Proceedings of the 8th International Conference on Economics and Social Sciences (2025), ISSN 2704-6524, pp. 237-246

The 8th International Conference on Economics and Social Sciences
Exploring Global Perspectives:
The Future of Economics and Social Sciences
June 5-6, 2025
Bucharest University of Economic Studies, Romania

Accounting for Crypto Payments in the Gambling Industry: A Conceptual Framework Based on IAS 21

Daniel-Marius IORDACHE[1]

DOI: 10.24818/ICESS/2025/019

Abstract

The increasing use of cryptocurrencies as payment method in the gambling industry presents challenges in terms of accounting recognition and financial reporting. This research paper proposes a theoretical framework based on the International Accounting Standard 21, which governs the accounting treatment of foreign currencies transactions. The proposed framework addresses the lack of tailored standards for crypto assets by creating analogies between their transactional role and that of foreign currencies. The literature review is grounded in a structured review of 19 peer-reviewed articles published between 2017 and 2024, identified using the Elicit search platform. By adapting IAS 21's logic (converting foreign currency at the exchange rate on the transaction date) to crypto gambling, the study explains how crypto income could be recognised and derecognised using an official reference rate, ensuring regulatory transparency. The theoretical contribution of the paper supports regulatory clarity and provides a foundation for future work addressing digital asset transactions in technology-driven sectors like gambling.

Keywords: IAS 21, gambling industry, crypto payments, cryptocurrencies accounting.

1. Introduction

The integration of cryptocurrencies into the global financial system has never been successfully achieved. As it poses some opportunities it also creates disruptions across various industries, notably within the gambling sector. As digital assets such as Bitcoin and Ethereum gain popularity as alternative payment methods, gambling operators are increasingly adopting them to meet the preferences of tech-savvy consumers (Gainsbury & Blaszczynski, 2017; Liu et al., 2021). However, this shift toward crypto-based payments brings significant regulatory challenges specific to the gambling industry, particularly in the areas of transaction recognition, valuation, and financial reporting (Procházka, 2018; Milutinović et al., 2024).

[1] Bucharest University of Economic Studies, Bucharest, Romania, iordachedaniel23@stud.ase.ro.

© 2025 D.-M. Iordache, published by Editura ASE. This work is licensed under the Creative Commons Attribution 4.0 License.

The absence of dedicated accounting standards for cryptocurrencies leaves gambling companies using them in an unregulated manner. Existing frameworks such as IFRS and US GAAP offer only partial guidance, requiring entities to classify cryptocurrencies as intangible assets or inventory, categories that may not fully reflect their operational use in gambling transactions (Luo & Yu, 2022; Makurin et al., 2023). Furthermore, inconsistent valuation methods, volatile pricing, and the lack of reliable exchange rate mechanisms complicate even more the transparent recognition of crypto-based revenues for gambling operations (Ramassa & Leoni, 2022; Yusuf et al., 2024).

This research paper addresses some of these challenges by developing a theoretical framework tailored to the gambling sector for better accounting recognition and valuation of crypto bets. Based on recent literature, the study proposes conceptual parallels between cryptocurrency transactions and foreign exchange rate operations. Having in mind the principles of IAS 21, the proposed framework applies exchange rate-based recognition and valuation to crypto revenues, allowing gambling companies to record such income using a consistent and theoretically grounded method.

2. Problem Statement

2.1 Crypto Payments: Adoption, Trends & Industry Dynamics in the Gambling Sector

Cryptocurrencies have emerged as a novel payment method for goods and services, bringing with them associated risks and regulatory inconsistencies.

A study from 2023 explores the use of cryptocurrencies as a payment method in the tourism industry, addressing the growing demand for digital currencies (Aiazbekov, 2023) by using a case study approach. Aiazbekov (2023) examines customer preferences, regulatory compliance, and security concerns associated with cryptocurrency adoption. His findings indicate an increasing demand for cryptocurrencies in the travel sector, because it offers customers secure and convenient payment options. But the tourism industry is not the only one adopting cryptocurrencies for security and convenience purposes. Another industry which is impacted by the adoption of blockchain technology is the online gambling sector (Gainsbury & Blaszczynski, 2017). A 2017 study argues that blockchain, a distributed ledger technology, has the potential to revolutionise how transactions are conducted, and data is managed in the gambling sector. Key advantages that blockchain brings include enhanced security, transparency, the elimination of intermediaries, and the ability to provide "provably fair" transactions. The study also examines how cryptocurrencies, particularly bitcoin, can be used for payments in online gambling, offering benefits such as lower fees, partial anonymity, and faster transaction processing (Gainsbury & Blaszczynski, 2017).

Researching further, we can see that the gambling sector is constantly adopting digital technologies to enhance value creation and improved operations categorised in three dimensions: (1) the value perceived by the customer, (2) the value obtained

from the customer and (3) the value gained by the firm (Liu et al., 2021). As a technology adopter, the gambling industry is constantly adopting new emerging technologies. In a bibliometric analysis examining 929 gambling studies from 2004 to 2023, focusing on the impact of digital technologies and associated risks, Iordache et al. (2024) highlight two primary themes influencing gambling research: risk and technology in this digital transformation (Iordache et al., 2024) showing that this argument holds true. But as new technologies often touch unregulated territory, Gainsbury and Blaszczynski (2017) also propose regulatory strategies to minimise gambling related harms by emphasising the role digital payment methods play in influencing gambling behaviour (Gainsbury & Blaszczynski, 2017). Thus, the rapidly changing gambling landscape drives the need for updated regulations to keep pace with technological advancements in video gaming and gambling (Lawn et al., 2020).

Another research paper from 2019 found a strong positive correlation between cryptocurrency trading frequency and problem gambling severity (Mills & Nower, 2019). This study revealed a significant overlap between cryptocurrency trading and high-risk stock trading. Notably, individuals engaged in both forms of trading reported higher levels of problem gambling, depression, and anxiety symptoms compared to those trading in only one of these two areas. The authors suggest that cryptocurrency trading may be particularly appealing to gamblers with higher problem gambling severity and recommend including cryptocurrency trading in gambling-related screening, assessment, and treatment protocols (Mills & Nower, 2019). The emergence of gambling and gaming infused ecosystems, as well as the potential merging of gaming, gambling, and speculative trading through blockchain technology (Delfabbro & King, 2023) blurs the relationship between cryptocurrency trading and problem gambling among regular gamblers.

But on top of emotional wellbeing concerns, the lack of safety measures and identity verification processes (such as Know Your Customer procedures) also pose potential risks for vulnerable individuals. Particularly given the anonymity of cryptocurrencies, policy and research on cryptocurrency based online gambling is increasing (Andrade et al., 2023). In this demand, the growing popularity of cryptocurrency payments has led to specialised payment service providers to meet this demand (Mykulyak, 2019). Despite constant turbulences in the cryptocurrency market, the financial benefits for companies are significant, driving continued adoption and integration of blockchain technology as payment options. However, the increased regulatory scrutiny results also in stricter anti-money laundering measures and more thorough KYC (Know Your Customer) checks. These developments are already reshaping the payments ecosystem and are expected to continue to influence its evolution. Despite these challenges and because of the opportunities they bring, cryptocurrency payment solutions will remain in high demand as blockchain technology becomes more frequent as payments (Mykulyak, 2019).

The ongoing changes in the cryptocurrency landscape are likely to have lasting effects on the broader payments industry (Mykulyak, 2019) and the financial

definition and classification landscape of this industry (Hada & Cioca, 2021). As crypto-assets become more common in financial statements, auditors must be prepared to address the associated challenges and risks, even if they currently have limited experience with these assets (Ozeran & Gura, 2020).

2.2 Classification, Measurement, Disclosure Gaps, and other Accounting Ambiguities

The accounting treatment of cryptocurrency transactions (such as recognition) pose significant challenges in modern financial reporting due to the lack of dedicated regulations (Milutinović et al., 2024). The accounting treatment of cryptocurrencies under International Financial Reporting Standards (IFRS) is a challenging issue due to the lack of specific regulations (Milutinović & Dimitrijević, 2023). In the absence of dedicated standards, businesses rely on existing accounting frameworks, such as the International Accounting Standards Board's (IASB) official guidance on cryptocurrency accounting and reporting. IASB focuses on two relevant standards: IAS 38 "Intangible Assets" and IAS 2 "Inventories"(Niftaliyev, 2023). Cost and fair value, as per professional accounting standards for intangible assets and inventory are the only two valuation models that are available for cryptocurrencies (Milutinović et al., 2024). In the push for transparency and as an aid for stakeholder decision-making, entities should disclose information about their cryptocurrency holdings in financial statements, including descriptions, characteristics, holding purpose, associated risks, and materiality considerations (Milutinović et al., 2024). These disclosures help investors and potential business partners to assess the entity's financial position and to make informed decisions regarding investments or partnerships (Milutinović et al., 2024).

In another recent study, Luo and Yu (2022) reveal how inconsistencies and distortions between GAAP and IFRS, can mislead users in assessing asset value, liquidity, profitability, and cash-generating abilities across firms. Companies which receive cryptocurrencies as revenue are accounting them as intangibles using different measurement bases and classify associated cash inflows in different ways (Luo & Yu, 2022). Some firms categorise cryptocurrencies as long-term intangibles, while others treat them as liquid, short-term assets. This is the effect of the limited guidance from both IFRS and GAAP which gives companies the freedom to choose which existing standard to apply and how to implement it (Luo & Yu, 2022).

Despite past criticism from constituents and Board members, IASB defended its position in the regulatory space by issuing an agenda decision based on existing standards (Ramassa & Leoni, 2022). This exposes the limitations of the IASB's lengthy regulatory process when dealing with rapidly evolving technologies and highlights the growing importance of agenda decisions in the IFRS environment (Ramassa & Leoni, 2022).

Considering the various classifications options such as stocks, financial investments, monetary means, or intangible assets (Makurin et al., 2023), a research paper from 2018 identifies scenarios where cryptocurrencies should be treated as foreign currencies in accounting (Procházka, 2018). Even though financial

regulators do not currently classify them as fiat currency. Despite the fact that cryptocurrencies are not widely recognised as money by central banks and state authorities, their increasing use in transactions needs proper financial reporting (Procházka, 2018).

Besides tourism and gambling sectors, companies like Tesla and MicroStrategy have also reported increased asset values from cryptocurrency investments (Yusuf et al., 2024). But they also struggle to provide consistent financial estimates due to market value fluctuations of crypto. While cryptocurrencies offer benefits such as portfolio diversification and efficient cross-border transactions, they also introduce complications in asset valuation and risk management due to price volatility and (again) regulatory uncertainty (Yusuf et al., 2024). Thus, financial practitioners are advised to develop expertise in cryptocurrency valuation and risk management while adhering to international financial reporting standards (Yusuf et al., 2024).

2.3 Research Gap and Research Question

Although the literature shows how much has been written on accounting for cryptocurrencies under IAS 38 and IAS 2, and on the regulatory and disclosure issues, no study has yet delivered an industry-specific framework tailored to gambling operators. The gambling sector's unique characteristics (high volumes of micro-transactions, rapid bet settlement cycles, and stringent Know Your Customer and Anti-Money Laundering compliance) create demands that existing standards do not adequately cover.

There is currently no accounting framework that treats crypto bets as monetary items, reflecting their operational role in gambling. Thus, the research question arises:

How can accounting mechanics be adapted into a practical theoretical framework for the recognition and reporting of cryptocurrency payments in the gambling industry, incorporating both exchange-rate treatment and Know Your Customer and Anti-Money Laundering controls?

This question is answered in our Methodology section which underpins the IAS 21-based conceptual theoretical framework.

3. Methodology

This study proposes a theoretical research approach aimed at developing a new conceptual framework for the accounting recognition and reporting of cryptocurrency transactions in the gambling sector, by using IAS 21 mechanics. These are: initial spot-rate recognition and subsequent retranslation (IFRS, n.d.). The methodology consists of a structured literature review combined with a theory-driven synthesis plus a proposed mechanism which covers the identified gap.

A total number of 19 peer-reviewed articles published between 2017 and 2024 which are presented in the Literature Review section, were selected for analysis. These articles were identified using an online platform called Elicit, which uses artificial intelligence to find relevant academic literature based on thematic research

prompts. To find the most relevant research papers, multiple searches were conducted using a combination of keywords such as: cryptocurrency, gambling industry, accounting treatment, and digital payments. Only academic papers published in top journals were selected, which address either: (1) the use of cryptocurrencies in gambling or (2) crypto currencies accounting treatment under various financial reporting standards. Studies focusing on adjacent topics like: block chain infrastructure, gambler's behaviour or crypto mining were excluded unless they provided insight into financial reporting implications. Special attention was paid to the applicability of IFRS, IASB, and US GAAP frameworks, and to how companies interpret or adapt these standards for crypto in the absence of specific guidelines.

The insights gained through this review formed the foundation of a theoretical model proposed in the next section. The aim of the model is to address the identified accounting and reporting challenges and gaps by adapting the use of reference exchange rates, to the context of cryptocurrencies income declaration in gambling.

3.1 Constructing an IAS 21 Based Theoretical Framework for Crypto Payments in the Gambling Industry

The proposed theoretical model is represented as a process and is described by Figure 1. The process steps for the proposed *Theoretical Framework* are as follows:

There are 3 defined environments:

A) Environment (A): The customer's personal cryptocurrency wallet or personal account outside the gambling platform.
B) Environment (B): The internal trading account (ledger) maintained by the gambling operator, where crypto balances are held.
C) Environment (C): The active wagering environment where bets are placed, resolved, and settled in crypto.

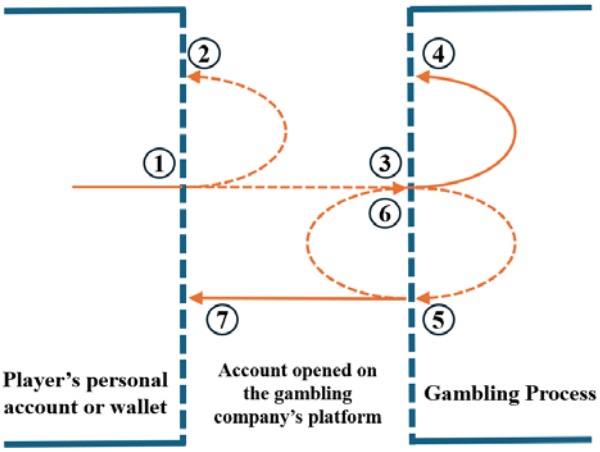
There are 7 possible steps as follows:

1) Action (1): The customer registers on the gambling platform and completes a Know Your Customer (KYC) validation. Once approved, the customer may transfer cryptocurrency from their personal wallet (A) into their trading account (B).
2) Action (2): Prior to any bet, the customer may withdraw their crypto from their trading account (B) back to their personal wallet (A). Because no gambling event occurred, this transfer does not trigger any accounting recognition.
3) Action (3): The customer places a wager using the cryptocurrencies held in their trading account (B). At this moment, a receivable in crypto is recognised at the spot exchange rate (IAS 21).
4) Action (4): If the bet is lost, the cryptocurrency transfers from the customer's trading account (B) into the company's account. This triggers an accounting event: the derecognition of the customer's receivable and the recognition of revenue in the company's books at the exchange rate on the bet date.
5) Action (5): If the bet is won, the original stake plus winnings (in crypto) transfers back to the customer's trading account (B). The return of the stake reverses the

receivable; the excess (winnings) is recorded as a loss (expense) for the gambling company, both measured at the exchange rate on pay-out date.

6) Action (6): The customer may place another bet using the remaining crypto in their trading account (B), repeating Action (3). Each new wager is treated identically for recognition and measurement.
7) Action (7): When the customer withdraws remaining crypto from their trading account (B) back to their wallet (A), this may create a fiscal event (capital gain/loss) for the customer. The company derecognises any remaining receivable and no further company accounting entry is required.

Figure 1. Process steps for the proposed Theoretical Framework



Source: author's own processing using Microsoft PowerPoint.

IAS 21 kicks in when each crypto denominated monetary item is recognised as a crypto receivable. Concretely:

I. Actions (1) and (2): account opening, KYC, transfers in or out mean no gambling event, so no recognition.
II. Action (3): in the moment when the customer's crypto is committed to a bet, you recognise a monetary receivable. This is the initial recognition under IAS 21.23. You measure that receivable at the spot exchange rate on the bet date (IFRS, n.d.).
III. Subsequent measurement (between reporting dates): any outstanding crypto receivables are retranslated at each closing rate per IAS 21.39, with the exchange difference in P&L (IFRS, n.d.).
IV. Settlement Actions (4, 5, 7): when the receivable is settled, either by the company keeping the crypto (lost bet) or returning it plus winnings (won bet), you derecognise the receivable and record any final exchange gain or loss in P&L, again per IAS 21 (IFRS, n.d.).

That means IAS 21 "begins" with Action 3, when the crypto moves from being a customer asset into a recognised receivable on the company's books. From that point on, all measurements and retranslations of that crypto receivable follow IAS 21's rules: initial spot-rate recognition, subsequent retranslation and P&L recognition of exchange differences (IFRS, n.d.).

4. Conclusions

In recent years the gambling sector has continually embraced digital transformation. Riding this trend, cryptocurrencies have emerged as a novel payment method, offering faster transfers, near-instant settlements, and appeals to security concerned customers. Yet, unlike traditional fiat currencies, cryptocurrencies do not comply with traditional accounting rules.

Today, gambling companies that accept Bitcoin, Ethereum, or other cryptocurrencies must force those receipts into IAS 38 (intangible assets) or, in some cases, IAS 2 (inventory). Neither standard captures both the exchange rate substance of crypto bets and the volatility these assets exhibit. This study shows that, although cryptocurrencies have been rapidly adopted as payment methods in the gambling industry, current accounting treatments under IAS 38 and IAS 2 fail to capture the exchange rate nature of these novel transactions.

The literature review of 19 peer-reviewed articles published between 2017 and 2024 reveals that classifying crypto receipts as intangible assets or inventory leads to inconsistent recognition under IFRS, and growing divergence from U.S. GAAP fair-value requirements. At the same time, regulatory reports and empirical research highlight KYC shortcomings on crypto gambling platforms and link crypto-based wagering to increased problem gambling risks, or even money laundering concerns.

In response, this study proposes a new theoretical framework based on IAS 21 principles. Under this model, each cryptocurrency wager is treated as a foreign currency monetary item: the receivable is initially recognised at the spot exchange rate when the bet is placed (2) settlement events like lost bets, pay-outs, and withdrawals, trigger derecognition and profit and loss recognition of all exchange differences.

By aligning accounting recognition with the reality that crypto functions as money in the betting lifecycle, this framework delivers symmetric recognition of gains and losses and brings transparency to the income statement, giving auditors and regulators a clear benchmark and reducing room for divergent interpretations. On top it also brings Anti-Money Laundering procedures like Know Your Customer into the process.

4.1 Limitations & Future Research

The proposed framework is conceptual and requires empirical validation (e.g., case studies with gambling operator data to assess operational feasibility and stakeholder perceptions). The proposal assumes the use of published spot-rate exchange data, yet no official reference rate for cryptocurrencies exists. Establishing

reliable rate sources and governance around exchange rate selection must be addressed in future work. Like for example, dedicated governmental institutions which publish daily exchange rates or other international bodies to which this responsibility can be delegated. Further research should explore how an IAS 21-style treatment interacts with tax regulations and customer level fiscal events, and how regulators might formalise a reference exchange rate mechanism.

In conclusion, as cryptocurrencies become normalised as gambling bets, an IAS 21-based framework offers a robust interim solution. By treating crypto wagers as monetary items and ensuring the transparent recognition of exchange rate gains and losses, light can be shed upon these disruptions. This bridges the gap between the economic substance and the financial reporting, while inviting policy makers to issue dedicated guidance for digital assets and crypto payments in the gambling industry. As stakeholders will push to access this opportunity, financial practitioners are advised to develop their skills in cryptocurrency valuation and risk management procedures while campaigning for clear international financial reporting standards.

References

[1] Aiazbekov, A. (2023). Cryptocurrency as a method of payment in the tourism sector. Financial Internet Quarterly, 19, 57-65. https://doi.org/10.2478/fiqf-2023-0006.

[2] Andrade, M., Sharman, S., Xiao, L.Y., Newall, P.W.S. (2023). Safer gambling and consumer protection failings among 40 frequently visited cryptocurrency-based online gambling operators. Psychology of Addictive Behaviors, 37, 545-557. https://doi.org/10.1037/adb0000885.

[3] Delfabbro, P., King, D. (2023). The evolution of young gambling studies: digital convergence of gaming, gambling and cryptocurrency technologies. International Gambling Studies, 23, 491-504. https://doi.org/10.1080/14459795.2023.2171469.

[4] Gainsbury, S.M., Blaszczynski, A. (2017). How Blockchain and Cryptocurrency Technology Could Revolutionize Online Gambling. Gaming Law Review, 21, 482-492. https://doi.org/10.1089/glr2.2017.2174.

[5] Hada, T., Cioca, I.C. (2021). Fiscal and Accounting Aspects Regarding the Gambling. Ovidius University Annals, Economic Sciences Series, 21(1), 757-765. https://doi.org/10.61801/OUAESS.2021.1.105.

[6] IFRS (n.d.). IAS 21 The Effects of Changes in Foreign Exchange Rates. Retrieved from https://www.ifrs.org/issued-standards/list-of-standards/ias-21-the-effects-of-changes-in-foreign-exchange-rates/.

[7] Iordache, D.-M., Mihai, F., Aleca, O. (2024). Two-Decade Bibliometric Analysis of Collaborative Trends in Gambling Studies: A Structured Literature Review and Analysis of Gambling Research (2004-2023). Proceedings of the 7th International Conference on Economics and Social Sciences, 133-141. https://doi.org/10.24818/icess/2024/015.

[8] Lawn, S., Oster, C., Riley, B., Smith, D., Baigent, M., Rahamathulla, M. (2020). A Literature Review and Gap Analysis of Emerging Technologies and New Trends in Gambling. International Journal of Environmental Research and Public Health, 17(3), Article 744. https://doi.org/10.3390/ijerph17030744.

[9] Liu, M.T., Dong, S., Zhu, M. (2021). The application of digital technology in gambling industry. Asia Pacific Journal of Marketing and Logistics, 33, 1685-1705. https://doi.org/10.1108/APJML-11-2020-0778.

[10] Luo, M., Yu, S. (2022). Financial Reporting for Cryptocurrency, 29, 1707-1740 https://doi.org/10.2139/ssrn.4186836.

[11] Makurin, A., Maliienko, A., Tryfonova, O., Masina, L. (2023). Management of Cryptocurrency Transactions from Accounting Aspects. Economics Ecology Socium, 7(3), 26-35. https://doi.org/10.31520/2616-7107/2023.7.3-3.

[12] Mills, D.J., Nower, L. (2019). Preliminary findings on cryptocurrency trading among regular gamblers: A new risk for problem gambling? Addictive Behaviors, 92, 136-140. https://doi.org/10.1016/j.addbeh.2019.01.005.

[13] Milutinović, S., Dimitrijević, D. (2023). Trends and Perspectives in Cryptocurrencies Recognition According to International Accounting Regulation. Facta Universitatis Series: Economics and Organization, 20(3), 235-242. https://doi.org/10.22190/FUEO230809015M.

[14] Milutinović, S., Dimitrijević, D., Vojinović, Ž. (2024). Recognition of cryptocurrency transactions: Challenges and perspectives. Ekonomski izazovi, 13(26), 40-51. https://doi.org/10.5937/EkoIzazov2426040M.

[15] Mykulyak, B.E. (2019). Facilitating Online Crypto-Payments Now and in the Future. In: Chishti, S., Craddock, T., & Courtneidge, R. (Eds.). The PayTech Book: The Payment Technology Handbook for Investors, Entrepreneurs and FinTech Visionaries, pp. 132-133. Wiley. https://doi.org/10.1002/9781119551973.ch40.

[16] Niftaliyev, S. (2023). Problems Arising in The Accounting of Cryptocurrencies. Financial and Credit Activity: Problems of Theory and Practice, 3(50), 76-86. https://doi.org/10.55643/fcaptp.3.50.2023.4046.

[17] Ozeran, A., Gura, N. (2020). Audit and accounting considerations on cryptoassets and related transactions. Economic Annals-XXI, 184(7-8), 124-132. https://doi.org/10.21003/ea.V184-11.

[18] Procházka, D. (2018). Accounting for Bitcoin and Other Cryptocurrencies under IFRS: A Comparison and Assessment of Competing Models. The International Journal of Digital Accounting Research, 18, 161-188. https://doi.org/10.4192/1577-8517-v18_7.

[19] Ramassa, P., Leoni, G. (2022). Standard setting in times of technological change: accounting for cryptocurrency holdings. Accounting, Auditing & Accountability Journal, 35(7), 1598-1624. https://doi.org/10.1108/AAAJ-10-2020-4968.

[20] Yusuf, Muh. F.M., Rauf, D.M., Hamid, A., Sultraeni, W., Garusu, I.A. (2024). Managing digital finance: The role of cryptocurrency in financial reporting. Edelweiss Applied Science and Technology, 8(5), 2007-2037. https://doi.org/10.55214/25768484.v8i5.1947.