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ETHICAL ASPECTS OF ACCOUNTING FOR DIGITAL ASSETS

In the European Union, the professional ethics of accountants play a fundamental role in ensuring the reliability of accounting, transparency of reporting, and prevention of corruption. In the context of digital transformation, automation without appropriate ethical oversight may create additional risks of losing the reliability of accounting information and trust in financial data. The hypothesis is put forward that aligning accounting approaches with the principles of the International Code of Ethics for Professional Accountants (IESBA Code) enhances the soundness of professional judgment and the quality of disclosure of information on digital assets, thereby reducing the risks of manipulation and non-transparent transactions in the digital economy. To test the hypothesis, an analytical-empirical approach was chosen, combining a documentary analysis of EU regulatory acts and international standards (MiCA, IFRS, IESBA Code of Ethics, EFRAG publications) with a critical analysis of scholarly publications, professional organization reports, and practical data on digital asset accounting. Using methods of scientific abstraction and concretization, the compliance of practical solutions with ethical principles was determined, gaps were identified, and areas of heightened ethical risk in financial reporting were

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ЕТИЧНІ АСПЕКТИ ОБЛІКУ ЦИФРОВИХ АКТИВІВ

У Європейському Союзі професійна етика бухгалтерів відіграє фундаментальну роль у забезпеченні достовірності обліку, прозорості звітності та запобіганні корупції. В умовах цифрової трансформації автоматизація без відповідного етичного контролю може створювати додаткові ризики втрати достовірності облікової інформації та довіри до фінансових даних. Висунуто гіпотезу, що узгодження облікових підходів з принципами Міжнародного кодексу етики професійних бухгалтерів (The International Code of Ethics for Professional Accountants – IESBA Code) підвищує обґрунтованість професійного судження та якість розкриття інформації про цифрові активи, що знижує ризики маніпуляцій і непрозорих операцій у цифровій економіці. Для перевірки гіпотези обрано аналітико-емпіричний підхід, що поєднує документальний аналіз регуляторних актів ЄС та міжнародних стандартів (MiCA, IFRS, Кодекс етики IESBA, публікації EFRAG) з критичним аналізом наукових публікацій, звітів професійних організацій та практичних даних щодо обліку цифрових активів. Використовуючи методи наукової абстракції та конкретизації, визначено відповідність практичних рішень етичним принципам, виявлено прогалини та виділено області підвищеного етичного ризику

highlighted. By systematizing the key threats to compliance with ethical principles, the specifics of their impact on the accounting of various types of digital assets were identified, and appropriate safeguards and practical steps for their implementation were substantiated, taking into account the nature of such assets and professional judgments. A multi-level model for integrating the IESBA principles of professional ethics into the accounting of digital assets has been developed, which systematizes ethical constraints, determinants of professional judgment, classification, valuation, disclosure, control, and responsibility. The scientific novelty lies in the operationalization of the IESBA principles as criteria for the admissibility of accounting decisions regarding digital assets based on EU experience. The practical significance is in providing substantiated recommendations for adapting Ukraine's national accounting system and enhancing trust in financial and non-financial reporting amid growing regulatory and geopolitical risks.

Keywords: digital assets, digital transformation, accounting, professional ethics for accountants, fundamental principles, financial reporting, corruption prevention, EU, International Code of Ethics for Professional Accountants, International Ethics Standards Board for Accountants (IESBA).

у фінансовій звітності. Завдяки систематизації ключових загроз дотриманню етичних принципів ідентифіковано специфіку їх впливу на облік різних видів цифрових активів та обґрунтовано відповідні запобіжники і практичні кроки їх впровадження з урахуванням характеру таких активів та професійних суджень. Розроблено багаторівневу модель інтеграції принципів професійної етики IESBA в облік цифрових активів, яка систематизує етичні обмеження, детермінанти професійного судження, класифікацію, оцінку, розкриття інформації, контроль і відповідальність. Наукова новизна полягає в операціоналізації принципів IESBA як критеріїв допустимості облікових рішень щодо цифрових активів на основі досвіду ЄС. Практична значимість – надання обґрунтованих рекомендацій для адаптації національної системи обліку України та підвищення довіри до фінансової та нефінансової звітності в умовах зростаючих регуляторних і геополітичних ризиків.

Ключові слова: цифрові активи, цифрова трансформація, облік, професійна етика бухгалтера, фундаментальні принципи, фінансова звітність, запобігання корупції, ЄС, Міжнародний кодекс етики професійних бухгалтерів, Рада з Міжнародних стандартів етики для бухгалтерів.

JEL Classification: M14, M41, K22, G30.

Introduction

The active adoption of digital assets in the financial and economic activities of enterprises is the result of systemic changes associated with the digital transformation of the economy. Crypto-assets, tokenized instruments, and other forms of digital assets are increasingly used as means of investment, settlement, value generation, and value storage, which necessitates their reliable and comprehensive recognition in accounting and reporting. At the same time, the development of regulatory frameworks for digital assets in the EU, in particular the adoption of the Markets in Crypto-Assets (MiCA) Regulation (European Commission, 2023, May 31), establishes new requirements for transparency, compliance, and accountability of market participants. Under these conditions, the role of the professional accountant as a key actor in the formation of reliable financial information is increasing.

Accounting and the preparation of financial statements are directly linked to compliance with the principles of professional ethics defined in the International Code of Ethics for Professional Accountants – Code by the International Ethics Standards Board for Accountants (IESBA Code) (IESBA, 2025, October 7). A key challenge in accounting for digital assets is the absence of a specific standard within International Financial Reporting Standards, which results in the application of different accounting

approaches and variations in professional judgment. Under such circumstances, ethical principles – integrity, objectivity, professional competence and due care, confidentiality, and professional behavior – become decisive in ensuring the quality of accounting information.

Digital transformation is changing traditional approaches to asset accounting, complicating the identification of ownership rights, valuation, and disclosure in financial reporting. It creates an environment of increased risk of ethical noncompliance, where accountants are forced to make decisions under conditions of regulatory uncertainty and technological complexity. The relevance of this research is further reinforced by the fact that digital assets can be used to conceal economic transactions, evade taxes, and launder money. Under such circumstances, adherence to professional ethics by accountants becomes a key tool for ensuring trust in financial information and the effectiveness of regulatory mechanisms. For Ukraine, which is harmonizing national legislation with EU standards, analyzing European approaches to the ethical aspects of digital asset accounting has practical significance.

The research problem lies in the diversity of types of digital assets, coupled with the absence of specific accounting standards for them, which necessitates extensive professional judgment and increases the risk of violating the principles of objectivity and integrity. Regulatory requirements regarding compliance and disclosure are not always aligned with existing accounting tools, creating a conflict between legal compliance and the professional independence of the accountant. An insufficient level of informational and methodological support, as well as accountants' awareness in the field of digital assets, complicates the application of the principles of professional competence and due diligence. A pressing issue is the lack of systematic alignment between accounting approaches to digital assets and the requirements of accountants' professional ethics in the context of digital transformation in the EU. Addressing these problems is a necessary condition for improving the quality of financial reporting, the transparency of economic processes, and trust in accounting information.

In scholarly and professional discussions, there is an opinion that digital transformation does not generate fundamentally new ethical problems for professional accountants, but rather creates new conditions for applying the existing International Code of Ethics (International Federation of Accountants (IFAC), 2021, April 1). However, this approach is not unconditional, since certain provisions of the Code require deeper interpretation and practical specification in light of technological complexity and the increased role of professional judgment in accounting and taxation of digital assets. It is evident that the ability to comply with general ethical requirements without considering the specifics of the digital environment is limited (Huterski et al., 2020).

At the regulatory level, the European Union and professional organizations are developing frameworks and guidance. For instance, the European Financial Reporting Advisory Group (EFRAG) conducted an in-depth study of the issues related to accounting for crypto-assets and crypto-

liabilities and published a corresponding Discussion Paper (EFRAG), 2020, July), and subsequently presented the summarized key findings of this study at the Advisory Forum on Accounting Standards (ASAF) in the form of an analytical presentation (EFRAG, 2020, December 10). European reviews provide a legal basis, but they do not detail the ethical obligations of accountants when applying different accounting approaches (Dragomir, 2023). The EU Markets in Crypto-Assets (MiCA) Regulation EU 2023/1114 (European Commission, 2023, May 31) became the first comprehensive framework for the operation of the crypto-asset market in the EU, including definitions and market transparency requirements. MiCA, as a regulatory act, partially addresses legal and regulatory issues of transactions involving digital assets, but it does not offer detailed requirements regarding the accounting recognition of digital resources in financial statements, leaving room for the application of accountants' professional judgment (Fomina et al., 2024).

It has been established that existing research focuses primarily on the technical aspects of recognition and measurement of crypto-assets or on the analysis of the EU regulatory framework (MiCA, IFRS), leaving the professional ethics of accountants outside of comprehensive analysis. In contrast, it is precisely the ethical principles of integrity, objectivity, professional competence, and due care that constitute the systemic factors ensuring the reliability of digital asset accounting, especially under conditions of high volatility, automation, and algorithmic decision-making in accounting. Research on ethical issues in the works of Fischer (2018, November 30), Fulop et al. (2025), Al-Okaily et al. (2023, December 26), Romashko and Korol (2024), Shapovalova et al. (2023), Golov et al. (2022), Shuid et al. (2024, February 19), Adriansyah Rais and Windarsari (2025), and publications by Accountancy Europe (2025, February 17), among others, offers conceptual frameworks for professional ethics in the context of blockchain and digital technologies. However, they do not provide practical, integrated solutions for applying judgments in digital asset accounting within the existing IFRS and EU regulatory requirements.

The FATF, in a series of updates (Targeted Update), notes that the global implementation of AML-standards (Anti-Money Laundering) regarding virtual assets remains incomplete (Financial Action Task Force (FATF), 2024, July 09). At the same time, FATF provides a roadmap and national compliance assessments, which serve as important guidance for the EU and Ukraine (Mazaraki & Melnyk, 2023, April). Institutional reviews by the U4 Anti-Corruption Resource Centre and Transparency International (2023, March 03) mention the risks of using crypto-assets for money laundering, yet they do not define practical procedures for accountants that would combine professional ethical requirements and responsibilities with anti-money laundering, reporting (whistleblowing), including questions of prioritization between client confidentiality and the public interest (Accounting Insights Team, 2024, September 19).

European Financial Reporting Advisory Group (EFRAG, 2020, July) and Parrondo (2023) detail the classification of tokens and approaches to applying existing IFRS. However, clear guidance is still lacking on how ethical principles (IESBA) should directly influence the choice of accounting policy for each type of token in real-world cases (case-by-case). In other words, how to reconcile the taxonomy with ethical requirements when providing financial information. Han et al. (2022, March), in a systematic literature review, indicate that current academic studies focus on the technical and procedural aspects of applying blockchain in accounting and auditing, but research on the ethical implications of such application is insufficient.

Ethical dilemmas remain in professional judgments when selecting standards (IAS 2, IAS 38, or IFRS 9). Although the International Accounting Standards Board (IASB) (IFRS Foundation, 2019, June), Big4 publications (EY, 2021, October), and analytical reviews provide certain recommendations for practitioners, there are no algorithms or ethical criteria that directly instruct accountants on how to act when the application of different standards produces different informational outcomes for financial statement users (for example, the choice of accounting policy may conceal or, conversely, reveal corruption risks). Wiyarni et al. (2024), Semenova and Shpyrko (2025) also point out that the possibility of applying professional judgment in determining recognition and measurement methods for crypto-assets can lead to manipulations in financial metrics, creating ethical dilemmas for accountants. Studies on blockchain and crypto auditing, as well as the range of assurance services, are described in reviews by Bellucci et al. (2022), Alsulami (2025), and Fomina et al. (2022, February), however, it remains unresolved which specific ethical principles (objectivity, professional competence and due care, independence in assurance engagements) should take priority in the audit of digital assets, and how auditors should collaborate with accountants in situations where disclosure may trigger regulatory consequences or compliance risks.

A number of studies (Kurniawan et al., 2025; Korol, 2024; Oriekhova, 2020) highlight the lack of preparation and practical guidance regarding which minimum competencies and ethical training should be implemented for accountants in view of modern challenges, so that they can respond to new risks associated with digital assets. Insufficient attention has been paid to the interaction between the EU professional organizations' ethical standards and accounting policies within the framework of digital transformations, which is particularly relevant today and is emphasized by Sampaio and Silva (2025).

Despite the existence of EU regulatory initiatives, the scholarly literature specifically analyzing the experience of EU companies in applying IFRS to digital assets remains limited. Most studies focus on analytical reviews and conceptual models, whereas empirical research on digital asset accounting in actual practice is scarce. Moreover, there is insufficient research on how EU regulatory requirements (MiCA) interact with

professional ethical standards of accountants when making accounting decisions related to digital assets. There is a need for practice-oriented research that can offer integrated ethical-accounting recommendations for EU accountants and, in the future, serve as a guideline for implementation in Ukraine.

The purpose of the study is to substantiate the directions for aligning accounting approaches to digital assets with the fundamental principles of professional ethics in the context of digital transformation, taking into account EU regulatory practice, and to determine directions for adaptation for Ukraine.

To achieve this goal, the article aims to address the following tasks:

• to analyze the economic essence of digital assets as objects of accounting in EU practice;

• to investigate the impact of digital transformation on accounting and the application of professional judgment by accountants in the EU;

• to summarize the requirements for accountants' professional ethics and the role of professional organizations;

• to identify threats to the violation of fundamental ethical principles in the accounting of digital assets;

• to substantiate directions for aligning accounting approaches to digital assets with the principles of professional ethics in the EU and to determine practical recommendations for Ukraine.

The study proposes the hypothesis that aligning accounting approaches with the IESBA principles in EU practice enhances the reasonableness of professional judgment and the quality of disclosures regarding digital assets, thereby reducing the risks of manipulations and non-transparent operations in the context of digital transformation.

To test the hypothesis, an analytical-empirical approach was chosen, combining a documentary analysis of EU regulatory acts and international standards (MiCA, IFRS, IESBA Code of Ethics, EFRAG publications) with a critical analysis of scholarly publications, professional organization reports, and practical data on digital asset accounting. The informational basis of the study consisted of regulatory documents, scientific publications, and reports from professional organizations. During the analysis, key categories were systematically identified: types of digital assets, corresponding accounting approaches, principles of professional ethics and the extent of their implementation in accounting practice, threats to adherence to fundamental ethical principles, and safeguards for their mitigation. Data processing was carried out through the synthesis and comparative analysis of regulatory requirements and practical cases of digital asset accounting in EU countries.

Using methods of scientific abstraction and concretization, the study determined the compliance of practical solutions with ethical principles, identified gaps, and highlighted areas of heightened ethical risk in financial reporting.

The main part of the article consists of five sections: the first section analyzes the economic nature of digital assets as accounting objects and the features of their classification in the practice of the European Union; the second section examines the impact of digital transformation on accounting processes and the application of professional judgment by accountants under conditions of regulatory uncertainty; the third section summarizes the requirements for professional ethics of accountants, reveals the role of professional organizations, and discusses the anti-corruption context of digital asset accounting regulation; the fourth section identifies key threats to the violation of fundamental ethical principles in digital asset accounting and assesses their impact on professional judgment; the final section substantiates directions for aligning accounting approaches to digital assets with professional ethics principles in the EU and formulates practical recommendations for their adaptation in Ukraine.

1. The essence of digital assets as accounting objects in EU practice

The conditions of the European Union's economic digital transformation are driving the emergence and active dissemination of new forms of assets, whose existence is based on digital technologies. Digital assets are gradually acquiring the characteristics of full-fledged accounting objects, which requires their clear conceptual definition, classification, and methodological understanding, taking into account the regulatory and ethical specifics of EU practice.

In general terms, digital assets are resources that exist in digital form, are controlled by an economic entity as a result of past events, and are capable of generating future economic benefits (EY, 2021, October). In EU practice, digital assets most often include crypto-assets (cryptocurrencies, tokens), digital financial instruments, virtual assets, as well as certain types of intangible assets related to the use of distributed ledger technology (DLT), blockchain, smart contracts, and digital platforms (Semenova, 2025). EU Regulation 2023/1114 MiCA (Markets in Crypto-Assets Regulation) (European Commission, 2023, May 31) defines the classification of crypto-assets, requirements for token issuers, exchange platform operators, and service providers in the digital asset sector. MiCA identifies three main categories of digital assets: (1) payment tokens, (2) utility tokens, and (3) security tokens. Each of them has different economic functions and risks, which affect the choice of accounting, valuation, and disclosure methods.

Alongside MiCA, International Financial Reporting Standards (IFRS) are applied in EU practice. Although IFRS does not contain a separate specialized standard dedicated to digital assets, it provides guidance on recognition, measurement, and accounting for certain types of them. Additionally, EFRAG offers recommendations for adapting IFRS to ensure compliance with the specifics of digital assets in the EU, including requirements

for transparency and completeness of disclosure (EFRAG, 2020, July). Therefore, today, a generally accepted understanding of the content of digital assets as accounting objects is still in the process of formation.

From the perspective of accounting, a key characteristic of digital assets is the absence of a unified physical form, which complicates their identification and valuation. In most EU countries, digital assets are not recognized as cash or cash equivalents and are accounted for depending on the economic substance of the transactions – as intangible assets, inventories, or financial instruments. This approach aligns with the principle of the primacy of economic substance over legal form, which is fundamental to IFRS. Practice shows that most European companies apply recognition and valuation methods for digital assets at fair value, adapted to the requirements of IFRS 9 "Financial Instruments" and IFRS 13 "Fair Value Measurement". At the same time, depending on the purpose of holding digital assets and the current business practices of the enterprise, other valuation approaches may be applied in accordance with IAS 38 "Intangible Assets" or IAS 2 "Inventories" (IFRS Foundation, 2019, June).

A distinctive feature of digital assets as accounting objects in the EU is their high volatility, technological complexity, and legal heterogeneity. This creates increased demands on professional judgment by accountants, particularly regarding the timing of asset recognition, the choice of valuation method (initial or fair value), and disclosure in financial statements. Digital assets become not only a technical but also an ethical challenge, as there is a risk of manipulative valuations, information asymmetry, and insufficient transparency for users of financial reports. Reviews of practical cases indicate ambiguity in the classification and accounting treatment of digital assets, not only due to the lack of specialized standards but also because of the variety of asset types (data, platforms, algorithms, digital ecosystems), not all of which constitute full-fledged accounting objects. This further reinforces the need for professional judgment by accountants and adherence to ethical principles in decision-making.

EU practice demonstrates a gradual transition from a fragmented accounting approach to more systematic regulation of digital assets, as evidenced by the implementation of the MiCA. Although this regulation is primarily focused on financial regulation, it indirectly affects accounting by shaping a shared understanding of the economic substance of digital assets and the scope of responsibility of economic entities.

2. The impact of digital transformation on accounting and the application of professional judgment by accountants in the EU

Digital transformation is defined as a systematic process of integrating digital technologies into all areas of economic activity, leading to fundamental changes in business models, operational processes, value creation mechanisms, and management approaches (Adriansyah et al., 2025).

Unlike the digitization of individual processes, digital transformation encompasses profound organizational, technological, and institutional changes that shape a new economic reality.

In the European Union, digital transformation is one of the key strategic priorities for economic development, implemented within the framework of the Digital Single Market, the Digital Europe Programme, and the European Digital Strategy. Its goal is to enhance the competitiveness of the EU economy, ensure technological sovereignty, promote innovation, and establish a unified digital space. In this context, digital technologies directly affect the transformation of financial markets, corporate reporting, and accounting systems. Digital transformation significantly changes the role of the accountant as a bearer of professional judgment. The implementation of technologies such as blockchain, AI, and Big Data enables the automation of routine operations, increases the accuracy of accounting data, and provides real-time access to information (Fomina et al., 2022, December). At the same time, these technologies do not eliminate the need for specialists. On the contrary, the focus shifts from mechanical execution of operations to analytical evaluation, quality control, and data interpretation. Accountants must make decisions regarding the correctness of digital asset valuation, the accuracy of their classification, and the disclosure of financial information, using technological tools as support rather than as a replacement for professional analysis (Han et al., 2022, March).

Practical aspects of digital transformation in the EU demonstrate that accounting models must adapt to a complex technological environment, where digital assets constitute a separate asset class with their own characteristics. It is necessary to consider not only the potential for improving the monitoring of digital asset usage but also cybersecurity challenges, issues with integrating different systems, and the protection of sensitive data. Ethical questions regarding the use of automated solutions require further attention and the development of appropriate rules and regulations. Modern accountants must not only possess technical tools but also be able to critically evaluate algorithms and document professional judgment. It is important to understand that automation does not relieve one of responsibility, and the use of AI or on-chain data requires additional verification procedures, algorithmic control, and transparency in explanations (explainability). IESBA and professional EU organizations already emphasize these requirements in their guidelines and educational initiatives.

The integration of blockchain technology into accounting processes has a significant impact on the accounting of digital assets. Blockchain ensures an immediate (immutable) recording of transactions, which increases trust in the data and the transparency of financial information, as all operations are recorded in a distributed ledger without the possibility of modification, eliminating manipulation. Thanks to blockchain, information on digital assets is available almost in real-time (Bellucci et al., 2022).

Accordingly, the need for traditional verification procedures decreases, and the quality of reporting improves. The benefits for audit and compliance lie in the fact that blockchain can provide a basis for automated checks and reduce the risk of fraud or errors in recording crypto-assets within financial systems.

Artificial intelligence (AI) is literally transforming accounting practice by automating complex procedures and data analytics. AI algorithms are capable of processing large volumes of transaction data on digital assets to identify patterns, anomalies, issues, predict risks, and automatically reconcile data, which enhances the reliability of accounting information and facilitates decision-making. Contemporary research (Alsulami, 2025) notes that combining AI with blockchain strengthens the ability to detect suspicious transactions or potential cases of fraud, which is critical for accounting digital assets, as they are often used in illicit activities. However, the use of blockchain and AI creates risks of algorithmic opacity and potential distortion of accounting data, requiring accountants to uphold principles of integrity, objectivity, and professional due diligence (Romashko & Miroshnichenko, 2025). In the context of digital transformation, professional judgment also includes the ability to interpret analytical results, verify automated decisions, and ensure compliance of financial information with IFRS standards and IESBA ethical norms. Thus, digital technologies do not reduce but rather enhance the role of professional judgment, making it a key factor in ensuring the reliability and transparency of digital asset accounting.

In the EU, institutional and political initiatives of the digital market play a special role in shaping the conditions for accounting digital assets within a single digital space. The "Digital Single Market" strategy promotes the harmonization of digital standards and platforms across the EU, including support for e-accounting and other digital solutions that facilitate the automated processing of financial information, particularly data on digital assets. Accounting is being transformed through the creation of an institutional environment for the implementation of modern technologies. At the same time, the level of digitalization among EU member states remains uneven, which affects the extent of adoption of digital accounting practices and requires coordinated strategies for developing the digital competencies of accountants.

3. Requirements for professional ethics of accountants

Accounting for digital assets in the context of digital transformation requires accountants to adhere to a high level of professional ethics, which ensures the reliability, transparency, and trustworthiness of financial reporting. In the EU, the primary regulatory document defining ethical standards for accountants is the IESBA Code.

3.1. General understanding of ethics in the accounting profession

The International code of ethics for professional accountants, developed by the International ethics standards board for accountants (*IESBA*, 2025, October 07), serves as the foundational regulatory document establishing universal principles of ethical conduct for accountants and auditors in the global professional environment. The Code enshrines fundamental ethical principles: integrity, objectivity, professional competence and due care, confidentiality, and professional behavior. These principles are mandatory when performing professional duties in all jurisdictions influenced by the International federation of accountants (IFAC), including EU countries, where these provisions form the basis of national regulation of the profession.

In 2023, IESBA published an updated edition of the Handbook of the International Code of Ethics for Professional Accountants, in which provisions related to the use of digital technologies, safeguarding independence, and ethical responsibility of professionals in a digital environment were significantly expanded. Special attention was paid to the impact of new technologies on accountants' ability to adhere to key ethical principles in situations of increased uncertainty and technological risks (Fomina et al., 2024). Simultaneously, IFAC is implementing a number of initiatives aimed at exploring the relationship between technological development and professional ethics. In particular, the Technology & Ethics Matrix (New Tech Matrix) systematizes the impact of modern technologies on critically important ethical categories, such as professional competence, information confidentiality, and independence of professional judgment. These developments serve as a methodological basis for the creation of national guidelines and educational programs in the field of accounting and auditing (IESBA, 2025, October 07).

The principle of *integrity* requires an accountant to represent digital asset transactions honestly and transparently in reporting, without intentional data distortion or manipulation of valuations. *Objectivity* implies independence in asset assessment and avoidance of conflicts of interest, particularly in cases of volatile or emerging digital assets, where external factors may significantly influence decision-making. *Professional competence and due care* entail continuously updating knowledge about technologies, including blockchain, AI, and Big Data, as applied to accounting, as well as carefully applying valuation and disclosure methods in line with international standards and European regulations. *Confidentiality* and *professional behaviour* are especially important when working with digital assets, as transactions are often conducted in decentralized environments, and information about assets and market participants may be sensitive. An accountant must ensure information protection, prevent unauthorized use of data, and comply with cybersecurity standards and EU regulatory requirements. Understanding the essence of professional ethics principles

allows for the development of an ethically grounded practice in digital asset accounting, combining compliance with legislation, international standards, and high professional standards, thereby enhancing trust in accounting data and financial reporting.

IESBA significantly strengthens guidance on the use of technology in professional practice, emphasizing accountants' responsibility for proper management of technological risks, safeguarding confidential information, and maintaining professional competence in the context of rapid digitalization. In line with these approaches, national professional organizations in EU member states develop their own ethical guidelines, adapted to the local regulatory and technological environment.

The latest revision of the 2025 Handbook of the International Code of Ethics for Professional Accountants (IESBA, October 7, 2025) establishes a reinforced ethical framework for professional judgments in the field of tax accounting, which is particularly relevant for transactions involving digital assets characterized by heightened regulatory uncertainty and cross-border nature. The changes focus on the application of fundamental principles in "grey area" situations, which are typical for the taxation of crypto assets, tokenized instruments, and other forms of digital assets, especially in cases of discrepancies between the tax regimes of EU member states.

The Code specifies requirements for professional competence and due care. It establishes the obligation to create a credible basis for tax positions, apply the retrospective test from the perspective of a reasonably skeptical third party, and fully disclose uncertainties and potential consequences to the client. The new provisions reduce the risk of violating the principles of integrity and objectivity, limiting opportunities for aggressive tax planning. They are fully aligned with European initiatives to enhance tax transparency, while maintaining the priority of the public interest (Accountancy Europe, 2025, February 17).

Amendments to the Code concerning the use of work from an external expert, as well as the updated requirements related to sustainability reporting, will take effect in December 2026. At the same time, the International Ethics Standards for Sustainable Development (including independence standards) and other related changes to the Code will apply from December 2026, except for certain independence provisions in the value chain, which will come into effect in July 2028 (IESBA, 2025, October 7).

The Code not only establishes fundamental principles but also provides a conceptual framework for identifying, evaluating, and addressing threats that may impede compliance with these principles. A professional accountant applies this framework to identify, evaluate, and manage ethical risks in practical activities. Although *independence* is not a fundamental principle of the IESBA Code, it serves as a specific ethical requirement for assurance engagements, acting as a means to uphold the principle of objectivity.

3.2. Anti-corruption context

Anti-corruption policy is an integral component of the EU's institutional architecture and one of the key factors in building trust in financial markets, public institutions, and corporate reporting. Digital transformation and the proliferation of digital assets increase the focus on anti-corruption issues, as digital technologies simultaneously create new opportunities for enhancing transparency and new risks for concealing illicit financial flows. In the EU, anti-corruption policy is based on a combination of legal, institutional, and ethical mechanisms covering both the public and private sectors. Accounting functions as a tool for financial transparency and accountability, ensuring the proper representation of transactions, assets, and liabilities. Improper accounting, understatement, or concealment of information in financial reporting is regarded not only as a violation of accounting standards but also as a potential manifestation of, or contribution to, corrupt practices. Digital assets play a particularly important role, as their technological complexity, the pseudo-anonymity of certain transactions, and their transnational nature can be exploited for money laundering, evasion of sanctions, financial control, and concealment of ultimate beneficiaries. Cryptocurrencies are increasingly used for illicit activities, including corrupt actions, due to their decentralization and relative anonymity, which allow the circumvention of traditional banking channels and reduce the likelihood of detection. At the same time, they are applied not only in cybercrime but also across a broader spectrum of offenses involving the transfer of monetary value, such as evasion of financial sanctions, bribery, and embezzlement (U4 Anti-Corruption Resource Centre, Transparency International, 2023, March 3).

Enhanced requirements are imposed on the accounting of digital assets, particularly regarding the identification of sources of origin, correct classification, reliable valuation, and full disclosure of information in accordance with financial monitoring and EU anti-corruption legislation. The professional judgment of the accountant acquires a special anti-corruption significance. When making decisions on the recognition and measurement of digital assets, the accountant is obliged to consider not only formal compliance with standards but also the potential risks of using accounting procedures to conceal corrupt schemes. Adherence to the principles of integrity, objectivity, and professional skepticism, as enshrined in the IESBA Code, is regarded as a key safeguard against financial misconduct.

Recent EU legislative initiatives (the updated AML framework, AML Regulation, etc.) expand the obligations of "obliged persons", which include accountants and audit professionals: strengthened KYC/CDD rules, disclosure of beneficial ownership, periodic training, and standards for storing and providing information. The accountant becomes an active participant in the system for preventing financial crime and corruption. At the same time, supranational bodies, such as OLAF and EPPO, carry out monitoring, investigations, and coordination of criminal prosecution, increasing the

importance of professional ethics in cooperation with law enforcement institutions. The combination of regulatory requirements and law enforcement pressure creates a practice in which accountants must document not only accounting decisions but also verification procedures (due diligence) and report suspicious transactions through the appropriate channels. In this way, the EU aims to reduce opportunities for abuse and places ethical responsibility at the center of professional practice.

3.3. The role of professional organizations

Professional accountancy organizations (PAOs) (Accountancy Europe, national chambers, IFAC/IESBA, EFAA, etc.) play a key role in transferring ethical standards into the everyday work of accountants. The professional environment becomes a space where practical approaches to interpreting existing regulations are developed, new risks are discussed, and a shared understanding of the boundaries of acceptable professional judgment is formed. Through recommendations, position papers, and educational initiatives, professional organizations effectively fill regulatory gaps that arise due to rapid technological development.

At the EU level, Accountancy Europe plays an important coordinating role, representing the interests of national accountancy and audit organizations and uniting 49 professional organizations from 35 countries (including not only EU member states but the entire region), representing approximately 1 000 000 qualified accountants, auditors, and tax advisors. In its analytical reports and consultation documents, Accountancy Europe (2025, February 17) systematically examines the impact of digital technologies, blockchain, and crypto-assets on financial reporting, professional ethics, and confidence in accounting information. The organization emphasizes that digital assets increase the importance of IFRS principles and require heightened attention to transparency in estimates, disclosure of assumptions, and explanation of accounting decisions to financial statement users.

National professional accounting and auditing bodies in EU member states play an important role in shaping ethical guidelines. They adapt international ethical standards and recommendations to the national legal framework, taking into account local characteristics of the digital asset market and financial supervision (Semenova & Shapovalova, 2021). Practical guidance on accounting for crypto-assets, using digital platforms, and automating accounting processes often includes not only technical explanations but also emphasizes the accountant’s responsibility to prevent abuse, conflicts of interest, and distortion of financial information.

At the global level, IFAC and IESBA form the methodological basis for ethical regulation. The International Code of Ethics for Professional Accountants issued by IESBA, supplemented with provisions on technology use, directly links professional competence to a specialist’s ability to critically evaluate digital tools, algorithms, and automated solutions.

A special role is played by the European Federation of Accountants and Auditors for SMEs (EFAA, 2025, September 25), which focuses on practical challenges relevant to small and medium-sized enterprises. SMEs are most often involved in digital asset transactions without sufficient internal controls or specialized accounting units. EFAA's recommendations draw attention to the risks of a simplified or formalistic approach to accounting for digital assets and emphasize the need for ethical vigilance even in cases of minor transactions.

Professional organizations in the EU act as a kind of "buffer" between rapid technological changes and slower regulatory processes. They contribute to the development of a professional culture in which accounting for digital assets is seen not merely as a technical task but as an area of heightened responsibility toward users of financial statements. Under the influence of digital transformation, the role of professional organizations in the EU becomes key to maintaining trust in the accounting profession, upholding ethical principles, and ensuring the quality of financial information.

4. Threats to the fundamental ethical principles in accounting for digital assets

In the International code of ethics for professional accountants, threats are defined as circumstances or relationships that may compromise compliance with the fundamental principles. According to the Code, threats should be identified, evaluated, and addressed through appropriate safeguards. This approach allows ethical requirements to be directly linked to specific professional actions, particularly to the formation of professional judgment in the process of recognition, measurement, and disclosure of information in reporting.

In accounting for digital assets, threats have a systemic nature and correlate with each fundamental principle. Their sources include a combination of high uncertainty in valuation approaches, the absence of specialized accounting standards for most types of digital assets, the complexity of confirming control and ownership rights, and the growing role of distributed ledger technology. In the current environment, professional judgment becomes a key element of the accounting process, which, in turn, increases sensitivity to threats related to self-interest, self-review, and advocacy, as defined in the IESBA Code.

The processes of digital transformation in the EU further amplify the significance of ethical threats in connection with the expansion of regulatory requirements for financial and non-financial reporting. The introduction of the Corporate Sustainability Reporting Directive (CSRD), the European sustainability reporting standards (ESRS), the development of crypto-asset market regulation (Markets in Crypto-Assets Regulation, MiCA), and the digitalization of supervisory practices are creating a new institutional environment in which information about digital assets is increasingly

becoming material for reporting users. Accordingly, the effectiveness of ethical regulation in the EU is determined not by general declarations of principles, but by the ability of professional accountants and auditors to apply appropriate, proportionate, and well-documented safeguards to the identified threats in each specific accounting situation.

An extended analysis of threats to compliance with fundamental ethical principles in digital asset accounting confirms that the key source of ethical vulnerability is the combination of regulatory uncertainty, technological complexity, and the significant role of professional judgment. The IESBA Code offers a universal, yet sufficiently flexible, framework for responding to challenges through the concepts of threats and safeguards. Detailed analysis of threat manifestations has shown that no fundamental principle exists in isolation: violations of integrity or objectivity are often accompanied by deficits in professional competence or threats to independence. Therefore, ethical requirements must be applied comprehensively rather than fragmentarily, considering the specifics of digital assets. To address this issue, a systematization of key ethical threats has been carried out, the characteristics of their manifestation in the accounting of different types of digital assets have been identified, and the corresponding safeguards and practical steps for their implementation have been aligned, as summarized in *Table 1*.

Table 1

Threats to compliance with fundamental ethical principles in digital asset accounting and related safeguards

IESBA Code principles	Threat	Manifestation in digital asset accounting	Detailed safeguards and implementation steps
Integrity	Incomplete or misleading reporting (self-interest threat)	The threat arises from selective or incomplete disclosure of material information about the nature of a digital asset, including: (a) uncertainty over control rights of crypto-assets held through third parties (custody arrangements); (b) limitations on use or transfer of tokens specified in smart contracts; (c) legal restrictions related to classification of the asset as a crypto-asset, tokenized financial instrument, or other digital representation of value. Incomplete disclosure of these aspects distorts users' understanding of the economic substance of the asset and associated risks	1) Implement mandatory disclosure templates for digital asset rights (ownership, access controls, custody arrangements). 2) Require documented evidence of legal title (on-chain evidence, legal documents). 3) Use an independent internal or external verifier to confirm rights before inclusion in reporting. 4) Maintain a protocol for preserving evidence (hashes, transaction receipts) in an immutable repository
Objectivity	Pressure or advocacy (intimidation threat; advocacy threat)	Arises from the influence of management or related-party economic interests on the exercise of professional judgment in valuing digital assets, especially in the absence of an active market. This may include subjective assumptions about future cash flows from utility tokens, manipulation of fair value model inputs, or uncritical use of quotations from opaque trading platforms. Such actions compromise the neutrality of valuation and violate objectivity requirements	1) Segregation of duties: separate team/person for structuring consultation, another for valuation. 2) Engage an independent external valuer with required disclosure of methodology and key assumptions. 3) Formalize professional judgment process: written justifications of key assumptions, peer review, and archiving changes. 4) "No-promotion" policy for staff involved in valuation

End of Table 1

IESBA Code principles	Threat	Manifestation in digital asset accounting	Detailed safeguards and implementation steps
Professional competence and due care	Lack of competence or self-review (self-review threat)	Threat arises when an accountant or auditor recognizes, classifies, or values digital assets without sufficient knowledge of their technological and legal nature, including distinctions between cryptocurrencies, utility tokens, security tokens, and tokenized real-world assets. Lack of expertise may result in incorrect IFRS application (e.g., misclassification between inventory, intangible assets, or financial instruments) and inaccurate determination of recognition timing or impairment measurement	1) Mandatory certification, qualification in digital assets for accounting, valuation personnel. 2) Use of multidisciplinary teams: IT experts, legal specialists, valuers. 3) Require external technical assurance or independent expert opinion at initial recognition of an asset class or for complex structures. 4) Procedures prohibiting valuation by personnel who prepared the technical structure of the asset (preventing self-review)
Confidentiality	Disclosure or improper use of information (self-interest threat)	Arises from risks of unauthorized access to confidential information related to digital assets, including private keys, user identification, and transaction details. The combination of accounting systems with distributed ledger technology poses a particular threat, as some information is public by nature while other parts are subject to commercial and personal data protection requirements. Breaches of confidentiality may have ethical and regulatory consequences	1) Implement key management policies (HSM (Hardware Security Module), multisig (Multi-signature), custody agreements). 2) Conduct regular penetration tests and independent cybersecurity audits. 3) Apply data minimization and anonymization of metadata prior to analysis/storage. 4) Establish contracts with custodians with clear SLAs (Service Level Agreements) and access rights; maintain immutable access logs
Professional behaviour	Excessive involvement or advocacy (familiarity threat; advocacy threat)	Occurs when a professional accountant exceeds a neutral role and participates in public promotion of digital assets associated with a client or employer. This may include communications regarding initial token offerings, public statements on investment attractiveness, or involvement in strategic decisions affecting market perception. Such actions conflict with professional behavior requirements and may undermine trust in the profession	1) Code of conduct: prohibit public promotion of projects under audit/valuation. 2) Mandatory disclosure of all economic and non-economic interests regarding the client. 3) Disciplinary procedures and sanctions for violations
Independence in assurance engagements*	Self-review or self-interest (self-review threat; self-interest threat)	Arises when the assurance provider has previously been involved in developing the digital asset structure, its accounting policies, or valuation methods. Particularly relevant for assurance of financial or non-financial information where digital assets are material. Combining such roles creates threats to independence, as the provider is reviewing the results of their prior work	1) Prohibit combining consulting and assurance for the same subject matter. 2) Require documentation of all indirect relationships (economic interests) and their elimination. 3) Staff rotation, external quality review. 4) Public disclosure of the nature of services provided in the independence report

** Independence is not a separate principle but a specialized requirement to ensure objectivity in assurance engagements.*

Source: based on a complex assessment (IESBA, 2025, October 07; EFRAG, 2020, December 10; European Commission, 2023, May 31; EY, 2021; Korol & Hnasko, 2022).

Although independence is not a fundamental principle of ethics, for assurance engagements it serves as a critical condition for implementing the principle of objectivity and as a prerequisite for users' trust in audit results, especially in the digital asset environment characterized by high levels of judgment, complex valuation models, and technological opacity. This

distinction allows for the analytical separation of specific threats of self-review and self-interest that are characteristic of digital assets. The table presented is developed as a tool for aligning the provisions of the IESBA Code with practical accounting solutions for digital assets within the existing EU regulatory framework. Its practical and scientific significance lies in systematizing typical threats to adherence to fundamental ethical principles through the lens of concrete manifestations in the recognition, measurement, and disclosure of various types of digital assets, thereby bringing the abstract ethical requirements of the Code closer to practice. The logical connection between ethical principles, professional threats, and relevant safeguards is demonstrated, which in practice helps reduce the risk of fragmented or declarative application of ethical principles in the context of accounting's digital transformation.

5. Aligning accounting approaches to digital assets with professional ethics: European experience and practical lessons for Ukraine

In this article, accounting approaches to digital assets are understood as a set of IFRS-compliant decisions regarding their recognition, classification, measurement, presentation, and disclosure, formed on the basis of professional judgment under conditions of regulatory uncertainty. It is important to emphasize the role of ethics, as it is ethics – not merely technical rules – that limits the permissibility of accounting approaches.

A review of European experience shows that ethical standards in accounting differ to some extent depending on cultural, national, legal, and economic conditions in various countries. While the principles of integrity, objectivity, and confidentiality are widely recognized and universal, their application may vary: in some contexts, strict compliance with regulatory requirements predominates, while in others broader ethical considerations, including sustainable development and social responsibility, play a greater role (Accounting Insights Team, 2024, September 19).

Currently, the integration of ethical principles into digital asset accounting occurs primarily through strengthening the role of professional judgment and oversight of its justification. In Germany and the Netherlands, professional accounting organizations emphasize documenting judgments when classifying crypto assets (as either intangible assets or financial instruments), taking into account the risks of interest conflicts and valuation of manipulation. In France and Belgium, the focus is on the transparency of the origin of digital assets and aligning accounting decisions with AML/CFT (Anti-Money Laundering/Combating the Financing of Terrorism) requirements, which directly affects the extent of disclosure in financial reporting. In the Nordic countries (Sweden, Finland), ethical requirements are closely linked to the quality of risk and valuation uncertainty disclosures, especially concerning investment and hybrid tokens.

Publications by European professional organizations, in particular Accountancy Europe, indicate an awareness that digital assets increase the

vulnerability of accounting to corrupt practices, money laundering, and sanctions evasion, and therefore require ethical constraints that go beyond formal compliance with IFRS. In practice, an approach is emerging in which ethics is used as a criterion for the acceptability of accounting decisions: if the origin of an asset is opaque, the risks are significant, or the valuation is based on unreliable assumptions, this affects not only the measurement but also decisions regarding recognition and disclosure. In the context of sanctions and geopolitical tension, this approach is seen as a means of protecting financial reporting from the misuse of digital assets for illegal purposes and as a tool for maintaining trust in companies' financial information within the EU.

Professional ethics in the EU is adapting to digitalization based on the understanding that technology does not replace human judgment and must remain under its control. What is needed is not only the technical implementation of solutions but also the development of an ethical-technological culture among accountants, including training and assessment of the application of ethical principles in interaction with digital systems. There is a need to transform general ethical requirements into an operationalized model for their application in accounting for digital assets. A model for integrating IESBA professional ethics principles into the accounting and disclosure of digital assets (*Table 2*) has been proposed, which systematizes ethical constraints, mechanisms of professional judgment, classification, valuation, disclosure, control, and accountability.

Table 2

Model for integrating fundamental ethical principles into digital asset accounting: EU experience and directions for adaptation in Ukraine

Model level	Substantive characteristics	European Union practice	Directions for adaptation in Ukraine
Ethical (Normative)	Fundamental principles of the International Code of ethics for professional accountants: integrity, objectivity, professional competence and due care, confidentiality, professional behaviour, and independence. These principles serve as normative constraints on professional judgment when working with digital assets	Application of the IESBA Code as a mandatory ethical foundation for professional activity. Alignment of ethical requirements with MiCA regulation, AML/CFT obligations, and General data protection regulation (GDPR)	Harmonization of national legislation with European standards; formalization of the obligation to consider ethical aspects when making accounting decisions regarding digital assets; strengthening ethical responsibility in the digital finance sector
Professional judgment	Accountant's professional judgment as the process of selecting an accounting approach under regulatory uncertainty, high volatility, and technological complexity of digital assets. Judgment is formed considering identified ethical threats: conflict of interest, risk of information manipulation, valuation uncertainty, and opaque origin of assets	In the EU, professional judgment is particularly important due to the absence of a specific IFRS standard for digital assets. Special attention is paid to documenting the rationale for judgment and the auditor's role in verifying its ethical soundness	Development of methodological guidelines for applying professional judgment in digital asset accounting. Implementation of requirements to record ethical reasoning behind accounting decisions in working papers

End of Table 2

Model level	Substantive characteristics	European Union practice	Directions for adaptation in Ukraine
Digital assets classification	Determining the economic substance of digital assets considering control rights, expected benefits, and risks. Classification is performed in accordance with IFRS, taking into account different functional token types (payment, utility, investment, hybrid, etc.)	MiCA regulation applies a functional approach to crypto-asset classification. EU accounting practice relies on IAS 38 "Intangible Assets" and IFRS 9 "Financial Instruments", depending on the economic substance of the asset	Adapting the EU functional approach to improve national accounting standards. Development of recommendations for accounting hybrid digital assets, considering their combined nature and IFRS/MiCA requirements
Measurement	Choosing the valuation method for digital assets (historical cost or fair value) considering market activity, reliability of input data, and valuation uncertainty. Ethical considerations include avoiding biased assumptions and manipulative over- or under-valuation	The EU requires enhanced justification of valuations, transparency of assumptions, and disclosure of uncertainties in accordance with IFRS 13 "Fair Value Measurement"; independent valuers are involved in complex cases	Introduction of ethically justified criteria for selecting valuation methods; requirement to disclose the level of valuation uncertainty of digital assets in financial statement notes
Disclosure	Determining the scope and content of information disclosure about digital assets considering threats to ethical principles. Identification of ethically mandatory disclosures based on: suspicion of provenance, materiality of risk, and valuation uncertainty	CSRD/ESRS require structured non-financial reporting disclosures. MiCA establishes technical and economic disclosure requirements for the market but does not formalize ethical disclosure criteria for digital assets in financial reporting	Development of guidelines for ethically mandatory disclosures in financial reporting while maintaining confidentiality balance. Expansion of financial statement notes on digital assets considering corruption, money laundering, and sanctions risks
Audit & Compliance	Internal control, audit, and compliance systems as tools to ensure ethical accounting decisions regarding digital assets, including verification of ownership chains and compliance with sanctions	In the EU, close interaction between accountants, auditors, and regulators is observed. The audit role is strengthened to confirm the reliability of digital asset information and compliance with AML and sanctions requirements	Use of EU experience to develop digital asset auditing in Ukraine. Integration of sanctions and anti-corruption control procedures into accounting processes

Source: based on a complex assessment (IESBA, 2025, October 7; EFAA, 2025, September 25; Adriansyah et al., 2025; Kytaichuk, 2024).

Thus, the proposed model allows for aligning the fundamental principles of ethics with the requirements of IFRS and the EU regulatory framework (MiCA, CSRD/ESRS), while simultaneously formalizing practical tools for applying ethics as a criterion for the permissibility of accounting decisions. It ensures a systematic approach to the classification, valuation, and auditing of digital assets. By providing methodological guidelines for the application of professional judgment, the model establishes

a foundation for adapting EU practices to Ukrainian legislation, particularly under conditions of military and sanctions-related challenges.

The scientific novelty lies in the systematic integration of IESBA professional ethics principles with specific accounting decisions regarding the classification, valuation, and disclosure of digital assets based on EU practices. The practical significance of the obtained results is based on the potential use of the proposed approaches to harmonize Ukraine's national accounting system with European requirements, which is especially relevant in the context of combating corruption, money laundering, and sanctions evasion during the period of Russian military aggression and post-war recovery. The implementation of the proposed measures is expected to contribute to ensuring transparency in digital asset transactions, protection against fraud, and the development of the digital economy.

Conclusions

The experience of the European Union indicates that digital transformation does not diminish the role of accountants; rather, it emphasizes the importance of adhering to ethical principles, professional responsibility, and sound professional judgment. The adoption of advanced technologies such as blockchain, AI, and Big Data facilitates the automation of accounting processes, enhances transparency, and strengthens analytical support for professional judgment, while simultaneously introducing new risks and challenges. Accountants working with digital assets must not only comply with formal regulations but also exercise well-reasoned judgments to prevent improper practices and ensure transparency in financial reporting. In this context, accountants serve as a crucial ethical safeguard in the digital asset accounting chain, where the risk of misuse is heightened due to anonymity, the global scope, and the technological complexity of these assets.

Research confirms that digital asset accounting within the European Union is subject to intensified regulation, reflecting its growing role in the business environment and the limited standardization of accounting approaches. The International Code of Ethics for Professional Accountants provides a suitable conceptual framework for identifying and mitigating threats to adherence to fundamental ethical principles; however, its effectiveness depends on adaptation to the specific characteristics of digital assets. Systematizing threats and analyzing their manifestations in digital asset accounting has enabled the identification of appropriate safeguards and implementation measures, thereby providing a foundation for the further development of methodological guidelines and practices aimed at enhancing trust in financial and non-financial reporting in the era of digital transformation.

The proposed model for integrating IESBA ethical principles into digital asset accounting clarifies the relationships between ethical requirements, professional judgment, and practical decisions regarding classification, valuation, and disclosure, while considering EU regulatory practices. These findings can inform improvements in Ukraine's national accounting system,

particularly in addressing corruption, money laundering, and compliance with sanctions. The scientific contribution lies in the applied interpretation of IESBA professional ethics principles as operational criteria for evaluating the permissibility of accounting decisions regarding digital assets, based on EU practice. The practical significance stems from the model's adaptability to harmonize digital asset accounting in Ukraine with European standards amid heightened regulatory and geopolitical risks.

Overall, the results support the proposed hypothesis: aligning accounting approaches for digital assets with IESBA principles enhances the rigor of professional judgment, improves the transparency of financial reporting, and serves as a key mechanism for reducing information and corruption risks in digital asset accounting.

Future research should focus on refining methodologies for identifying and assessing ethical risks in digital asset accounting and assurance, particularly given the high dependence on professional judgment, valuation models, and decentralized technological solutions. Additionally, approaches to monitoring the application of these technologies should be enhanced. Special attention should be devoted to evaluating the impact of AI and Big Data integration on the objectivity, independence, and quality of professional judgment among accountants and assurance professionals across sectors where digital assets are increasingly significant.

REFERENCES / СПИСОК ВИКОРИСТАНИХ ДЖЕРЕЛ

Accountancy Europe. (2025, February 17). *IESBA code revisions on tax planning – key changes for accountants.* Accountancy Europe. https://accountancyeurope.eu/publications/iesba-code-revisions-on-tax-planning-key-changes-for-accountants

Accounting Insights Team. (2024, September 19). *Ethics in Accounting: Principles, Challenges, and Global Views*. https://accountinginsights.org/ethics-in-accounting-principles-challenges-and-global-views

Adriansyah, Rais, A. H., & Windarsari, W. R. (2025). Professionalism of Accountants in the Digital Era: Ethics, Competence, and Public Trust. *Review of Accounting and Business*, *5*(1), 45–58. https://doi.org/10.52250/reas.v5i1.1037

Al-Okaily, M., Al-Majali, D., Al-Okaily, A., & Majali, T. (2023, December 26). Blockchain technology and its applications in digital accounting systems: Insights from Jordanian context. *Journal of Financial Reporting and Accounting*. https://doi.org/10.1108/JFRA-05-2023-0277

Alsulami, F. (2025). A strategy of synergizing Big Data and artificial intelligence in accounting: Opportunities and challenges. *Corporate & Business Strategy Review*, *6*(3), 299–310. https://doi.org/10.22495/cbsrv6i3siart7

Bellucci, M., Cesa Bianchi, D., & Manetti, G. (2022). Blockchain in accounting practice and research: Systematic literature review. *Meditari Accountancy Research*, *30*(7), 121–146. https://doi.org/10.1108/MEDAR-10-2021-1477

Dragomir, V. D. (2023). Recognition and measurement of crypto-assets from the IFRS perspective and EU regulatory framework (MiCA). *Journal of Risk and Financial Management*, *16*(3), 31. https://doi.org/10.3390/jrfm16030031

European commission. (2023, May 31). *European crypto-assets regulation (MiCA).* Regulation (EU) 2023/1114 of the European parliament and of the council on markets in crypto-assets (MiCA). EUR-Lex. https://eur-lex.europa.eu/EN/legal-content/summary/european-crypto-assets-regulation-mica.html

European federation of accountants and auditors for SMEs (EFAA). (2025, September 25). EFAA responds to the EU Commission's consultations in the Context of digital markets act (DMA) First review. https://efaa.com/efaa-responds-to-the-eu-commissions-consultations-in-the-context-of-digital-markets-act-dma-first-review/

European financial reporting advisory group. (EFRAG). (2020, December 10). *Accounting for crypto-assets (liabilities). Highlights of EFRAG Discussion Paper*. ASAF Agenda Paper (2), 32 p. https://www.ifrs.org/content/dam/ifrs/meetings/2020/december/asaf/02-asaf-paper-on-crypto-assets-efrag-presentation.pdf

European financial reporting advisory group. (EFRAG). (2020, July). *Accounting for crypto-assets (liabilities). Discussion Paper*, 152 p. https://www.efrag.org/sites/default/files/2023-11/EFRAG%20Discussion%20Paper-Accounting%20for%20Crypto-Assets%20%28Liabilities%29-%20July%202020.pdf

EY. (2021, October). *Applying IFRS: Crypto-assets update*. Ernst & Young. https://www.ey.com/content/dam/ey-unified-site/ey-com/en-gl/technical/financial-services/documents/ey-apply-ifrs-crypto-assets-update-october2021.pdf

Financial Action Task Force (FATF). (2024, July 09). *Virtual Assets: Targeted update on implementation of the FATF standards*. FATF. https://www.fatf-gafi.org/en/publications/Fatfrecommendations/targeted-update-virtual-assets-vasps-2024.html

Fischer, D. (2018, November 30). Ethical and Professional Implications of Blockchain Accounting Ledgers. *Brooklyn College*. 13 p. http://dx.doi.org/10.2139/ssrn.3331009

Fomina, O., Romashko, O., & Semenova, S. (2022, December). Professional ethics of accountants: its features and problem aspects of observing ethical principles. *Economy and society*, (46). https://doi.org/10.32782/2524-0072/2022-46-42

Фоміна, О., Ромашко, О., & Семенова, С. (2022, грудень). Професійна етика бухгалтерів: її особливості та проблемні аспекти дотримання етичних принципів. *Економіка та суспільство*, (46). https://doi.org/10.32782/2524-0072/2022-46-42

Fomina, O., Semenova, S., & Romashko, O. (2024). Ethics of professional accountants in the EU: experience for Ukraine. *Scientia fructuosa*, (6), 15–33. https://doi.org/10.31617/1.2024(158)08

Fomina, O., Zadniprovsky, O., Korol, S., & Romashko, O. (2022, February). Professional judgement in accounting: contents and conditions of application. *Business: Theory and Practice*, *23*(1), 26–38. https://doi.org/10.3846/btp.2022.13330

Fulop, M., Ionescu, C., Magdas, N., Stefan, M. & Topor, D. (2025). Digital Transformation of the Accounting Profession at the Intersection of Artificial Intelligence and Ethics. *Economics*, *19*(1), 20250155. https://doi.org/10.1515/econ-2025-0155

Golov, S. F., Golubka, Ja. V., Kostjuchenko, V. M., Kuzina, R. V., & Chyzhevs'ka, L. V. (2022). *Professional ethics of an accountant*. Zhytomyr: PP Ruta.

Голов, С. Ф., Голубка, Я. В., Костюченко, В. М., Кузіна, Р. В., & Чижевська, Л. В. (2022). *Професійна етика бухгалтера*. Житомир: ПП Рута.

Han, H., Shiwakoti, R. K., Jarvis, R., Mordi, C., & Botchie, D. (2022, March). Accounting and auditing with blockchain technology and artificial intelligence: A literature review. *International Journal of Accounting Information Systems*, (48), 100598. https://doi.org/10.1016/j.accinf.2022.100598

Huterski, R., Voss, G., & Huterska, A. (2020). Professional Ethics in Accounting as Assessed by Managers of Economic Units. *European Research Studies Journal*, XXIII (Special Issue 1), 720–731. https://doi.org/10.35808/ersj/1788

International accounting standards board (IASB)/IFRS Foundation. (2019, June). *Holdings of Cryptocurrencies – Agenda Decision*. IFRS Foundation. IFRS Interpretations Committee. https://www.ifrs.org/content/dam/ifrs/supporting-implementation/agenda-decisions/2019/holdings-of-cryptocurrencies-june-2019.pdf

International ethics standards board for accountants (IESBA). (2025, October 7). *2025 Handbook of the International Code of Ethics for professional accountants (Including international independence standards)*. Handbooks, Standards, and Pronouncements. IFAC / IESBA. https://www.ethicsboard.org/publications/2025-handbook-international-code-ethics-professional-accountants

International federation of accountants (IFAC). (2021, April 1). *International federation of accountants. ethics, technology, and the professional accountant in the digital age.* https://www.ifac.org/knowledge-gateway/discussion/ethics-technology-and-professional-accountant-digital-age

Korol, S. (2024). Digital transformation of business: selection of accounting software product. *Investments: practice and experience*, (17), 5–12. https://doi.org/ 10.32702/2306-6814.2024.17.5	Король, С. (2024). Цифрова трансформація бізнесу: вибір бухгалтерського програмного продукту. *Інвестиції: практика та досвід*, (17), 5–12. https://doi.org/10.32702/2306-6814.2024.17.5
Korol, S., & Hnasko, O. (2022). Ethics of Professional Accountants as a Factor Influencing the Economic Environment. *Business Inform*, (12), 217–224. https://doi.org/10.32983/2222-4459-2021-12-217-224	Король, С. Я., & Гнасько, О. І. (2022). Етика професійних бухгалтерів як фактор впливу на економічне середовище. *Бізнес Інформ*, (12), 217–224. https://doi.org/10.32983/2222-4459-2021-12-217-224

Kurniawan, S., Harya Ningsi, E., Langgeng, U., Safriliana, R., & Prihat, Assih. (2025). Digital Transformation and accounting integrity: harmonization of moral ethics and accountability. *East Asian Journal of multidisciplinary research.* (EAJMR), *4*(6), 2681–2694. https://doi.org/10.55927/eajmr.v4i6.172

Kytaichuk, T. (2024). The role of accountant ethics in the post-war reconstruction of Ukraine. *Business Navigator*, *3*(76), 442–446. https://doi.org/10.32782/business-navigator.76-73

Mazaraki, A., & Melnyk, T. (2023, April). Ukraine's cooperation with the EU in the field of preventing and countering corruption. *Foreign trade: economics, finance, law*, *2*(127), 4–33. https://doi.org/10.31617/3.2023(127)01	Мазаракі, А., & Мельник, Т. (2023, квітень). Співробітництво України з ЄС у сфері запобігання й протидії корупції. *Зовнішня торгівля: економіка, фінанси, право*, *2*(127), 4–33. https://doi.org/10.31617/3.2023(127)01
Oriekhova, A. (2020). Problematic aspects of compliance with ethical standards by professional accountants. *Investments: practice and experience*, (23), 5–9. https://doi.org/10.32702/2306-6814.2020.23.5	Орєхова, А.І. (2020). Проблемні аспекти дотримання етичних норм професійними бухгалтерами. *Інвестиції: практика та досвід*, (23), 5–9. https://doi.org/10.32702/2306-6814.2020.23.5

Parrondo, L. (2023). Cryptoassets: Definitions and accounting treatment under the current International financial reporting standards framework. *Intelligent systems in accounting, finance and management*, *30*(4), 208–227. https://doi.org/10.1002/isaf.1543

Romashko, O., & Korol, S. (2024). Professional ethics of accountants in the context of electronic trust services and the use of artificial intelligence. *Problems of modern transformations. Series: economics and management*, (12). https://doi.org/ 10.54929/2786-5738-2024-12-09-04	Ромашко, О. М., & Король, С. Я. (2024). Професійна етика бухгалтерів в контексті електронних довірчих послуг та використання штучного інтелекту. *Проблеми сучасних трансформацій. Серія: економіка та управління*, (12). https://doi.org/10.54929/2786-5738-2024-12-09-04
Romashko, O., & Miroshnychenko, S. (2025). Features of the practical application of the principles of professional accountant' ethics. *Grail of science*, (58), 59–66. https://doi.org/10.36074/grail-of-science.14.11.2025.004	Ромашко, О., & Мірошниченко, С. (2025). Особливості практичного застосування принципів етики професійних бухгалтерів. *Grail of Science*, (58), 59–66. https://doi.org/10.36074/grail-of-science.14.11.2025.004

Sampaio, C., & Silva, R. (2025). Digital transformation in accounting: an assessment of automation and AI integration. *International Journal of Financial Studies*, *13*(4), 206. https://doi.org/10.3390/ ijfs13040206

Semenova, S. (2025). The structure of digital assets in business value creation. *International scientific journal "Internauka", Series: "Economic Sciences"*, (12). https://doi.org/10.25313/2520-2294-2025-12-11767

Semenova, S. M., & Shapovalova, A. P. (2021). Professional accounting and auditing organizations in Europe. *Foreign trade: economics, finance, law*, (5), 77–89. https://doi.org/10.31617/zt.knute.2021(118)06	Семенова, С. М., & Шаповалова, А. П. (2021). Професійні організації з обліку і аудиту в Європі. *Зовнішня торгівля: економіка, фінанси, право*, (5), 77–89. https://doi.org/10.31617/ zt.knute.2021(118)06

Semenova, S., & Shpyrko, O. (2025). Accounting aspects of using digital assets as an innovative finaning mechanism for concession operations. *Efficient economy*, (12). http://doi.org/10.32702/2307-2105.2025.12.80	Семенова, С. М., & Шпирко, О. М. (2025). Облікові аспекти використання цифрових активів як інноваційного механізму фінансування операцій концесії. *Ефективна економіка*, (12). http://doi.org/10.32702/2307-2105.2025.12.80

Shapovalova, A., Kuzmenko, O., Polishchuk, O., Larikova, T., & Myronchuk, Z. (2023). Modernization of the national accounting and auditing system using digital transformation tools. *Financial and Credit Activity Problems of Theory and Practice*, *4*(51), 33–52. https://doi.org/10.55643/fcaptp.4.51.2023.4102

Shuid, S. H., Ahmad Zazili, A. S., & Mahat, Z. (2024, February 19). A systematic literature review on the roles and ethical dilemmas of professional accountant in money laundering. *International Journal of Academic Research in Business and Social Sciences, 14*(2), 1682–1696. https://doi.org/10.6007/IJARBSS/v14-i2/20966

U4 Anti-Corruption Resource Centre / Transparency International. (2023, March 03). *Cryptocurrencies, corruption and organised crime: Implications of the growing use of cryptocurrencies in enabling illicit finance and corruption.* https://knowledgehub.transparency.org/helpdesk/cryptocurrencies-corruption-and-organised-crime-implications-of-the-growing-use-of-cryptocurrencies-in-enabling-illicit-finance-and-corruption

Wiyarni, W., Hanifah, N., & Murtiningtyas, T. (2024). Spiritual Intelligence as a moderation between professional ethics and professionalism of public accountants. *Revista de Gestao Social e Ambiental 18*(8), e06398. https://doi.org/10.24857/rgsa.v18n8-105

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