

Conceptual Review: Valuation of Digital Assets under Nigeria's Investment and Securities Act 2025

J.O Olaleye¹, Abraham Olayinka², Razak Zubair³

¹Lead City University, Toll Gate Area, Lagos- Ibadan Express Way, Ibadan, Nigeria

²Dominion University KM 24 Ibadan –Lagos Express way, Ibadan, Oyo State

³Lead City University, Toll Gate Area, Lagos- Ibadan Express Way, Ibadan

Abstract— A comprehensive regulatory framework governed digital assets in Nigeria was signed into law through Investment and Securities Act 2025 (ISA 2025). The act classified the assets as securities under the Securities and Exchange Commission (SEC). ISA 2025 addresses persistent legal ambiguities and also introduce significant conceptual and practical challenges in valuation of cryptocurrencies, blockchain-based assets, and tokens. The central problem is the lack of robust and valuation methodologies that are context- sensitive suitable for volatile and evolving market in Nigeria. The critical research question that this review addresses is how can stakeholders effectively value digital assets under ISA 2025 to ensure investor protection and market transparency? The paper critically examines approached adopted globally and Nigeria for the valuation of digital asset. And synthesizing internationally adopted methodologies and evaluating their relevance for Nigeria. It proposes multi-dimensional conceptual framework that integrates technological, an innovative, market, regulatory, and macroeconomic factors. The gaps in interdisciplinary perspectives and current valuation practices were identifies in the review. It offered actionable and appropriate recommendations for accountants, policymakers, and regulators. The paper recommended that Nigerian stakeholders should collaboratively develop and implement local valuation guidelines that adapt global best practices to unique context in Nigeria. It also recommended that they should invest in capacity building, and promote continuous empirical research to ensure robust, transparent, and valuation standards that protect investor. In the long run, this work aims to align Nigeria's capital market with global standards by strengthen market integrity, and foster investor confidence.

Keywords— Investment and Securities Act 2025, digital assets, valuation, Nigeria, regulatory framework, conceptual framework, global standards.

I. INTRODUCTION

On March 31, 2025, the President of Nigeria signed the investment and Securities Act 2025 (ISA 2025) into Law. This positioning Nigeria as a leader in distal fiancé landscape in Africa (Securities and Exchange Commission, Nigeria, 2025). By virtue of this act digital assets which include cryptocurrencies, security tokens, and utility tokens are classified as securities. Securities and Exchange Commission (SEC) is now empowered by this law to regulate Virtual Asset Service Providers (VASPs), Digital Asset Exchanges, and Digital Asset Operators (DAOPs) (IOSCO, 2023). Despite this legislative progress, there are still complex challenges in the area of valuation of digital assets. This is due to their volatility, diversity and technological underpinnings (Yermack, 2015).

Statement of the Problem

Stakeholders dealing with digital assets in Nigeria currently lack robust and context -sensitive valuation frameworks for the asset. The existing methodologies available globally are not fully adapted to the unique market, regulatory and technological environment in Nigeria. This gap serves as threat to investor protection, impedes market transparency, and undermines the effective implementation of ISA 2025.

Research Questions

1. This review synthesizes the globally adopted approaches for digital asset valuation, critiques their applicability in Nigeria, and proposes a tailored conceptual framework. The analysis proceeds through six sections: definition of key concepts, Review and Synthesis of Existing Literature, developing a conceptual framework for digital asset valuation, discussion and implications, recommendations and outlining future research directions. The research questions focused on
2. What conceptual frameworks exist for the valuation of digital assets in global financial markets?
3. How does Nigeria's Investment and Securities Act 2025 define and classify digital assets?
4. What valuation models are recognized or implied under the ISA 2025 for digital assets?
5. How does the valuation framework under ISA 2025 compare with international regulatory practices (e.g., SEC US, FCA UK, EU)?
6. What are the potential legal and financial implications of the valuation provisions in ISA 2025 for investors, digital asset service providers, and regulators in Nigeria?
7. What challenges might arise in applying valuation models for digital assets under the ISA 2025 in Nigeria?

II. RESEARCH OBJECTIVES

The Research objectives of this Conceptual review are to:

1. Review conceptual and theoretical models for valuing digital assets globally.
2. Examine how Nigeria's Investment and Securities Act 2025 defines, classifies, and regulates digital assets.
3. Identify valuation approaches provided or implied under the ISA 2025 for different categories of digital assets.
4. Compare Nigeria's regulatory valuation framework with international standards and best practices.

5. Assess the legal, financial, and regulatory implications of digital asset valuation provisions in the ISA 2025 for market stakeholders.
6. Highlight potential challenges in implementing valuation guidelines for digital assets in Nigeria's regulatory environment.

III. HYPOTHESES

Since this is a conceptual review (qualitative legal-financial analysis), the researchers used propositions or guiding hypotheses rather than testable statistical hypotheses in order to frame hypotheses for critical analysis/discussion.

H₁: Nigeria's Investment and Securities Act 2025 provides a comprehensive and internationally competitive framework for the valuation of digital assets.

H₂: The valuation models recognized under ISA 2025 inadequately address the unique characteristics and market volatility of digital assets.

H₃: The implementation of valuation guidelines in ISA 2025 will face significant practical and legal challenges within Nigeria's financial and regulatory environment.

H₄: Harmonizing Nigeria's digital asset valuation framework with international standards would enhance investor confidence and market stability.

Definition of Key Concepts

Digital Assets

ISA 2025 defines digital assets as virtual assets which includes cryptocurrencies (Bitcoin, Tether, Ethereum), security tokens, and utility tokens (Securities and Exchange Commission, Nigeria, 2025). Cryptocurrencies function as decentralized mediums of exchange. The utility tokens grant access to blockchain services, while security tokens represent ownership in underlying assets (Narayanan et al., 2016). The above distinctions necessitate the need for specialized valuation methods (Baur et al., 2018).

Valuation

Valuation determines the fair value of asset. IFRS 13 defines this as the price received to sell an asset in an orderly transaction (International Financial Reporting Standards, 2011). For digital assets to be accurately valued the Stakeholders must navigate market volatility, regulatory requirements and technological risks (Damodaran, 2018). The available accounting standards offer limited guidance which make compliance to be complicating (Procházka, 2018).

ISA 2025's Regulatory Context

The recent act, ISA 2025, enhances the authority of SEC to license VASPs and enforce disclosures. This aligns Nigeria with global standard of International Organization of Securities Commissions (IOSCO) (IOSCO, 2023; Securities and Exchange Commission, Nigeria, 2025). Accurate valuation underpins these requirements. This enables transparent financial reporting and investor trust (Raiborn & Sivitanides, 2015).

Review and Synthesis of Existing Literature

Approaches Adopt Globally for Valuation

Globally, researchers and practitioners have adopted three primary approaches for the valuation of digital asset: market-based, cost-based, and income-based methods.

Market-Based Valuation: This is a method of valuation that compares the market prices and financial parameters of comparable assets in order to arrive at a value. According to this approach, the price of an item in a competitive market is the most accurate representation of its true worth. IFRS 13 prioritizes observable market prices, prices that are readily available and widely recognised in a market which are based on the active trading and transactions, for valuation (International Financial Reporting Standards, 2011). Some Exchanges like Binance provide real-time data. But the volatility of the market undermines reliability (Cheah & Fry, 2015). Dyhrberg (2016) point out speculative bubbles in cryptocurrency markets. This affects the Efficient Market Hypothesis (Fama, 1970). Makarov and Schoar (2020) also highlight liquidity fragmentation across exchanges which bring distortion to the prices.

Cost-Based Valuation: it is also called cost approach. This approach estimates the values of assets based on the expenses incurred to produce them. It shares the same valuation approach with self-constructed intangible assets or inventory. The value of Bitcoin, for instance, may be related to the costs of mining. This value includes computational power, depreciation of hardware and electricity consumption (Nakamoto, 2008; Hayes, 2017). In this situation, the "floor" of value of Bitcoin may be determined by the marginal cost of production.

This approach has also come under criticism. Vranken (2017) argues that it will be difficult for cost-based valuation to establish a consistent cost basis due to some factors. Some of the factors include geographic differences in electricity prices, volatility of energy cost and rapid advancements in mining technology. Also, there are non-digital assets which this approach cannot effectively value. For example, pre-mined tokens or tokens issued on platforms like Ethereum. This shortcoming affects the relevance of this approach to a subset of the digital asset ecosystem.

In addition, this approach does not reflect investor sentiment or market dynamics. These are crucial in the speculative environments in respect of the pricing of assets. As a result, this method is not widely adopted practice. it only offers some grounding in production economics except in niche analytical contexts.

1. *Income-Based Valuation*: This approach is based on the estimate of the present value of expected future benefits from holding a digital asset. The most popular approach model in this category is the Discounted Cash Flow (DCF) (Damodaran, 2018). This is well-suited for assets that generate consistent and predictable income streams. For instance, the holder of security tokens may be entitled to dividends or profit shares. These are amenable to DCF analysis.

However, not all the digital assets generate regular cash flows. This makes traditional income-based model to be less applicable. Liu and Tsyvinski (2021) note that the majority of cryptocurrencies function more like speculative instruments or

commodities rather than income-producing assets. Their values are often driven by user adoption, network utility, or market sentiment. These factors cannot be easily quantified in monetary terms.

Within the income-based framework an alternative was developed called real options model. This model was originally developed by Trigeorgis (1996). The approach of this model treats digital assets as options on platform success or future technology use. For example, a token could grant access to services in future. This is akin to a call option. However, the application of real options in the valuation of crypto is still developing. The options face practical challenges. Cong et al. (2021) point out such challenges as estimating volatility, defining the underlying stochastic process and modelling user behaviour. All of these are less stable in decentralised network. and Cong et al. (2021)

In spite of these hurdles, income-based valuation models are becoming popular especially among institutions where their business models and tokenomics of blockchain projects are clearer. In such cases, a more nuanced valuation framework may be offer by hybrid models that combine income potential with market indicators.

Each of these globally adopted approaches have strengths and limitations, particularly when applied to nascent and volatile digital asset market in Nigeria.

Theoretical Perspectives

The valuation of digital asset is rooted and draw on distinct theories. These theories offer competing and at times complementary lenses that helps to assess the effectiveness and limitations of methodologies use for different valuation.

1. Efficient Market Hypothesis (EMH). This theory was proposed by Fama (1970). It argues that prices of the asset fully reflect all available information. In case of digital asset, it presumes that current market price to be an unbiased estimate of its intrinsic value. Thereby making market-based valuation a theoretically sound approach.

Under the operation of cryptocurrencies, the theory implies that no investor can consistently outperform the market or make extra ordinary gain either trading strategies or through analysis. This is due to the fact the price reflects all relevant information.

Critics of the theory argues that EMH falls short to explain the speculative bubbles and the wild price swings that are common in the digital asset markets. In response, Shiller (2015), a prominent behavioral economist, argues that markets are frequently driven by irrational exuberance. This is a situation where prices are dictated by investor sentiment rather than fundamentals. This type of behaviour challenges the assumption of information efficiency and rational actors especially in digital assets markets that is sentiment-driven.

2. Behavioural Finance

it emerges as a powerful alternative to traditional valuation theory. It focuses on how psychological factors influence the behaviour of investor. The Prospect theory developed by Tversky and Kahneman (1992) supports this perspective. It holds that people weigh their gains and losses in relation to a reference point and demonstrate loss aversion. The above

helps to explain the reason why markets of digital asset often experience momentum trading, overreactions and herd behaviour.

In the investigation of Barberis, Greenwood, Jin, and Shleifer (2018), they further support this view by showing that sentiment-driven trading plays a critical role in shaping price dynamics. Sentiments driven trading occurs as a result of influenced by news, crowd psychology and social media. The result of their findings assists to understand why some digital assets experience massive price fluctuations with little to no change in fundamentals.

Behavioural finance propose that valuation models must account for investor biases, heuristics, and emotions. These are specially pronounced in markets characterized by low regulation, technological novelty, and high uncertainty such as those involving tokens and cryptocurrencies.

The above perspective agreed with the recent development in algorithmic trading. This is a situation where sentiment analysis from platforms like Reddit and Twitter is used to predict short-term price movements by adding a new layer of complexity to valuation efforts.

3) Real Options Theory

This theory was pioneered by Triggerfish (1996). It provides a flexible framework for valuing assets under uncertainty especially those with embedded growth opportunities. Real options treat investment opportunities as options unlike traditional cash-flow models. It is a situation that managers can exercise when conditions are favourable. This approach is highly applicable to digital assets, especially utility tokens. It often represent rights to use a future service or access a developing platform. As a result of this, owning a token is akin to holding a call option on the success of the underlying technology.

Amram and Kulatilaka (1999) advocate this by emphasizing the relevance of option pricing models for valuing assets and projects with uncertain cash flows, strategic flexibility, and technological innovation. It is all hallmarks of blockchain-based environment. This approach makes real options suited to tokens whose value is contingent on platform development, adoption, or regulatory clarity.

However, in practice applying real options is challenging. This requires complex modelling assumptions which include the estimation of volatility, contingent pathways, and decision nodes. These are often speculative in decentralized systems. Overall, the theory provides a useful lens for emerging digital infrastructures and strategic valuation of early-stage projects.

Challenges in Nigeria's Context

In the cryptocurrency adoption in Africa, Nigeria has been at the forefront. The country has been ranked second globally in digital asset usage. An impressive \$125 billion in on-chain value has been transacted from July 2023 to June 2024 (Chainalysis, 2024). However, despite this outstanding performance, the digital valuation landscape in the country still faces obstacles. These obstacles hinder accurate and consistent valuation practices.

Some of the obstacles/ challenges are:

1. Market Immaturity

Market immaturity is a major limitation in the digital asset ecosystem of Nigerian is market immaturity. This manifest in the form low liquidity and thin order books on local exchanges. Okorie and Lin (2021) support the above by arguing that illiquid markets are prone to price manipulation and extreme volatility. It makes market-based valuation models unreliable. Local exchanges in Nigeria often rely on fragmented global pricing feeds without the benefit of robust domestic trading volume. This led to inconsistent price discovery and significant bid-ask spreads.

Another issue is the presence of peer-to-peer (P2P) trading although it is innovative and accessible. But it further complicates valuation. These decentralized trades are often associated with issues. They are unregulated, negotiated off-exchange, and subjective to geographic, temporal, or trust-based premiums. They introduce non-transparent pricing mechanisms.

2. Regulatory Evolution

Conflicting signals and instability have been the hallmark of the regulatory landscape of digital assets in Nigeria. In February 2021, the Central Bank of Nigeria (CBN) issued a circular that prohibited banks and financial institutions from facilitating or dealing in cryptocurrency transactions (CBN, 2021). This situation created an environment of legal uncertainty. Operators and investors of crypto activities were driving underground. While people were waiting for the impending accounting standards and formal adoption of valuation.

However, with the recent signing of the Investment and Securities Act (ISA) 2025, and engagement by the Securities and Exchange Commission (SEC) coupled with CBN have created a shift toward regulatory clarity (World Bank, 2024). This latest progress has brought hope for standardization in valuation, auditing and reporting of digital assets.

3. Technological Constraints

In digital asset environment in Nigeria, technological infrastructure remains a major bottleneck. In spite of fintech adoption and rapid mobile adoption, blockchain-specific infrastructure like secure nodes, institutional-grade digital wallets and validated on-chain data sources is underdeveloped. Kshetri (2018) support the above position by pointing out that emerging markets often lack the foundational digital architecture that require scalable, secure, and auditable blockchain solutions.

4. Economic Volatility

In Nigeria, valuation contend with broader macroeconomic instability. Some of the instability like high inflation rates, volatile monetary policy and currency depreciation create significant distortions when converting digital asset prices into naira-denominated values. According to the International Monetary Fund (2024), Nigeria inflation rate has surpassed 25% rate coupled with sharp fluctuations in the exchange rate regime following subsidy removals and monetary policy adjustments.

These challenges have eroded the purchasing power parity of local currency-based valuations. They undermine both costs based and income-based valuation models. For example, staking rewards denominated in naira or mining may yield

unpredictable returns due to inflationary pressures. This makes long-term valuation unreliable.

In addition, due to ongoing regulatory tensions there is lack of stablecoin integration with local banks. This restricts the capacity of accountants and businesses to utilize crypto-native tools to protect against naira volatility. This further impair process efforts to establish consistent benchmarks for asset pricing including cross-border contexts.

Gaps in Literature

In spite of growing number of research on the valuation of digital asset, there are still critical gaps between professional literature and the academic. These gaps have affected the practical applicability of valuation framework especially the stakeholders in emerging economies such as Nigeria. There is need to address these blind spots in order to develop robust, inclusive and context-sensitive approaches to digital asset accounting and financial reporting.

1. Global Models Neglect Emerging Markets' Challenges

The design of most existing valuation frameworks is within the context of well-regulated market and mature financial systems. Bouri et al. (2019) in their paper observe that global models often assume stable regulatory environment, deep liquidity and reliable price discovery mechanisms. These assumptions are rarely hold in developing economies. For instance, emerging markets like Nigeria have unique challenges. Some of the challenges include fragmented exchanges, limited fiat-to-crypto gateways, volatile macroeconomic conditions and infrastructural gaps. Thus far, few valuation models account for these realities.

This oversight creates a misalignment between theory and practice. Thereby rendering global models partially or wholly not suitable for localized application. Therefore, there is need for contextual valuation frameworks that will include technological constraints, fluctuating national currencies and informal trading structures (like P2P platforms).

2. Limited Integration of Valuation and Regulatory Frameworks

Another gap especially in emerging markets is the paucity/scarcity of research that combine valuation techniques with evolving regulatory regimes. The works of Tapscott & Tapscott (2016) emphasize blockchain's transformative potential. But they fall short of operationalising valuation within specific regulatory environments such as Nigeria's Investment and Securities Act (ISA) 2025.

This gap is significant because regulation has direct influences on asset asst classification, measurement and recognition. In the absence of harmonised lens that connects valuation models to legal and compliance frameworks, the practitioners will continue to struggle to navigate accounting disclosures, audit standards and tax treatment. Future research must focus on bridging this disconnect by developing regulatory-aware valuation models that align with national and international financial laws

3. Lack of Adequate Specific Guidance in IFRS and GAAP

Both International Financial Reporting Standards (IFRS) and Generally Accepted Accounting Principles (GAAP) offer limited or at times confusing guidance on the measurement, recognition and disclosure of digital assets. Procházka (2018)

argues that cryptocurrencies are often classified under broad categories such as intangible assets or inventories. These classifications do not reflect their economic characteristics that are unique like volatility, liquidity, or utility.

This inadequate tailored guidance has led to inconsistent accounting practices, both within and across jurisdictions. For example, some firms use fair value to report crypto holdings while others use historical cost even when they maintain similar assets. The result produces a fragmented financial reporting landscape. This undermines investor confidence and hampers comparability.

There is urgent need for both IFRS and GAAP to establish clear, coherent, consistent, and worldwide accepted valuation frameworks for digital assets.

4. Underdeveloped Interdisciplinary Approaches

Valuation of digital asset cut across various disciplines; finance, accounting, economics, computer science, and law. Raiborn and Sivitanides (2015) note that academic research remains siloed and that few studies actually adopt a truly interdisciplinary lens. For instance, financial scholars may focus on valuation mechanics, while legal scholars address regulation in isolation thereby leaving gaps in holistic understanding.

Considering regulatory complexity and technological of digital assets the disciplinary fragmentation has become problematic. For instance, to value a utility token will require the following; understanding its technical function within a protocol, the legal framework governing its issuance, and the economic model supporting its demand and scarcity. In order to avoid valuation models remaining either too technical for accountants or too theoretical for practitioners, there is need for collaborative research efforts.

Developing a Conceptual Framework for valuation of Digital Asset

Rationale

The rise of digital assets in emerging markets like Nigeria has created both opportunities and challenges for regulators, auditors, and investors. Securities and Exchange Commission (SEC) Nigeria has been mandated by the Investment and Securities Act (ISA) 2025 to formalise approach for the valuation of digital asset. The approach must be the one that balances global valuation standards with market specific realities in Nigeria. This demand shows the importance of need for a conceptual framework that integrates diverse elements such as market behaviour, technological infrastructure, regulatory compliance and macroeconomic conditions. Stakeholders can improve transparency, comparability and accuracy in financial reporting by aligning this framework with fair value hierarchy of IFRS 13 and social-economic landscape of Nigeria.

This type of multidimensional model is not merely theoretical, it is actionable. It can guide and assist accountants, auditors, inform policy for regulators in making informed decision as regard to valuation. The framework proposes four interdependent modules; 1) Market Dynamics, 2) Technological Reliability, 3) Regulatory Compliance, and 4) Economic Context.

Components of the Framework

1. Market Dynamics Module

It addresses the core valuation principle of market-based measurement. This is anchored on IFRS 13 which give priority to observable market prices as the most reliable valuation input (International Financial Reporting Standards, 2011).

- Exchange Price Benchmarks: in order to ensure Price integrity, transparency and regulatory alignment, prices must be sourced from SEC-licensed digital asset exchanges. This prevents valuation distortion arising from unregulated peer-to-peer platforms and enhances investor protection.
- Volatility Adjustments: Due to the extreme price swings in digital asset markets statistical volatility models (e.g., GARCH, Value-at-Risk) are being applied analysts to normalise short term fluctuations. Cheah & Fry (2015) and Makarov & Schoar (2020) noted that price fragmentation and speculative surges distort fair value estimations. This necessitating these adjustments.
- Sentiment Analytics: this is about the effect of behavioural inputs on the price formation. The inputs are investor mood and speculative sentiment. Valuation professionals can leverage on social media data, on-chain metrics, and natural language processing (NLP) to derive sentiment indices (Barberis et al., 2018; Peterson, 2021). These behaviours are particularly useful in markets driven more by perception than intrinsic value.

2. Technological Reliability Module

The valuation of digital asset must reflect not only market performance but also the technological credibility of the underlying asset or protocol.

- Blockchain Architecture Evaluation: The security, scalability, and consensus model of the blockchain on which the asset is issued must be assessed by Auditors (Narayanan et al., 2016).
- Smart Contract Auditability: The absence of rigorous auditing for tokens reliant on smart contracts (utility and security tokens) poses legal and valuation risk. In order to ensure functional integrity and avoid hidden vulnerabilities the technical experts must conduct code reviews (Buterin, 2014; Dannen, 2017).
- Infrastructure Sensitivity Adjustments: The blockchain infrastructure in Nigeria faces many constraints. This includes inconsistent internet access, cybersecurity vulnerabilities, and limited developer capacity. The above factors introduce systemic risk. And also justify the inclusion of an infrastructure adjustment coefficient in valuation models (Kshetri, 2018; Swan, 2015).

3. Regulatory Compliance Module

Valuation of digital asset will be incomplete without considering the regulatory standing and disclosure quality. Part of the requirement of ISA 2025 is that there must be full integration of licensing, documentation, and risk disclosures into the valuation process.

- Licensing and Legal Verification: any Assets issued or traded on a non-SEC-licensed platforms are heavily discounted in valuation or excluded. As they lack

enforceable investor protections. This act serves as a compliance filter that ensure regulatory legitimacy (Securities and Exchange Commission, Nigeria, 2025).

- **Whitepaper and Prospectus Analysis:** Valuation professionals must careful and thoroughly examine technical whitepapers, tokenomics and risk statements by following IOSCO (2023) and ISA 2025. The inputs are mandatory as part of valuation they are not optional.
- **Taxation and AML Considerations:** the valuation of digital asset may be altered by its tax implications and compliance with anti-money laundering (AML) protocols. Assets that are not in compliance with the guidelines of FATF or Nigeria’s Data Protection regulations will face reduce utility from investor and also heightened enforcement risks (Financial Action Task Force, 2021; Nigeria Data Protection Authority, 2023).

4. Economic Context Module

The macroeconomic environment especially Nigeria with a volatile setting have a significantly influences on the valuation of digital asset valuation.

- **Forex Sensitivity Analysis:** the Conversion of digital assets to naira which are denominated in USD or other stable currencies introduces foreign exchange risk. In order to manage this risk, analysts must apply sensitivity models that will enable to simulate exchange volatility scenarios and provide valuation ranges (International Monetary Fund, 2024).
- **Adoption Metrics as Value Drivers:** The status of Nigeria as the second highest crypto adopter in the world show that there is a strong user demand in the country (Chainalysis, 2024). This rate of adoption can act as a market validation proxy and influence the utility of the asset and network effects.
- **Macroeconomic Indicators:** some of the variables that influence investor confidence and asset demand are GDP growth, monetary policy and inflation. These variables are incorporated into risk premiums and discount rate estimations when applying option-based models or income-based (World Bank, 2024; African Development Bank, 2024).

This four-module conceptual framework offers a scalable, adaptable structure for valuing digital assets in Nigeria. It bridges global standards (like IFRS 13 and IOSCO) with local regulatory, technological, and economic realities mandated by ISA 2025. The model encourages collaboration of interdisciplinary; merging of finance, law, technology, and behavioural economics. This will enhance accuracy and reduce systemic risk in digital asset reporting.

As the environment of digital asset is developing gradually in Nigeria, this framework can inform future auditing, financial statement disclosures, and valuation standards. Furthermore, it offers the model for other emerging markets facing similar institutional and infrastructural constraints can replicate.

Framework Visualization

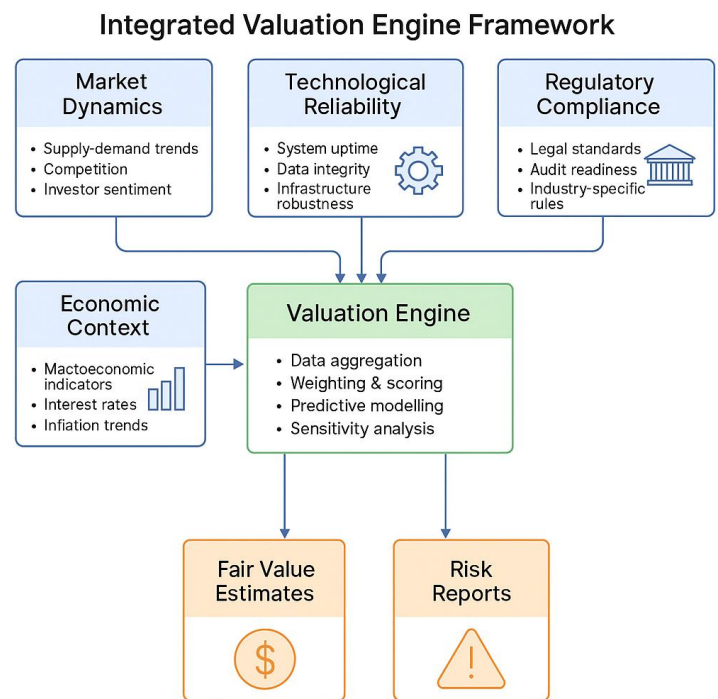


Figure 1: Conceptual Valuation Framework for Digital Assets under ISA 2025
Source: Researchers 2025

Unique Contributions

This conceptual framework brings unique contributions through innovations for valuing digital assets. The key innovations are:

Built for Emerging Markets

Many exiting global models do not quite fit the unique financial scenes in developing economies such as Nigeria. This framework fixes these shortcomings. It has been tailored to align valuation practices with Nigeria’s specific economic conditions, regulations and technological landscape (Bouri et al., 2019). By ensuring that this valuation is not just theoretical but is grounded, relevant and truly useful in Nigeria’s dynamic financial environment.

Integrating different fields

Traditional approached often look at different fields/disciplines such as technology, finance and regulations in isolation. This model unifies insights from all these fields thereby giving a complete, holistic view of digital assets. It means far more accurate and comprehensive valuation strategies can be developed because is reflecting the true complexities of these assets (Raiborn & Sivitanides, 2015).

Alignment with Regulatory and Standardization

The framework can be compared with others globally and ensure compliance locally by adhering with international standards like IOSCO principles and IFRS 13 and also directly incorporates ISA 2025. This alignment boosts transparency, reduces uncertainty in valuations and enhance confidence that investors and stakeholders have in digital markets (Securities and Exchange Commission, Nigeria, 2025).

IV. DISCUSSION AND IMPLICATIONS

Theoretical Implications

This conceptual framework makes significant contributions to the theory of valuation by engaging and expanding on several core theories:

Efficient Market Hypothesis (EMH): The EMH suggests that the asset price will always reflect all available information (Fama, 1970). However, the framework has shown that there are persistent inefficiencies in digital asset market which is not developed and fragmented particularly Nigeria's market. Some of the inefficiencies include inconsistent pricing across different exchanges, high volatility, and limited investor access to real-time data directly challenge many of EMH assumptions. This position aligns more with Shiller's (2015) observations about irrational exuberance and speculative behaviour often seen in crypto markets.

Behavioural Finance

The framework gives a clearer picture of behaviour finance by including sentiment analysis especially what people are saying on social media and what transactions they are making. This essentially putting investor psychology into practice (Tversky & Kahneman, 1992). This position was supported by findings of Barberis et al. (2018) that investor emotions and crowd behaviour have significant influence on pricing dynamics in emerging crypto markets.

Real Options Theory: The framework advances real options theory by treating digital assets (utility and security tokens) as contingent claims on uncertain technological developments (Trigeorgis, 1996; Amram & Kulatilaka, 1999). This fits perfectly with fast-paced, innovation driven environment in Nigeria where value of asset often hinges on future protocol upgrades, regulatory shifts, or wider network adoption.

Practical Implications

- **Accounting and Audit:** For accountants and auditors, this framework serve as structure guide for them to comply with IFRS 13 especially in the environment/ area where observable market data is not reliable or scarce. It enables to combine market indicators with sentiments and technology-based inputs that will enable them to derive fair value estimates.
- **Investment Analysis:** Part of the benefits that investors derived are the enhanced valuation transparency and contextual accuracy, especially those participating in vibrant peer-to-peer and DeFi ecosystems in Nigeria. The framework supports investors in taking informed decision-making in a landscape that is characterized by high volatility and uncertainty in regulation.
- **Regulatory Oversight:** Regulatory bodies in Nigeria like SEC can leverage the framework to put ISA 2025 into practice. By ensuring that digital asset disclosures, AML compliance, and operator licensing are factored into valuation processes. This give strengthens to oversight functions and protect investors.
- **FinTech Innovation:** The framework can be used by FinTech startups and blockchain developers to assess tokenomics. By establishing pricing models for sales of token or listings, and demonstrate value creation to stakeholders and investors (Tapscott & Tapscott, 2016).

Limitations

The framework has some limitations despite its strengths. Some of the limitations are:

- **Market Data Quality:** The framework will require access to reliable, liquid, and transparent market data. These may be lacking due to the fact that the market in Nigeria is still developing gradually. Okorie & Lin, 2021 noted that low trading volumes, risk of price manipulation, and exchange system that is fragmented can make it tough to get precise valuation.
- **Expertise in Technological knowhow:** many accounting firms and regulators in Nigeria might be lacking the specialized expertise needed for in-depth audits in blockchain and analysis of smart contract.
- **Implementation and Enforcement by Regulatory:** while the provisions of ISA 2025 are detailed and comprehensive but the effectiveness of the implementation and enforcement of the framework will depend on the ability of the SEC to ensure compliance. The capacity of SEC to enforce is limited. The enforcement of this framework can be done by making sure that the body coordinate with financial institutions and adapt to rapid technological changes (World Bank, 2024).

V. RECOMMENDATIONS

The followings are recommended based on the unique challenges facing Nigeria:

- **Development of localised Valuation Guidelines:** Regulators, professional bodies and markets participants in Nigeria should come together and develop valuation guidelines that will adapt global best practices to regulatory in Nigeria, economic and technological context.
- **Investment in capacity building:** Stakeholders should give priority to training for accountants, auditors and regulators in the valuation of digital asset and blockchain technology.
- **Promotion of Continuous Empirical Research:** Promotion of continuous and Ongoing research using local market data that should validate and refine valuation models. This will ensure that they remain robust as the market evolves.
- **Foster Regulatory Coordination:** the policies of SEC, CBN, and other agencies should harmonize in order to reduce uncertainty and support consistent valuation and reporting standards

ISA 2025 has brought a new era for regulation and valuation of digital asset in Nigeria. The act has provided long-awaited legal certainty and align the financial system of the country with international best practices.

The financial environment in Nigeria can now enhance investor confidence, foster market integrity, and position the country as a leader in digital finance regulation by addressing the identified conceptual gap and adopting a multi-dimensional valuation framework. In order to ensure robust, transparent, and globally competitive valuation standards, it is essential to encourage Ongoing research, continuous capacity building, and adaptive policymaking.

Outlining Future Research Directions

- Empirical Validation: there is need for future studies to use real world data from Nigerian digital asset markets to test the proposed framework.
- Comparative Analysis: Researchers should compare the effectiveness of the valuation models across the emerging markets as well as developed markets.
- Technological Innovation: Further research should exploit how to integrate AI, machine learning, and blockchain analytics into the valuation of digital asset.
- Regulatory Impact: The impact of ISA 2025 and subsequent regulatory updates on valuation practices and market integrity should be monitored by Ongoing analysis.
- Capacity Building: The effectiveness of training programs for accountants, auditors, and regulators in the valuation of digital asset should be assessed by various studies

VI. CONCLUSION

ISA 2025 positions Nigeria at the forefront and pioneer in the regulation of digital assets across the Globe. However, the critical success of this leadership lies on the robust and effective. This study reviews global valuation theories. It critiques their applicability in emerging markets. And also proposes a novel, multidimensional framework tailored to realities in Nigeria. The framework has provided a holistic tool for fair value estimation by integrating market dynamics, technological reliability, regulatory compliance, and macroeconomic context.

Theoretically, the gaps in EMH, behavioural finance and real options theory have been bridged by this framework. Practically, accountants, investors, regulators and FinTech innovators have been assisted in navigating complexity in valuation. Future research should continue to refine and validate this framework, promote of evolution of international standards and leverage AI tools for enhanced precision.

Ultimately, for the digital finance environment in Nigeria to compete and thrive globally there is need for valuation that its foundation is credible with transparency, resilience and the framework has bridged gaps in EMH, behavioural finance, and real options theory. Practically, it has assisted accountants, investors, regulators, and FinTech innovators in navigating valuation complexity. Future research should refine and validate this framework. It should promote international standard evolution, and leverage AI tools for enhanced precision.

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