at the time of its acquisition or construction, or, where applicable, the amount attributed to that asset that was initially recognized in accordance with the specific requirements of other IFRSs, for example, IFRS 2 'Share-based Payment' [7–15].

Revaluation. Intangible assets may be accounted for at revalued amounts under IAS 38 provided there is an active market for them (which may not be the case for all types of digital assets). Under the revaluation model, intangible assets are initially measured at cost and subsequently measured at fair value less accumulated amortization and impairment losses [7–15].

IAS 38 requires that increases in revaluation be recognized in other comprehensive income and accumulated in equity under the heading "Revaluation Surplus." However, increases in revaluation must be recognized in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognized in profit or loss. Revaluation decreases are recognized in profit or loss. However, decreases are recognized in other comprehensive income to the extent of any credit balance existing in the revaluation surplus in respect of that asset.

To apply the revaluation model under IAS 38, the fair value of the intangible asset must be reliably measurable. Intangible assets are generally rarely revalued, as active markets for them are infrequent, but when digital assets are traded on an exchange (cryptocurrencies), it may be possible to apply the revaluation model under IAS 38 [7–15].

Active Markets. IFRS 13 "Fair Value Measurement" defines an active market as "a market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis." IFRS provides little additional guidance
to support this definition, so judgment is required when determining whether an active market exists for certain digital assets (such as cryptocurrencies). For more well-known currencies like Bitcoin, where significant trading occurs daily, it may be relatively easy to demonstrate the presence of an active market. However, for less-known cryptocurrencies, this may not be the case, especially if transactions are not conducted in cash. We believe that while under some circumstances it might be possible to go beyond cash transactions (for example, exchanging for other cryptocurrencies that are considered to have an active market), greater weight should be given to cash transactions.

Companies holding digital assets (cryptocurrencies) under the revaluation model must also disclose details such as the tracking of movements on revaluation and their reflection in other comprehensive income. For example, whether this is done for individual coins, which exchange is used for measurement, and at what time (given that many exchanges operate 24/7).

Depreciation and Impairment. According to IAS 38, a company must assess whether the useful life of an intangible asset is finite or indefinite. When conducting such an assessment, the standard specifies that an intangible asset should be considered to have an indefinite useful life if there are no foreseeable limits to the period over which the asset is expected to generate net cash inflows for the entity. Considering that perhaps only cryptocurrencies among the entire spectrum of digital assets are intended for use as a store of value over time, we believe that for the purposes of IAS 38, their useful life is indefinite. However, we note that technological changes can be rapid, and that "indefinite" according to IAS 38 does not mean "infinite" [7–15].

An intangible asset with an indefinite useful life is not amortized but must be tested for impairment by comparing its recoverable amount with its carrying amount annually and whenever there are indicators that the intangible asset may be impaired.

According to IAS 36 "Impairment of Assets," an impairment loss should be immediately recognized in profit or loss, except for cases where the asset is carried at a revalued amount. Any impairment loss of a revalued asset is considered a decrease in revaluation in accordance with the standard under which it was revalued. IAS 38 states that "if the carrying amount of an intangible asset increases as a result of revaluation, this increase should be recognized in other comprehensive income and accumulated in equity under the heading of revaluation surplus. However, the increase should be recognized in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognized in profit or loss."

Choosing the method of assessing intangible and digital assets in an organization's accounting and reporting. The application of one method or another for assessing intangible and digital assets is determined by the organization's business model. Where the organization's business model involves transforming assets at input to create new assets or services at the output of the model, we believe that historical cost is usually the most useful basis for assessing such assets. Where the firm's business model does not involve transforming assets at input but instead involves buying and selling assets in the same market to profit from changes in market prices, we believe that fair value is usually the most useful basis for assessing property. Whichever method of asset and liability assessment is used in financial reporting, disclosure of information about the alternative method of assessment may be useful to users provided that the benefit of providing this additional information exceeds the cost of obtaining it. Additionally, in the case of using more than one method of asset assessment in accounting, reports should be structured to make clear the calculation of profits and losses arising from the application of each assessment method.

Conclusions. Digital assets are identifiable non-monetary assets without physical substance and meet the definition of an intangible asset.

Digital assets satisfy the definition of an intangible asset as they are identifiable and separable or arise from contractual or other legal rights.

Therefore, there is still no consensus on the legal nature and essence of virtual assets. However, most countries are not ignoring the rapid development of this financial phenomenon and are attempting to create an appropriate legal framework for regulating all possible types of such assets. There are certain trends in defining the concept of "virtual assets." At the legislative level of many states, there is a transition from the concept of "virtual currency" to the concept of "virtual asset," which is significantly broader in understanding. By elaborating on the concept of "virtual asset," legislators have begun to focus on distributed ledger technology, indicating a more thorough approach to studying and understanding this phenomenon. The transition from the concept of "virtual currency" to the term "crypto-asset" in the European MiCA regulation, which is expected to be implemented in Ukrainian legislation in the future, raises doubts. Nevertheless, the concept of a virtual asset is broader and its use is considered more appropriate. The absence of comprehensive regulation of DeFi and NFT in the MiCA regulation already indicates the imperfection of this act.

References:
3. IAS 7 Statements of cash flows. Available at: https://www.google.by/url?q=https://www.iasplus.com/en/standards/ias/ias7&sa=U&ved=2ahUKEwjHo8HF5KPyAhVmwaIHHVIAAYQFnoECAoQAQ&usg=AOvVaw1hv-R8d0VZ5a0JamowXQdG
4. IAS 16 Property, plant and equipment. Available at: https://www.google.by/url?q=https://www.iasplus.com/en/standards/ias/ias16&sa=U&ved=2ahUKEwjhvrLP5aPyAhWQOwK HVuGAPIQFnoECAoQAQ&usg=AOvVaw2R1mfs2iNueLXIF_0xd80P
5. IAS 21 The Effect of Changes in Foreign Exchange Rates. Available at: https://www.iasplus.com/en/standards/ias/ias21&sa=U&ved=2ahUKEwin9ZvO5qPyAhXICuwKHfgaC2AQFnoECAEQAQ&usg=AOvVaw3rUL010KqPHhQkNY5Hrroq