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Succession of Digital Assets Under Islamic Inheritance Law: A Fiqh-Grounded Framework for Crypto, Cloud Accounts, and NFTs

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ABSTRACT

Over the past decade, the explosion of digital assets, including cryptocurrencies, non-fungible tokens (NFTs), and cloud-based accounts, has introduced complex legal questions that conventional inheritance regimes struggle to address. In Muslim-majority jurisdictions and among Muslim communities worldwide, these questions intersect with the requirements of Islamic personal law, particularly the farā'iḍ (obligatory heirs' shares) and waṣiyya (testamentary bequests). This study undertakes original empirical and doctrinal research to chart a path toward a unified fiqh-grounded framework for digital asset succession. By combining doctrinal analysis of classical juristic sources, contemporary fatwas, and statutory developments with semi-structured interviews among scholars, estate planners, and digital asset owners across Malaysia, Indonesia, Pakistan, and the United Kingdom, the research shows that digital assets are increasingly recognized as mal mutaqawwim (valuable property) but lack standardized protocols for identification, valuation, and transfer. The study reveals that differences in platform terms of service and cross-border jurisdiction complicate heirs' access to private keys and cloud accounts, exacerbating existing gender and socio-economic disparities. It proposes a model of "custodial key trusts" and e-wills that integrate digital asset inventories with farā'iḍ distributions, allowing compliance with both shariah and civil laws. The paper argues that without coordinated legal reforms and educational initiatives, vast wealth stored in digital forms risks being lost or misappropriated, undermining the objectives of ḥifẓ al-māl (preservation of wealth) and social justice.

Keywords: *digital inheritance; Islamic law; farā'iḍ; cryptocurrency; estate planning.*

INTRODUCTION

The relationship between law and technology is often portrayed as dialectical: advances in one sphere compel adaptation in the other, while legal norms can encourage, or sometimes hinder, technological change. Inheritance law—one of the oldest branches of jurisprudence—now finds itself grappling with the disruptive arrival of purely digital forms of wealth. Cryptocurrencies, non-fungible tokens (NFTs), online businesses and cloud-based accounts have transformed property into intangible, borderless and sometimes anonymous value. In Malaysia, for example, surveys report that about forty per cent of the population owned some form of crypto asset in the first quarter of 2024 (Abd Wahab et al., 2024), and the value of

digital investments under management grew roughly 400-fold between 2018 and 2023 (Securities Commission Malaysia, 2024).

Such assets are defined and regulated differently across jurisdictions (Financial Stability Board, 2022; Securities Commission Malaysia, 2019; Feyen et al., 2022), rely on cryptography and distributed ledger technology for security (Feyen et al., 2022), and can be traded or stored without a central authority. Yet existing inheritance regimes—drafted for tangible property like land, livestock or gold—lack a clear taxonomy and procedure for identifying, valuing and transferring these digital goods, especially when owners die without leaving instructions (Mikk & Sein, 2018).

The legal uncertainty is compounded by the absence of a universally accepted definition of "digital asset." Financial regulators still debate whether digital currencies, tokens and virtual items represent securities, commodities, personal data or some hybrid category (Financial Stability Board, 2022; Feyen et al., 2022). Malaysia's Capital Markets and Services (Prescription of Securities) (Digital Currency and Digital Token) Order 2019 treats crypto assets as digital currencies or tokens, placing them under the Securities Commission's jurisdiction (Securities Commission Malaysia, 2019); many other jurisdictions treat them as commodities, while a few have banned them outright (Reuters, 2021; Al Jazeera, 2021). Major institutions like the Financial Stability Board and the World Bank emphasize the reliance of these assets on cryptography and distributed ledgers (Financial Stability Board, 2022; Feyen et al., 2022), but this technical description does not resolve the normative question of whether they are inheritable property. As digital assets proliferate in everyday life, the fact that they may be held on foreign servers, bound by platform terms of service and protected by private keys means that legal obligations around post-mortem access differ sharply from those for traditional bank accounts. Owners frequently believe that they can simply "pass on the password" to heirs; in practice, contractual prohibitions and privacy laws often prevent heirs from accessing or controlling accounts without a court order (Uniform Law Commission, n.d.; Mikk & Sein, 2018).

Against this backdrop, Muslim communities face an additional layer of complexity. Islamic inheritance law (farā'iḍ) prescribes fixed shares to heirs and imposes a one-third cap on discretionary bequests. Classical jurists distinguished between *mal mutaqawwim* (property with lawful benefit) and items that cannot be owned or inherited. Historically, wealth comprised tangible assets; however, jurists also recognized inheritance of intangible rights such as debts and usufruct. The emergence of decentralized digital tokens raises new questions: do cryptocurrencies and NFTs qualify as *mal mutaqawwim*? How should private keys and cloud credentials be managed without violating the fixed shares and testamentary limits? Scholarly opinion remains divided. In Malaysia, the Shariah Advisory Council of the Securities Commission and certain state fatwa committees permit crypto assets issued by registered exchanges (Securities Commission Malaysia, n.d.), while other jurists in Egypt, Indonesia and other jurisdictions argue that crypto tokens lack the characteristics of money and therefore cannot be lawful property (Al Jazeera, 2021; Abdelgawad, 2024). The lack of a unified Sharīʿah ruling means that the same asset can be deemed permissible in one state and forbidden in another, delaying inheritance and sowing confusion among heirs. Moreover, even scholars who accept digital assets emphasize that speculative trading, excessive uncertainty (*gharar*) and the potential for illicit use pose ethical concerns (Munandar, 2025).

Regulatory and practical challenges further complicate matters. Malaysia has adopted a minimalist approach to regulating crypto assets in order to encourage innovation, resulting in inadequate protections for heirs (Abd Wahab, Katuk, Hussain, Zainol, Maamor, & Kamis, 2024). Without specific laws on digital asset succession, families may struggle to prove ownership, determine jurisdiction, or access private keys. Courts dealing with crypto assets must grapple with price volatility—should the value of tokens be locked at the time of death or at the moment of distribution? Disputes have already arisen over whether assets should be distributed in crypto units or converted into fiat currency (Abd Wahab et al., 2024; Robert Ong

Thien Cheng v. Luno Pte Ltd & Anor, 2020). The anonymous nature of blockchain transactions and the requirement for private keys expose heirs to identity theft and fraud; losing a key can permanently erase a fortune (Beyer & Nipp, 2019; Chainalysis, 2024). Guidelines developed in other jurisdictions, such as the United States' Revised Uniform Fiduciary Access to Digital Assets Act, show models for giving executors access to digital property (Uniform Law Commission, n.d.; Beyer & Nipp, 2019), yet these models have not been incorporated into many Muslim-majority countries. Estate planners urge clients to create inventories of their digital holdings and to store credentials securely, but surveys reveal that most crypto owners store keys on personal devices or simply memorize them, leaving no instructions for heirs (Abd Wahab et al., 2024; Beyer & Nipp, 2019).

These challenges are not merely technical; they speak to broader questions of social justice and the preservation of wealth. Islam emphasizes ḥifẓ al-māl—the protection of property—as one of the objectives of law. If digital wealth cannot be accessed or distributed according to farā'iḍ, the result is not only the loss of individual assets but also the erosion of communal welfare. The generational nature of digital adoption heightens the risk: surveys indicate that millennials and Generation Z hold a significant portion of their wealth in crypto assets, while older heirs may lack the literacy to manage or even recognize these holdings (Pew Research Center, 2024; JPMorgan Chase Institute, 2025). Gender disparities in access to technology can further disadvantage female heirs. The absence of guidance also undermines the principle of equality among heirs; some may gain disproportionate control of digital holdings, while others are left uninformed. Without coordinated legal reforms, religious rulings and educational initiatives, digital wealth may simply vanish or be appropriated by third parties, undermining the objectives of social justice embedded in Islamic law (Abd Wahab et al., 2024).

Recognizing these risks, a growing number of scholars and practitioners call for a fiqh-grounded framework that bridges doctrinal principles with technical realities. Such a framework would classify digital tokens, NFTs and cloud accounts as *mal mutaqawwim*, subject them to the fixed shares of farā'iḍ, and integrate digital asset inventories into estate planning. It would also address the challenge of access by proposing mechanisms such as custodial key trusts or e-wills that release private keys upon verification of death—potentially via blockchain-based liveness or oracle verification (Chen et al., 2021; Singh et al., 2022). Comparative studies suggest that trusts could be adapted to Islamic contexts by invoking the concept of amanah, provided trustees are bound by sharīʿah and civil law (Abdullah, Awang, & Nor Muhamad, 2022). Any solution must also account for cross-jurisdictional probate and terms-of-service conflicts; otherwise, digital assets located on foreign servers may remain beyond the reach of heirs (Law Commission of England and Wales, 2023/2024). Most importantly, the conversation must center on transparency—owners should disclose their digital holdings, regulators should clarify how such assets are regulated, and scholars should issue consistent guidance. In short, just as legal debates around generative AI hinge on transparency, fairness and accountability, so too must the emerging field of digital asset succession embrace openness as a starting point. Only then can the ancient law of inheritance adapt to the brave new world of intangible wealth.

Emerging Definitions and Classifications of Digital Assets

The term "digital asset" lacks a universally accepted definition, and its scope has expanded rapidly with technological innovations. Early scholarship treated digital assets as intangible rights akin to software licenses or email accounts. More recent analyses broaden the concept to include cryptocurrencies, tokens, NFTs, domain names, cloud-stored data, e-commerce credits, social media accounts and even virtual real estate (Edwards, 2013; Law Commission of England and Wales, 2023, 2024; Beyer & Nipp, 2019). Some commentators argue that digital assets constitute a new category of property requiring separate legal treatment (Law Commission of England and Wales, 2024; UK Parliament, 2024). Others caution that too

rigid a classification might hinder technological innovation and prefer to adapt existing property categories (UK Jurisdiction Taskforce, 2019; Low & Hara, 2024).

From a technical perspective, cryptocurrencies are digital representations of value not issued by central banks and accepted by individuals or corporations as a medium of exchange (Financial Action Task Force [FATF], 2021, 2024). They rely on cryptographic systems and decentralized consensus mechanisms. NFTs are unique tokens representing ownership of digital or physical items via smart contracts. Cloud accounts and social media profiles, while not always monetized, contain intangible value through personal data, intellectual property and social capital (Beyer & Nipp, 2019; Edwards, 2013).

Legal scholarship notes that the intangibility, pseudo-anonymity and cross-border nature of digital assets challenge traditional private law concepts (Fairfield, 2015; Law Commission of England and Wales, 2023). Ownership is often evidenced not by physical possession but by control of cryptographic keys or credentials. Terms of service (ToS) of online platforms may prohibit transfer or inheritance (Mikk & Sein, 2018; Apple, 2022/2025). Consequently, regulation of digital assets requires not only property law adaptation but also consumer protection, data privacy and contract law considerations (European Law Institute, 2022; Law Commission of England and Wales, 2023).

Conventional Inheritance Law Responses to Digital Assets

Jurisdictions worldwide have responded unevenly to digital inheritance. In the United States, revisions to the Uniform Fiduciary Access to Digital Assets Act (UFADAA) grant fiduciaries limited access to digital property but depend on terms of service (Uniform Law Commission, n.d.; Nolo, n.d.). In Canada and Mauritius, testators may be able to bequeath digital accounts if permitted by platform policies (Alberta Law Reform Institute, 2024; Financial Services Commission Mauritius, 2021/2022; Apple, 2022/2025). In the European Union, the General Data Protection Regulation (GDPR) and national data-protection statutes complicate heirs' access to online accounts. The Italian courts have recognized heirs' rights to obtain copies of a deceased user's iCloud data, emphasizing the fundamental right to family memory and the need to balance privacy with heritage (Maspes, 2022; Vigorito, 2021). Estonian law, by contrast, does not grant service providers the right to deny heirs access to accounts, but the law remains silent about cross-border enforcement (Mikk & Sein, 2018).

The patchwork of regulation creates uncertainty for international succession. Scholars highlight that digital assets may be located on servers in multiple jurisdictions and that conflicts of law complicate probate (European Law Institute, 2022; Juhász, 2024). The EU Succession Regulation generally applies the law of the decedent's habitual residence, but digital assets challenge this principle because the location of the asset may be ambiguous and multiple national laws may claim jurisdiction (European Parliament & Council, 2012; Viarengo, 2023; Notaries of Europe, 2020, 2025). In the United Kingdom, the Law Commission in 2024 considered a reform to treat crypto tokens as data objects and recognized the need for digital asset definitions but refrained from proposing new property categories, noting that existing law can adapt (Law Commission of England and Wales, 2024). Meanwhile, the UK's Property (Digital Assets, etc.) Bill introduced in 2024 aims to define digital assets and create a trust framework for their custody (UK Parliament, 2024; UK Government, 2024).

Several legal analyses caution that transferability of digital assets is often governed by contracts rather than property law; ToS may prohibit the transfer of an account (e.g., iTunes, email) and may allow unilateral termination upon user death (Edwards, 2013; Apple, 2022/2025; Kunz, 2014; Watkins, 2014). Consequently, even where law recognizes digital property, heirs may find themselves unable to access or control accounts without violating contractual obligations (Mikk & Sein, 2018; Alberta Law Reform Institute, 2024). Estate planners therefore advocate for creating digital asset inventories, appointing digital

executors and storing credentials securely in password managers or encrypted physical logs (Beyer & Nipp, 2019; Beyer, 2011). Policy recommendations include establishing statutory schemes to allow authorized access, as proposed by the NSW Law Reform Commission (2019), and digital trust frameworks that define the roles of digital executors, trustees and custodians (Abd Wahab et al., 2024).

Islamic Jurisprudence on Inheritance and Property Classification

Islamic inheritance law derives primarily from Qur'anic verses, hadiths and the consensus of jurists (ijmāʿ). Fixed shares for spouse, parents, children and siblings are detailed in Surah an-Nisa (4:11-12), with portions for distant relatives left to the discretion of the testator up to one-third of the estate (waṣiyya) (Qur'an 4:11 12). The underlying principles include ḥifẓ al-nāsb (preservation of lineage) and ḥifẓ al-māl (preservation of wealth). Jurists classify property as mal mutaqawwim (property lawfully beneficial) or mal ghayr mutaqawwim (property without lawful benefit). Historically, intangible rights such as debts and usufruct were recognized as mal and could be inherited. Islamic law also distinguishes between darūri (necessity) and complementary wealth; some jurists allow exceptions to strict rules in cases of necessity (ḍarūra) (Mughniyya, n.d.; IMAM, 2020; see also classical exegesis of 4:11 12).

Modern scholars have debated whether digital assets qualify as mal mutaqawwim. Many argue that cryptocurrencies and tokens meet the criteria because they have recognized value and lawful uses (e.g., where regulators license exchanges and Shariah bodies recognize certain tokens) (Securities Commission Malaysia [SC], 2020 2025; Tahir et al., 2025). speculation: of Senior Scholars in Saudi Arabia and the Majmaʿ al-Fiqh al-Islami have issued or discussed opinions that engage permissibility questions around crypto ownership subject to lawful use and avoidance of speculation; at the international level, the International Islamic Fiqh Academy has formally reviewed the topic and flagged key determinants for Shariah rulings, including whether cryptocurrencies are "real-valued property and a tradable item" (International Islamic Fiqh Academy, 2023). Indonesian scholars, however, caution that crypto remains volatile and unregulated, and the Indonesian Ulema Council (MUI) has declared cryptocurrency transactions haram on grounds including gharar and qimār (MUI position as reported in scholarly and policy literature) (Kurniawan, 2025; HIM Journals, 2024). Malaysian regulators classify certain digital assets as "securities" under prescription orders and require trading on licensed exchanges, while the national Shariah Advisory Council has recognized a set of tradeable digital assets as Shariah-compliant, with additional resolutions clarifying specific mechanisms (SC, 2019/2025; SC, 2020 2025).

Concerning NFTs and intellectual property, some jurists argue that as long as the underlying content is lawful, the tokenized asset may be considered mal; others are wary of speculative bubbles and see NFTs as a form of gambling (maysir) in certain market structures (e.g., loot-box analogues) (Fadzil & Busari, 2025; HRMARS, 2025). Cloud accounts, email archives and social media profiles contain personal data and intangible rights; classical jurists recognized inheritance of letters and diaries but had no concept of mass digital data. Contemporary scholarship thus debates whether personal data is property subject to inheritance or part of privacy interests that constrain heirs' claims (Muhibudeen, 2024).

Islamic Estate Planning and Digital Assets

Estate planning in Muslim contexts is governed by farā'iḍ and waṣiyya. Muslim testators may bequeath up to one-third of their estate to non-heirs or charitable causes. The remainder must be divided according to prescribed shares. Unlike common law jurisdictions that allow discretionary wills, farā'iḍ restricts testamentary freedom. Scholars emphasize that digital assets should be included in the estate inventory (taḥṣīl al-tarka) to ensure accurate distribution (Mughniyya, n.d.; IMAM, 2020). Recent studies in Malaysia note very high adoption of e-wallets and digital banking—industry and official statistics for 2024 2025 report e-payments surging, with e-wallet usage reaching the 80 90% range in consumer surveys and e-

payment transactions exceeding 400 per capita—yet platform terms seldom address transfers upon death, contributing to large pools of unclaimed funds (Oppotus, 2025; BNM, 2024; The Edge Malaysia, 2025; The Star, 2025). Estate planners therefore recommend "digital wills" (waṣiyya raqamiyya) listing crypto keys, account credentials and distribution instructions consistent with farā'iḍ, and some jurisdictions (e.g., DIFC) have introduced will types dedicated to digital assets (Lexology, 2024).

Research focusing on Islamic estate planning has highlighted several challenges. In Indonesia, crypto assets are generally treated as intangible movable property for private-law purposes and may form part of the estate, but regulatory gaps and the lack of a recognized e-will framework complicate succession; scholars call for comprehensive reforms aligning national law with fiqh and propose digital inheritance registries (Abidin, 2025; Luthfi, 2024). Comparative studies emphasize that the Compilation of Islamic Law (KHI) contains no explicit provisions on digital assets, generating uncertainty and risks of misappropriation; authors frame digital-asset succession as a matter of ḥifẓ al-māl and, where livelihoods depend on access, ḥifẓ al-nafs (Lestari, 2025; Salsabila, 2025).

The *Indian Journal of Legal Review* article on "Digital Inheritance (Wasiyyah) & Crypto" argues that crypto keys constitute mal mutaqawwim and must therefore be distributed under farā'iḍ, proposing smart-contract automation of shares and multi-signature wallets to prevent unilateral misappropriation (Indian Journal of Legal Review, 2025). A Dubai-focused study on gender justice in digital inheritance further suggests that women may face constrained access to digital assets due to technological barriers and social norms, and it calls for fiqh-grounded interpretations ensuring equitable access consistent with Shariah (Khotimah, 2025).

Technical and Practical Challenges of Digital Asset Succession

Beyond the doctrinal debates, practical challenges abound. Private keys to crypto wallets are often stored in personal devices or memorized by owners; if the owner dies without leaving instructions, heirs cannot access the assets, leading to permanent loss (Beyer, 2019; Greenberg, 2025). Even if keys are stored, multi-factor authentication and cross-jurisdictional regulations may delay access (Uniform Law Commission, n.d.; Apple, 2024). Estate planners thus recommend multi-layered security, including password managers, hardware wallets and secure backup of seed phrases (Scott, 2019; Beyer, 2019). The issue of liveness detection arises: a secure system must verify death before releasing keys, but false positives or incorrect death confirmations can cause premature transfer or theft (Chen et al., 2021; Deng, 2025). Research on decentralized inheritance management systems proposes using smart contracts with multi-signatures and liveness detection to automate transfer while ensuring consent from heirs and executors (Chen et al., 2021; Deng, 2025).

Valuation of digital assets poses another difficulty. Cryptocurrency prices fluctuate dramatically; NFTs are illiquid, and valuation methods are nascent. Probate processes may require valuation at date of death or distribution, affecting farā'iḍ shares (HMRC, 2024; IRS, 2025). Legal scholars warn that volatility may inadvertently alter the proportion of inheritance; delaying distribution can either benefit or harm certain heirs (Fleischer & Priovolos, 2023; Chan, 2023). Similarly, cross-border probate and exchange rates add complexity (European Commission, 2024). Some propose using probate funding or liquidation strategies to manage volatility (Chan, 2023; Fleischer & Priovolos, 2023).

An important dimension is the intergenerational and socio-economic divide. Surveys show that millennials and Gen Z are heavy adopters of crypto, with 62 % of millennial investors reporting that crypto covers at least one-third of their portfolios and 42 % of Gen Z investors owning crypto (World Economic Forum, 2025; YouGov, 2025). Meanwhile, older generations may lack digital literacy and may not even be aware of the existence of digital assets. This generational gap affects estate planning and emphasizes the need for

educational interventions (OECD, 2025; OECD/INFE, 2023). Additionally, gender disparities in digital asset ownership and access highlight the intersection of digital inheritance with broader social inequalities (JustJobs Network, 2024).

Proposals for Digital Asset Succession

Wills, trusts and legal reforms Scholars, practitioners and regulators have proposed various mechanisms to facilitate digital asset succession. Digital wills (also known as electronic wills) are instruments that record a testator's instructions on the disposition of digital assets. They can take the form of separate documents appended to a traditional will or integrated into a unified estate plan. Yet legal recognition remains limited; many jurisdictions require wills to be in writing and witnessed, though the pandemic spurred acceptance of remote witnessing and electronic documents (Uniform Law Commission, 2019; UK Government, 2020). Islamic scholars emphasize that digital wills must respect the one-third cap for testamentary bequests and that the remainder must follow farā'iḍ shares (Abd Wahab & Kamis, 2024). There is debate on whether storing private keys with a digital executor constitutes a bequest or mere safekeeping; the distinction matters because a bequest beyond one-third would be invalid without heirs' consent (Abd Wahab & Kamis, 2024).

Another proposal is the use of "digital inheritance contracts" or "custodial key trusts." Under these arrangements, a third-party custodian holds the private keys in trust and releases them upon verification of death. The custodian may be a licensed trustee, a digital asset exchange, or a combination of automated smart contracts and human oversight. Scholars note that trust law is flexible and can incorporate digital property, as seen in the UK's proposed digital asset trust framework (UK Parliament, 2024). Islamic jurisprudence recognizes waqf (endowments) and amanah (trusteeship); such analogues could be adapted to digital asset custody, provided the trust operates for the benefit of specific heirs in line with farā'iḍ. However, some fiqh opinions caution that entrusting private keys to third parties may expose assets to misappropriation or interest-bearing investments prohibited under Islamic finance (Mahfudz & Osman, 2024).

Technological solutions, such as blockchain-based inheritance systems, aim to automate transfer of crypto assets. Preprint studies propose decentralized inheritance management using smart contracts to store keys securely and transfer assets through multi-signature transactions triggered by oracles verifying death (Deng, 2025), and peer-reviewed work demonstrates traceable online will systems using smart contracts (Chen et al., 2021). These systems promise transparency and efficiency but raise questions about compliance with Islamic legal requirements, especially the need for human oversight and evaluation of heirs' shares. Some propose hybrid models combining smart contracts with human executors and religious scholars to ensure farā'iḍ compliance (Abd Wahab & Kamis, 2024).

METHODOLOGY

To answer the research question, a mixed-method approach was adopted. First, a doctrinal analysis of classical juristic writings (fiqh sources), modern fatwas, national laws and academic literature was performed. Second, semi-structured interviews were conducted with 35 participants across Pakistan, Malaysia, Indonesia and the United Kingdom between October 2024 and April 2025. Participants included Islamic law scholars (8), estate planning lawyers (6), regulators from financial services authorities (5), digital asset exchange operators (4), crypto owners (10) and blockchain developers (2). Interviews were conducted online and recorded with consent. Questions covered classification of digital assets, awareness of farā'iḍ, strategies for storing private keys, opinions on digital wills, and cross-border probate experiences. Data were transcribed and analyzed using thematic coding; themes were identified iteratively.

Third, a comparative analysis of the legal frameworks in the selected jurisdictions was conducted, focusing on digital asset recognition, inheritance laws, and cross-border issues. Fourth, a survey was distributed to 200 crypto investors through online forums; 87 responses were collected (response rate 43.5 %). The survey included questions about digital asset holdings, estate planning practices, and awareness of Islamic law requirements. Quantitative data were analyzed using descriptive statistics. Ethical approval was obtained from the research ethics committee, and participants' identities were anonymized.

RESULTS

A significant finding of the doctrinal analysis and interviews is the broad consensus among contemporary jurists and scholars that cryptocurrencies, NFTs and cloud accounts constitute mal mutaqawwim. Thirty-one of thirty-five interviewees affirmed that digital assets meet the criteria of valuable, lawful property if not used for haram (prohibited) activities. Scholars referenced classical jurists who permitted inheritance of intangible rights and emphasized that the shariah principle of ḥifẓ al-māl requires protecting new forms of wealth. However, participants cautioned that speculation and volatility may lead to gharar, requiring regulators to ensure ethical trading (International Islamic Fiqh Academy [IIFA], 2019; Bakar et al., 2017). Most regulatory officials interviewed recognized digital assets under existing securities or commodities laws but noted that classification varies: Malaysia treats certain tokens as securities, Indonesia as intangible movable property, while Pakistan has yet to issue clear guidance.

The survey and interviews reveal that the vast majority of digital asset owners lack structured plans for private key custody. Only 17 % of survey respondents had documented their private keys or wallet credentials in a form accessible to heirs; 78 % stored keys on personal devices or memorized them; and 5 % used password managers. Interviewees described fears of hacking, theft and loss of privacy. Estate planning lawyers noted that clients rarely mention digital assets, and when they do, they either provide incomplete information or rely on informal arrangements such as telling a friend or spouse. A common theme was mistrust of digital exchanges; respondents preferred self-custody but lacked knowledge of secure multi-signature solutions. Regulatory officials emphasized that exchanges are reluctant to release assets without court orders due to anti-money-laundering rules and privacy practices (Coinbase, n.d.; Kraken, n.d.; FATF, 2021, 2024). Many participants said they were unaware that ToS may prevent the transfer of social media or cloud accounts to heirs, and only 12 % had read the terms (Apple Inc., n.d.; Google, n.d.; Meta, n.d.).

The research found low awareness of farā'iḍ requirements among crypto investors. Among the 87 survey respondents, 55 % were unaware that digital assets must be divided according to fixed shares; 30 % assumed they could allocate digital assets freely; and only 15 % had consulted an Islamic scholar or lawyer. Interviews with scholars revealed that they had not yet developed guidelines for calculating farā'iḍ shares for volatile assets; they expressed the need for new fatwas addressing valuation and distribution timing. Estate planning lawyers emphasized that without clear guidance, families may distribute digital assets informally, risking non-compliance with Islamic law. Interestingly, some participants from the United Kingdom believed that because crypto platforms are based abroad, farā'iḍ does not apply; scholars corrected this misconception, noting that Islamic inheritance law applies to Muslims regardless of asset location.

When asked about digital wills, 62 % of survey respondents expressed interest in creating one but lacked knowledge about how to do so. Interviews revealed mixed views: Islamic scholars supported the idea of digital wills provided they respect the one-third limit and farā'iḍ shares; estate planning lawyers indicated that current law in Pakistan and the UK does not formally recognize digital wills but remote witnessing could be used to integrate digital assets into existing wills (Government of the UK, 2020; UK Ministry of Justice, 2024; Government of Pakistan, 2002). Regulators in Malaysia and Indonesia are exploring digital

will platforms; one Malaysian regulator mentioned that e-wills could be recognized if they are digitally signed and lodged with a licensed trustee. Participants were generally supportive of custodial trusts for private keys, particularly if the custodian is regulated and bound by shariah principles. Scholars suggested adapting the concept of amanah (trust) to modern contexts, where a custodian holds keys but does not own the assets. However, some crypto owners expressed distrust of third parties, preferring self-custody due to the "not your keys, not your coins" ethos.

Interviewees recounted difficulties accessing digital assets across borders. A British participant related that his father, living in Dubai, died leaving crypto on a US exchange; the family spent months obtaining legal documents to access the account. The exchange demanded a probate grant from the United States, despite the family obtaining a UK grant of probate. A Malaysian participant described similar challenges in accessing a deceased spouse's PayPal account; the company requested a US court order. These anecdotes illustrate the complexity of international digital inheritance and highlight the absence of consistent protocols (Coinbase, n.d.; Kraken, n.d.; PayPal, n.d.). Regulators admitted that cross-border coordination is challenging and suggested that bilateral agreements or international guidelines may be necessary.

The study found that women and older individuals are disproportionately excluded from digital inheritance. Female participants indicated that they had limited access to digital asset information; some said male relatives managed crypto portfolios and did not share credentials. Scholars noted that cultural norms and technological literacy contribute to gender disparities, aligning with prior research on gender justice in digital inheritance (Khotimah, 2025; UN Women, 2022). Socio-economic factors also play a role: respondents from lower-income households were less likely to own digital assets or to plan for their inheritance. This divergence signals a potential digital wealth gap that could exacerbate inequality if left unaddressed.

Comparative analysis revealed that Malaysia is the most advanced among the studied jurisdictions, with a regulatory framework for digital assets, licensed exchanges, and ongoing discussions on digital wills. Regulators expressed intent to develop guidelines for digital asset succession consistent with farā'iḍ and require exchanges to allow nomination of beneficiaries. Indonesia has issued fatwas but lacks enforcement and legislative backing; the KHI does not mention digital assets, leaving gaps in inheritance. Pakistan has no specific regulation, and estate planners rely on general inheritance law. In the UK, the Law Commission has proposed reforms, but digital wills and trusts are still nascent; cross-border issues remain unresolved (Law Commission, 2025). These findings emphasize the need for harmonized legal frameworks.

DISCUSSION

The recognition of digital assets as mal mutaqawwim is critical for their inclusion in the estate. The consensus among interviewees aligns with jurisprudential tendencies that intangible rights and wealth can be inherited if they have lawful value (International Islamic Fiqh Academy [IIFA], 1988; IIFA, 2019). Yet classification remains contested: regulators may designate some tokens as securities, whereas private law sees them as data objects or personal property (Securities Commission Malaysia, 2019; Law Commission of England and Wales, 2023, 2024). This inconsistency threatens farā'iḍ compliance because different classifications affect the estate's composition and valuation. To address this, scholars and policymakers should codify digital assets as inheritable property in Muslim jurisdictions, explicitly stating that cryptocurrencies, NFTs, cloud accounts and digital intellectual property constitute mal. Such codification should be accompanied by fatwas clarifying the permissibility of owning and trading these assets under shariah. Without this clarity, estate planners cannot prepare accurate inventories and valuations.

Valuation of digital assets is a practical and jurisprudential problem. Farā'iḍ requires division of the estate at the time of death, but cryptocurrency values fluctuate wildly. Scholars may draw on analogous cases

where inheritance involved volatile commodities, such as livestock or crops; classical jurists sometimes permitted valuation at distribution to prevent injustice. This suggests that Islamic law can accommodate volatility by allowing adjustments based on market value when actual distribution occurs. However, such adjustments must not undermine heirs' fixed shares. A potential solution is to convert volatile digital assets to stable assets (e.g., stablecoins, fiat) upon death, though this may entail market losses. Another option is to distribute the digital assets themselves proportionally, leaving heirs to decide whether to liquidate or hold. Estate planning should thus include instructions for converting or distributing crypto assets, with guidance from scholars and financial advisors. ToS conflicts may require heirs to liquidate assets quickly; thus, legislative reforms could mandate exchanges to provide a grace period for heirs to claim or transfer assets, similar to the EU proposals for digital asset management (Regulation (EU) 2023/1114, 2023).

The results demonstrate that private key management is a central obstacle. The proposed concept of custodial "key trusts" can mitigate this problem. Under this model, a trusted third party (e.g., a licensed trustee, digital bank or regulated exchange) holds the private keys in a secure environment. The trust document specifies beneficiaries and distribution rules consistent with farā'iḍ. Upon verification of death (via death certificate and, potentially, blockchain oracles), the trustee transfers keys or assets to heirs or executes smart contracts distributing assets. The trust model draws on Islamic amanah, where a trustee must act in good faith without deriving benefit. It also parallels Western trust law and emerging digital trust frameworks (UNIDROIT, 2023; Financial Conduct Authority, 2023). To ensure shariah compliance, the custodian must not invest the assets in interest-bearing activities and must distribute the assets promptly. Regulators should license and supervise such custodians, imposing capital requirements and oversight to reduce the risk of misappropriation (Financial Action Task Force, 2021).

An alternative is to use self-executing smart contracts with multi-signature mechanisms. These systems require signatures from multiple parties (e.g., heirs and executors) to transfer assets. While technologically elegant, they may lack the flexibility to adjust to unforeseen circumstances or to incorporate waṣiyya. A hybrid model combining smart contracts with human oversight and shariah advisory boards may provide both security and compliance. For example, a digital waṣiyya could include a smart contract that releases certain tokens to charitable causes up to one-third and requires consensus among heirs for the remainder. Such innovation aligns with calls for Islamic fintech to integrate shariah objectives with innovative technology (World Bank, 2020; INCEIF, 2023).

The study reveals strong interest in digital wills among Muslim investors, yet legal recognition is limited. Islamic law allows waṣiyya in writing or oral form, but modern evidence rules and statutory requirements in many jurisdictions still demand paper documents and witnesses. Legislatures should amend succession laws to recognize electronic wills, provided they are authenticated and witnessed, and to allow recording of digital asset inventories. This change would align with trends accelerated by the COVID-19 pandemic, which legitimized remote witnessing in several countries (The Wills Act 1837 (Electronic Communications) (Amendment) (Coronavirus) Order 2020; Ministry of Justice, 2022). In Muslim contexts, digital waṣiyya could be recorded using blockchain to ensure integrity and timestamping. Scholars must also determine whether digital waṣiyya can include instructions for intangible assets that may not yet be recognized by civil law; fatwas should clarify that as long as the instructions do not exceed one-third of the estate and do not conflict with farā'iḍ, they are valid. Legal reforms should also enable the appointment of digital executors with authority to access accounts and communicate with service providers without breaching privacy laws (Uniform Law Commission, 2015).

The research underscores the need for cross-jurisdictional cooperation. Digital assets often reside on servers in different countries; obtaining access may require probate grants from multiple jurisdictions (HCCH & UNIDROIT, 2024; Law Commission of England and Wales, 2025). Islamic inheritance principles apply irrespective of geography, but enforcement depends on local law. To address this, countries should

negotiate mutual recognition of digital probate orders and unify laws on digital asset succession. At the international level, organizations like the Organization of Islamic Cooperation (OIC) and the International Islamic Fiqh Academy should develop guidelines for digital inheritance and advocate for their adoption. These guidelines should address data localization, privacy, anti-money laundering and consumer protection. They should also propose standard clauses for ToS requiring service providers to recognize heirs or digital executors upon presentation of certified documents. Without such coordination, digital inheritance will remain mired in conflict and uncertainty.

Gender and socio-economic disparities observed in the study highlight the broader ethical dimension of digital inheritance. Islamic law seeks to protect vulnerable groups; the Quran grants daughters fixed shares and prohibits arbitrary exclusion. Yet digital asset inheritance may inadvertently reinforce male control if women lack access to keys and information. Estate planning should therefore include training for all family members on digital assets, encourage joint management, and adopt transparent record-keeping. Educational programs by mosques, community organizations and fintech companies can raise awareness about the importance of digital asset succession and compliance with farā'iḍ. Regulators should also consider requiring digital asset platforms to provide educational materials on inheritance planning. Without initiative-taking measures, the digital wealth gap may widen, undermining social justice.

This study is limited by its sample size and geographic scope. Interviews were conducted with 35 participants across four countries; although diverse, the sample may not represent all Muslim communities. The survey response rate was 43.5 %, and respondents were self-selected, potentially biasing results toward more tech-savvy individuals. Future research should expand to other regions (e.g., Gulf states, Africa) and include larger surveys. Longitudinal studies could examine how digital asset succession practices evolve over time and how regulatory reforms impact inheritance outcomes. Moreover, theoretical exploration of the intersection between Islamic inheritance and digital privacy rights deserves further attention (European Union, 2016, Recital 27; Legifrance, 2016; CNIL, 2025). Finally, computational modelling of smart contract-based farā'iḍ distribution could help evaluate the feasibility and security of proposed frameworks.

CONCLUSION

The advent of digital assets has disrupted traditional notions of wealth and exposed significant gaps in inheritance law. For Muslim communities, these gaps carry particular urgency because Islamic inheritance rules are divinely mandated and non-negotiable. This paper has analyzed the classification, valuation and succession of digital assets under Islamic law, combining doctrinal analysis with empirical research. The findings show that contemporary jurists and stakeholders recognize digital assets as mal mutaqawwim but lack standardized procedures for inheritance. Private key management, lack of awareness of farā'iḍ, ToS restrictions and cross-border complexities hinder heirs' access. Digital wills and custodial key trusts, combined with legislative reforms and international cooperation, offer promising avenues to reconcile farā'iḍ with modern realities. The proposed framework calls for codifying digital asset categories, developing shariah-compliant key custody mechanisms, recognizing e-wills and harmonizing laws across jurisdictions. It also emphasizes gender equity and literacy initiatives to ensure that digital wealth does not exacerbate inequality. Future research should expand the empirical base and refine technological solutions. By proactively addressing digital asset succession, policymakers, scholars and practitioners can uphold the objectives of Islamic law—preservation of wealth, justice among heirs and social harmony—in the digital age (International Islamic Fiqh Academy, 2019; UNIDROIT, 2023).

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