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Article

Digital Assets from Islamic Perspective (2019-2024): A Systematic Literature Review

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ABSTRACT - This study aims to investigate the existing literature on Islamic perspectives regarding digital assets published between 2019 and 2024 through a systematic literature review methodology. Utilising document analysis of relevant articles and literature concerning Islamic rulings on digital assets, the research collected and statistically analysed data using ATLAS.ti software across multiple variables, including publication trends, subject area distribution, methodological approaches, authorship characteristics and geographical concentration. The findings reveal a notable scarcity of published research in this field, underscoring a significant gap in the academic literature and highlighting the pressing need for expanded scholarly investigation and contribution regarding Islamic jurisprudential perspectives on digital assets.

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INTRODUCTION

Digital assets have emerged as a prominent topic in contemporary financial and technological discourse, gaining widespread public recognition. Their rising popularity, coupled with recent legal regulations have contributed to more structured governance. However, despite their growing prominence, questions remain regarding the Islamic perspective on digital assets. This inquiry stems from the unique characteristics of digital assets, which set them apart from conventional assets. As a result, a debate has emerged among Islamic scholars and Shariah economics experts regarding the permissibility of digital asset usage under Islamic law. This technological evolution necessitates adaptation across all sectors of society, with Islamic financial transactions being one of the key areas impacted by digitalisation.

The impact of digital transformation extends to various aspects of Islamic finance, including rulings on financial transactions, Islamic inheritance and estate planning, zakat (obligatory charity) and *waqf* (religious endowments). These matters are no longer confined to traditional applications but can be elaborated in accordance with evolving conditions and needs. In an era where technology is deeply integrated into daily life, it becomes crucial to examine how Islam views the status of digital assets as property that can be transacted, subject to zakat, endowed as *waqf*, or inherited.

This paper is structured into five main sections. Following this introduction, section 2 presents a comprehensive literature review, establishing the context for the study. Section 3 outlines the research methodology, detailing the processes and techniques used for data collection

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and analysis. Section 4, the core of the paper, presents and discusses the findings, focusing on key variables including authorship patterns, number of articles published, author productivity, geographical affiliation and subject area patterns. The paper concludes with section 5, which summarises the key findings, discusses their broader implications, addresses any limitations of the study and suggests directions for future research.

LITERATURE REVIEW

This section presents a comprehensive literature review encompassing various aspects of digital assets from an Islamic perspective. The review begins with an overview of examples of digital assets, followed by an examination of digital assets through Shariah lens. It then explores scholarly opinions regarding the legality of digital assets in Islamic law. The review further investigates the relationships between digital assets and several key areas of Islamic finance and practice: inheritance management, Islamic estate planning, *waqf* and zakat (obligatory charity).

Conceptual Framework of Digital Assets

Digital assets represent electronically stored value or rights that exist in binary form and come with associated ownership or usage rights. These assets can be systematically categorised into four main principal classifications based on their technological foundation and functional attributes. The first category encompasses blockchain-based assets, which utilise distributed ledger technology for ownership verification and transfer. This includes cryptocurrencies such as Bitcoin, which has been extensively discussed in Islamic financial discourse (Kamis et al., 2022; Rosele et al., 2022; Engku Ali & Wan Muhamad Fokri, 2023; Drs Nasrul et al., 2023; Jalal & Che Abdullah, 2024). Other prominent examples in this category include diverse cryptocurrencies (Selangor State Mufti Department, 2021; Zul Kepli & Bustami, 2021; Muneeza et al., 2022; Sulaiman, 2023; Abd Wahab, 2024), digital tokens (Jailani & Muneeza, 2023), non-fungible tokens (NFTs) (Uwais et al., 2024), stable coins and digital bonds and digital currencies that have been classified as securities by regulatory bodies such as Securities Commission Malaysia (2020a).

The second category comprises government-backed digital currencies, which function as official digital representations of national currencies. This includes Central Bank Digital Currencies (CBDCs) and other state-issued digital monetary instruments designed to operate within existing financial systems while leveraging digital technology. These instruments represent an evolution of traditional fiat currencies into the digital domain, maintaining their foundational governmental backing while adopting technological enhancements for improved efficiency and accessibility.

Web-based and social media assets constitute the third category, representing digital properties that derive value from online platforms and social media presence. This encompasses monetised social media accounts on platforms such as YouTube, Facebook and Instagram (Uwais et al., 2024), online identities including blog domains and IDs for accessing online games (Fageh & Solikhawati, 2022), communication and storage mechanisms such as email accounts, digital files (Fageh & Solikhawati, 2022) and various forms of intellectual property including copyrighted material (Uwais et al., 2024).

The fourth category encompasses digital financial and commerce assets, which relate to electronic assets within financial services and e-commerce ecosystems. This includes e-commerce platform accounts, online marketplace accounts, digital payment systems, digital wallets, online banking accounts, digital investment portfolios and trading accounts. These assets represent the growing integration of digital technology into modern financial and commercial infrastructure, carrying both economic and personal value through their implications for financial autonomy and individual identity in the digital age.

Digital assets encompass a diverse ecosystem of electronically stored value and rights, ranging from blockchain-based cryptocurrencies and tokens to government-backed digital currencies, web-based social media assets and digital financial instruments, all of which represent the growing integration of digital technology into modern financial and commercial systems while also carrying significant personal and emotional value through their implications for privacy and individual identity in the digital age.

Digital Assets from Islamic Perspective

Islamic jurisprudence applies unique frameworks and principles when evaluating emerging financial instruments and technologies. This section examines how traditional Islamic concepts are being adapted and applied to digital assets, exploring the various classifications of digital assets within Islamic legal frameworks and the underlying principles guiding these classifications. The analysis encompasses different perspectives across Islamic schools of thought and geographical regions, highlighting areas of consensus and ongoing debates.

Digital Assets as a Form of *Māl*

Within Islamic jurisprudence, assets are conceptualised as entities possessing value that can be purchased and sold in market transactions. From a Shariah perspective, digital assets can be categorised into three distinct forms: *māl* (wealth or property), money or currency and *urudh* (tradable goods). Contemporary Islamic scholars have increasingly recognised various digital assets as legitimate forms of *māl*, including Bitcoin (Drs Nasrul et al., 2023), cryptocurrencies more broadly (Abu Bakar, 2018; Perak State Mufti Department, 2021; Selangor State Mufti Department, 2021), digital tokens (Jailani & Muneeza, 2023), digital currencies (Security Commission Malaysia, 2020) and non-fungible tokens (Uwais et al., 2024).

For a digital asset to be classified as *māl* under Islamic law, it must satisfy several fundamental requirements. First, it must be compliant with Shariah principles, exemplified by cryptocurrencies that can be considered Shariah-compliant when utilised for righteous purposes such as facilitating zakat payments (Drs Nasrul et al., 2023). Second, it must possess the quality of *mutaqawwam*, defined by Shaykh Zuhayli as "something that is stored or present and permissible to use" (Abu Bakar, 2018), meaning that assets that cannot be saved or lack tangible presence cannot be categorised as *māl*. Third, it must achieve acceptability by human custom (*Uruf*), with Jalal and Che Abdullah (2024) emphasising that all four major schools of Islamic jurisprudence concur that entities acquiring value through human custom and acceptance can be legitimately classified as *māl*.

Additionally, digital assets must demonstrate multifunctionality and benefit to qualify as *māl*. Using Bitcoin as an illustrative example, these benefits include access to a comprehensive ecosystem enabling secure and accurate ownership transfer, capacity for storage and efficient transfer to other parties, trading potential on cryptocurrency markets, acceptance as a payment method by certain entities and utilisation of blockchain technology that enhances transparency, security and value (Perlis State Mufti Department, 2019). These criteria collectively establish a framework for evaluating whether specific digital assets qualify as *māl* under Islamic jurisprudential principles.

Digital Assets as a Form of Money or Currency

Digital assets, particularly cryptocurrencies like Bitcoin, have emerged as a novel form of money within contemporary financial systems (Drs Nasrul et al., 2023). Despite lacking traditional backing by precious metals such as gold or silver, these digital assets fulfil many fundamental requirements associated with currency. Their capacity to be bought and sold demonstrates their status as legitimate assets, while their value and adoption are substantially influenced by user trust and acceptance as payment mechanisms (Riedl et al., 2024).

From an Islamic perspective, several criteria define legitimate currency: it must be valued by people, accepted as a medium of exchange by a substantial community, serve as a measure of value and function as a unit of account (Abu Bakar, 2018). Cryptocurrencies, particularly Bitcoin, satisfy many of these criteria and exhibit characteristics traditionally associated with money, including durability, fungibility, portability, recognisability and capacity to serve as a value storage mechanism. Unlike traditional currencies, cryptocurrencies derive these properties from mathematical principles rather than from authorisation by central authorities or physical properties of precious metals.

However, significant debates persist among Islamic scholars regarding the status of cryptocurrencies as legitimate currency. Some scholars argue that valid currency must be recognised by a central or government-authorised body. Others, drawing on classical Islamic scholarship from figures like Imam al-Ghazali, emphasise that money's primary function should be as a medium of exchange rather than deriving value from intrinsic properties (Abu Bakar, 2018). This perspective aligns with the nature of cryptocurrencies, which primarily serve as transaction mechanisms and value stores.

Muneeza et al. (2022) state that Sheikh Ali Qaradaghi, Secretary-General of the International Union of Muslim Scholars (IUMS), argues that cryptocurrencies do not fully meet the requirements for classification as currency. These requirements include serving as a medium of exchange, a store of value (*mahkzunan lil tsarwah*), a general measure of acceptance (*Mi'yar li Tadawul*) and a stability measure (*Miqyas lil Qiyam*). Three key factors preclude cryptocurrencies from being considered money according to Islamic principles: the absence of intrinsic value, anonymous ownership and instability due to volatility. Muneeza et al. (2022) further assert that cryptocurrencies like Bitcoin do not qualify as real or fiat money because they lack backing by physical commodities or precious metals and do not possess intrinsic value. As a result, Bitcoin does not fulfil Shariah requirements for money, though many Islamic scholars continue to explore its permissibility from the perspective of *maslahah* (public interest). In contrast, metal-backed cryptocurrencies are considered Shariah-compliant if they adhere to Islamic principles.

In jurisdictions like Malaysia, regulatory bodies have addressed the status of digital currencies within Islamic finance. The Security Commission Malaysia (2020a) has established a nuanced classification for digital currencies backed by *ribawi* items (items subject to specific rules regarding interest and exchange), distinguishing between two categories based on the nature of their backing. Digital currencies backed by *ribawi* items comprising gold, silver and currency are categorised as currency from a Shariah perspective, subjecting their trading to the principle of *bai` al-sarf,* which governs currency exchange transactions in Islamic finance. Conversely, digital currencies backed by *ribawi* items other than gold, silver and currency are classified as *amwal ribawiyyah* (*ribawi* items), requiring their trading to adhere to specific Shariah requirements applicable to such items.

Digital Assets as a Form of *Urudh*

Digital assets have gained recognition as a form of *urudh* (tradable goods) by various Islamic authorities, including the Securities Commission Malaysia (2020b) and the Perlis State Mufti Department (2019). This classification holds significant implications within Islamic jurisprudence, where *urudh* traditionally refers to tradable goods, investment assets, or commodities. Bakar (2017) provides additional perspective by drawing parallels between cryptocurrencies and reward point systems, characterising them as abstract instruments or intangible assets that function as exchange mediums and tradable commodities with fluctuating value (Jamal, 2021). He compares cryptocurrency transactions to the redemption of reward points accumulated through loyalty programs, which are permissible under Shariah law. Just as reward points can be used to purchase goods or exchanged for monetary value, cryptocurrencies can also be utilised for transactions or traded based on market value (Sahalan & Samsudin, 2023).

The Securities Commission Malaysia (2020b) has established comprehensive guidelines for evaluating digital assets under Shariah principles, particularly regarding digital tokens as *māl* within the *urudh* category. Three essential criteria must be satisfied for Shariah compliance: proceeds must be allocated to Shariah-compliant purposes, associated rights and benefits must adhere to Shariah principles and in cases involving mixed activities, existing Shariah Advisory Council resolutions apply. Notably, digital currencies based solely on technology without underlying assets are classified as *urudh* rather than currency, exempting them from specific rules governing *ribawi* items and *bai` al-sarf* principles in Islamic finance.

This Islamic legal framework for digital assets gained significant momentum when the Muzakarah Committee of the National Assembly for Islamic Religious Affairs (MKI) acknowledged in August 2021 that both Perak and Selangor Mufti Departments had adopted an Irshad Hukm permitting digital assets in business transactions, provided they are conducted through registered and licensed authorities in Malaysia. Building on this foundation, Rosele et al. (2022) proposed a comprehensive framework outlining six essential requirements for Shariah-compliant digital assets: possessability, transferability, practical usability, value retention, storability and Shariah compliance. They also identified four crucial features for currency or money: *taʿāmul* (common usage), *iṣṭilāḥ* (social agreement), medium of exchange capability and *thamaniyyah* (inherent monetary value).

Scholarly Opinions on the Prohibition of Digital Assets Dealings

The use and possession of digital assets, particularly cryptocurrencies, has been prohibited by several Islamic scholarly bodies and regulatory authorities. The Indonesian Ulema Council (2021), the Federal Territories Mufti Department (2018) and the Kelantan State Mufti Department (2018) and the Grand Mufti of the Arab Republic of Egypt, Shawky Ibrahim Allam (2017), have all issued rulings against cryptocurrencies, citing multiple concerns. These concerns include the high-risk nature of such investments that could result in complete financial loss for investors without recourse, the presence of *gharar* (uncertainty/speculation) due to unpredictable price volatility and issues of ignorance and excessive market manipulation that challenge regulatory oversight.

Additional concerns encompass the potential for deceptive practices, fraudulent activities, and speculative trading that may harm market participants; the facilitation of illicit activities such as money laundering through cryptocurrency networks; the lack of oversight by centralized regulatory authorities; the assessment that cryptocurrencies' inherent risks and structural weaknesses substantially outweigh their potential benefits; the possible dangers posed to communities and users by the unchecked authority of individuals or entities utilizing cryptocurrencies as digital currency; and the fundamental incompatibility of current cryptocurrency systems with established Islamic Shariah principles.

However, it is noteworthy that these rulings may be subject to revision if significant improvements are implemented regarding bitcoin, whether from the perspective of production methods, price regulation, security systems in exchanges, or regulatory frameworks designed to prevent exploitation by irresponsible parties (Federal Territories Mufti Department, 2018). This conditional approach suggests that Islamic jurisprudence maintains flexibility to accommodate technological innovations that can be brought into conformity with Shariah principles.

Scholarly Opinions on the Legitimacy of Digital Assets Dealings

Conversely, the storage and use of digital assets for conducting transactions has gained acceptance among certain Islamic scholarly bodies and regulatory authorities. Several fatwa committees have issued rulings permitting digital currencies, including the Perlis State Mufti Department (2018), the Perak State Mufti Department (2021), the Selangor State Mufti Department (2021) and the Majlis Islam Sarawak Ordinance (2021). This permissibility is also supported by organisations such as the Zakat Foundation of America (2021) and scholars like Drs Nasrul et al. (2023) and the Darul Uloom Zakariya, a South African Islamic seminary (Jalal, & Che Abdullah, 2024).

The rationale for this permissibility is grounded in the recognition of cryptocurrency as a valuable asset with global acceptance. These digital currencies are viewed as viable payment mechanisms, effective for money transfers (particularly remittances) and suitable for asset preservation. However, the permissibility of Bitcoin and other virtual currencies as exchange mediums is contingent upon specific conditions: equal quantities must be exchanged for the same type, physical transfer must occur, transactions should not be motivated solely by speculative profit and their value must be equivalent to legitimate fiat currency.

Beyond cryptocurrencies, the permissibility of NFT (Non-Fungible Token) transactions has also been acknowledged by some Islamic scholars. This acceptance is based on principles of Islamic commercial law, as noted by Siliwangi and Mufidi (2022) and Uwais et al. (2024). However, NFT trading in online markets remains subject to certain restrictions, including prohibitions on selling digital artworks or videos displaying private body parts or containing sexually suggestive material, restrictions on the sale of certain services and regulations regarding transactions involving minors.

Integration of Digital Assets in Islamic Financial Practices

The intersection of digital assets with established Islamic financial practices presents both challenges and opportunities for innovation. This section examines how digital assets are being integrated into various domains of Islamic finance, exploring the adaptations and frameworks being developed to accommodate these novel forms of wealth while maintaining fidelity to Islamic principles. The analysis encompasses multiple dimensions of Islamic finance, from transactions to charitable giving and inheritance planning.

Relationship between Digital Asset and Financial Transaction

Digital assets have fundamentally transformed financial transactions by enabling value exchange without physical currency. These electronic forms of value, including cryptocurrencies, can be bought, sold and traded as investments within digital ecosystems. The tokenisation of traditional assets into digital forms has substantially enhanced transaction efficiency, particularly in cross-border payments where traditional systems often involve significant delays and costs. Digital agreements automate exchanges based on predefined conditions, creating immutable transaction records that enhance transparency and auditability across financial systems. This proliferation of digital assets in finance has necessitated the development of new regulatory frameworks and compliance requirements to address unique challenges associated with digital transactions.

The integration of digital assets into financial transactions raises important considerations regarding Shariah compliance. In Malaysia, the Securities Commission (2020) has established a structured approach to regulate digital asset offering and trading in Malaysia. This framework governs the issuance of digital tokens through Initial Exchange Offerings (IEO) and the trading of digital assets on Digital Asset Exchanges (DAX), providing a regulated environment for such transactions.

Relationship Between Digital Assets and Inheritance Management

The management of digital assets in inheritance processes presents unique challenges due to their intangible nature and reliance on specific access credentials, such as public and private keys. According to Drs Nasrul et al. (2023), digital assets are typically classified as movable property in inheritance proceedings. This classification requires heirs to identify and consolidate these assets within the deceased's estate. While digital assets with legal value can be included in the estate, their ownership is inherently tied to the possession of electronic wallets and access credentials. This intrinsic link complicates traditional inheritance mechanisms, which may not adequately address the nuances of digital assets.

Upon receiving a Grant of Probate, executors gain the authority to access and liquidate digital assets for estate distribution. However, this process heavily relies on the availability of login information, highlighting the critical need for comprehensive digital asset succession planning. To mitigate the risk of digital assets becoming irrecoverable upon death, it is essential for individuals to include detailed information about their digital assets—such as identification and access credentials—in their testamentary documents. From an Islamic perspective, ensuring that digital assets are properly accounted for and distributed in accordance with Shariah principles is vital, as it aligns with the broader objectives of justice and fairness in inheritance management.

Relationship Between Digital Assets and Islamic Estate Planning

The relationship between digital assets and Islamic estate planning underscores the critical importance of proper management to ensure Shariah-compliant accessibility and distribution to rightful heirs and beneficiaries. This meticulous planning is essential for several interconnected reasons. It not only facilitates adherence to Islamic inheritance principles (*Faraid*) but also enables the accurate identification and valuation of digital assets that is crucial for their fair distribution (Heriyanto et al., 2024). Comprehensive planning provides a structured approach for managing access to these assets, balancing the needs of heirs with Islamic principles and helps navigate potential conflicts between Shariah requirements and secular legal systems governing digital assets.

Moreover, effective digital asset planning allows individuals to manage their digital presence after death, contributing to ongoing *sadaqah jariyah* (continuous charity) and facilitating the inclusion of digital assets in zakat calculations. The process can incorporate emerging technologies like blockchain to ensure secure and Shariah-compliant asset transfers, especially in the context of international Islamic inheritance. Despite the increasing significance of digital assets, many individuals remain unaware of the necessity to integrate these assets into their estate planning. Educational campaigns and inheritance planning services can help bridge this gap by providing guidance on cataloguing digital assets, securely storing access information and establishing clear instructions for beneficiaries (Heriyanto et al., 2024).

In the Malaysian context, Abd Wahab et al. (2024) recommend a comprehensive framework for Islamic estate planning of crypto assets. This process begins when a crypto owner opens an account with a regulated Digital Asset Exchange (DAX) and appoints a nominee or trustee to administer their estate. Upon appointment, the DAX notifies the nominee or trustee, who acts as a *waṣī* or administrator responsible for distributing the crypto assets to rightful beneficiaries according to Islamic law upon the owner's death. In the event of the crypto owner's death, a person, either the nominee/trustee or a beneficiary, must present the owner's death certificate or other legal documentation to the DAX. Once the DAX receives this confirmation, it facilitates the transfer of crypto assets to the nominee/trustee's crypto wallet. The final step in the process varies based on the owner's religion. For Muslims, the nominee/trustee must distribute the deceased's crypto assets in accordance with Islamic law, while for non-Muslims, the nominee/trustee becomes the rightful owner of the deceased's crypto assets (Abd Wahab et al., 2024). This framework not only addresses Shariah compliance but also provides a structured approach to managing digital assets within the Islamic inheritance context.

Relationship Between Digital Assets and *Waqf*

Previous studies have established that digital assets can indeed be subject to *waqf* (Islamic endowment), showcasing the potential of productive *waqf* to create multiplier effects in society. The discourse surrounding digital assets as *waqf* encompasses various forms and applications, with recent research exploring several innovative approaches. Notable examples include the use of blockchain-based digital assets as *waqf* resources (Uwais et al., 2024), *waqf* derived from YouTube content (Nur Ahsan et al., 2023; Supriadi, Purwanto & Soleh, 2020) and proceeds from social media content as *waqf*, as recognised by Sukmana and Rusydiana (2023).

According to Uwais et al. (2024), digital asset *waqf* is permissible and can be likened to investment *waqf* due to its intangible nature and potential for generating annual income. Content creators may contribute to digital *waqf* initiatives by donating a percentage of their earnings—such as 5% of their monthly YouTube revenue—thus enabling substantial charitable contributions from successful creators. However, the widespread adoption of this model may be limited by a general lack of interest in *waqf* initiatives among creators.

Nevertheless, revenues generated from digital assets can be harnessed to improve social welfare, empower communities and address pressing socio-economic challenges—aligning with the principles of *waqf*, which aim to create lasting societal benefits. Integrating digital assets into *waqf* frameworks presents significant potential to enhance charitable giving and promote sustainable development within communities.

Relationship Between Digital Assets and Zakat

Previous studies have established that digital assets are recognised as property, currency, or *urudh tijarah*, making them subject to zakat (Rosele et al., 2022; Engku Ali & Wan Muhamad Fokri, 2023). This includes various forms of digital assets such as cryptocurrencies and security tokens (Muneeza et al., 2022; Sulaiman, 2023; Drs Nasrul et al., 2023; Jalal & Che Abdullah, 2024). The rationale for subjecting digital assets, particularly cryptocurrencies like Bitcoin to zakat lies in their ability to generate profit through trading, thereby meeting the criteria of zakatable assets. Their value and attributes have led to their classification as commodities or financial assets, consistent with the general principle that any asset purchased for resale is zakatable (Jalal & Che Abdullah, 2024).

The Perlis State Mufti Department (2019) classifies Bitcoin as *Urudh al-Tijarah* (trade goods) for zakat purposes. Zakat becomes mandatory for Bitcoin holdings exceeding the equivalent value of 85 grams of gold and held for one lunar year (Perlis State Mufti Department, 2019). The calculation for zakat on Bitcoin is defined as follows: [(Lowest annual BTC value × BTC units) + annual trading profit] × 2.5% (Abdul Rahman, 2020). This method effectively accommodates value fluctuations and trading profits. Importantly, zakat can be paid in either currency or Bitcoin, demonstrating flexibility in applying Islamic principles to digital assets.

Furthermore, administrative bodies such as the Selangor Zakat Board (2021) and the Federal Territories Islamic Religious Council (2024) have implemented practical frameworks for zakat calculation on digital assets, employing formulas that account for current market valuations while deducting associated costs before applying the standard 2.5% zakat rate.

These developments represent a significant evolution in Islamic financial jurisprudence, demonstrating the adaptability of Shariah principles to emergent financial technologies while maintaining fidelity to fundamental religious obligations. The establishment of these frameworks facilitates compliance with zakat obligations for Muslim individuals and entities engaging with digital assets, thereby integrating traditional Islamic financial ethics with contemporary economic innovations.

METHODOLOGY

This study employs a systematic literature review approach, synthesising a corpus of 40 articles published between 2019 and 2024 that examine digital assets from an Islamic perspective. The research methodology involves a targeted search strategy utilising key terms such as "digital assets," "digital asset," and "asset digital" across multiple academic databases including Scopus, Google Scholar, Science Direct and ResearchGate.com, encompassing various conference papers, journals and articles. This comprehensive search strategy ensures the collection of literature specifically addressing the intersection of digital assets and Islamic finance principles, which is subsequently analysed using qualitative content analysis techniques to identify key themes, trends and scholarly perspectives.

To enhance analytical rigor, the study utilises ATLAS.ti 24.1.1 software for systematic coding and thematic categorisation of the literature, while frequency measurements of each variable are conducted using Microsoft Excel. This software-assisted approach facilitates a thorough examination of various aspects, including publication trends, subject area distribution, methodological approaches, authorship characteristics and geographical concentration of research on digital assets in Islamic finance. Through this methodological framework, the study aims to provide a comprehensive overview of the current state of knowledge and identify significant research gaps regarding the treatment of digital assets within Islamic financial frameworks, thereby contributing to the scholarly understanding of this emerging field.

RESULT

The systematic analysis of 40 scholarly articles published between 2019 and 2024 on digital assets from Islamic perspectives reveals significant patterns in publication trends, subject area focus, methodological approaches, authorship characteristics and geographical distribution. The following sections present a comprehensive examination of these publication characteristics.

Publication Trends (2019-2024)

The temporal distribution of research publications demonstrates a clear upward trajectory in scholarly interest regarding digital assets from Islamic perspectives. As illustrated in Table 1, the field has experienced substantial growth, progressing from minimal scholarly output in 2019 to significant research activity in recent years.

Table 1: Number of annual journal publications

Year of Publication	Number of Articles	Percentage (%)
2019	1	2.5
2020	0	0
2021	3	7.5
2022	8	20.0
2023	14	35.0
2024	14	35.0
Total	**40**	**100**

Table 1 shows a compelling narrative of intellectual evolution in the field of digital assets from Islamic perspectives. Beginning with a solitary publication in 2019, representing merely 2.5% of the total corpus, the field experienced a lacuna in 2020, potentially attributable to the global disruption caused by the COVID-19 pandemic. However, subsequent years demonstrated remarkable resilience and growth, with 2021 contributing 7.5% of publications, followed by a substantial increase to 20% in 2022. The years 2023 and 2024 each account for 35% of the total publications, collectively constituting 70% of all scholarly output in this domain. This exponential growth pattern suggests mounting academic interest in reconciling traditional Islamic jurisprudence with emerging digital asset classes.

Subject Area Distribution

The thematic analysis of publications reveals distinct patterns in subject area concentration, with certain domains receiving more scholarly attention than others. Table 2 illustrates the distribution of subject areas across the publication timeline.

Table 2: List of subject area of articles

Publication Year	Types of Articles					Total
	Islamic ruling	Transaction	Zakat	Inheritance & Estate planning	*Waqf*	
2019	0	1	0	0	0	1
2020	0	0	0	0	0	0
2021	1	0	1	1	0	3
2022	3	2	1	2	0	8
2023	3	5	1	3	2	14
2024	3	1	1	5	4	14
Total	**10**	**9**	**4**	**11**	**6**	**40**

Table 2 indicates that Inheritance and Estate Planning emerges as the dominant subject area with 11 publications, followed closely by Islamic Ruling with 10 publications. Transaction-related research constitutes 9 of the literature, while *Waqf* and Zakat represent 6 and 4 publications respectively. The temporal evolution of each subject area reveals distinctive patterns of scholarly attention and development.

Inheritance and Estate Planning research demonstrates the most pronounced growth trajectory, progressing from no publications in 2019-2021 to becoming the most researched area by 2024. This surge may reflect increasing recognition of the challenges posed by digital assets to traditional Islamic inheritance frameworks. Islamic Ruling exhibits relative consistency across the publication timeline, indicating sustained scholarly interest in establishing jurisprudential foundations for digital assets. Transaction-focused research peaked in 2023 with 5 publications, potentially corresponding to increased mainstream adoption of cryptocurrencies and digital payment systems. *Waqf*-related research demonstrates gradual but consistent growth, suggesting emerging interest in leveraging digital assets for Islamic endowment purposes. Zakat studies show fluctuating attention across the publication timeline, with intermittent publications across multiple years.

Research Methodological Approaches

The analysis of methodological approaches employed in the literature reveals distinct preferences among researchers investigating digital assets from Islamic perspectives. Tables 3 and 4 illustrate the distribution of data analysis types and research approaches respectively.

Table 3 demonstrates that based on the data analysis of journal articles from 2019 to 2024, the analytical approach emerged as the most predominant research method with 18 publications, followed by a descriptive approach with 14 publications. The newer research approaches - thematic, empirical and exploratory - showed lower numbers, with thematic recording 4 articles, while both empirical and explanatory approaches each had 1 publication. The publication trend shows a significant increase over the years, with 2023 recording the highest number at 15 articles, followed by 2024 with 13 articles. The earlier years (2019-2021) had fewer publications, with 1, 0 and 3 articles, respectively, while 2022 showed improvement with 8 articles. Notably, 2024 demonstrated the most diverse use of research approaches, incorporating all six types of analysis methods, suggesting a growing trend toward more varied and comprehensive research methodologies in recent publications, with the total number of articles across all approaches reaching 40 publications.

Table 3: Types of study by journal articles publication year

Publication Year	Data Analysis						Total
	Analysis	Descriptive	Empirical	Explanatory	Exploratory	Thematic	
2019	1	0	0	0	0	0	1
2020	0	0	0	0	0	0	0
2021	1	2	0	0	0	0	3
2022	3	4	0	0	1	0	8
2023	10	4	0	0	0	1	15
2024	3	4	1	1	1	3	13
Total	**18**	**14**	**1**	**1**	**2**	**4**	**40**

Table 4: Research approach based on journal articles publication

Publication Year	Research Approach			Total
	Qualitative	Quantitative	Mixed-Method	
2019	1	0	0	1
2020	0	0	0	0
2021	3	0	0	3
2022	8	0	1	9
2023	14	0	0	14
2024	12	0	1	13
Total	**38**	**0**	**2**	**40**

Table 4 shows the research approaches used in journal articles published from 2019 to 2024. Over this six-year period, there is a clear dominance of qualitative research methods, with 38 out of 40 total publications employing this approach. Notably, no purely quantitative studies were published during this timeframe. Mixed-method research appears sparingly, with only 2 articles using this approach, specifically in 2022 and 2024. The data reveals a strong preference for qualitative methodologies in this field, particularly in recent years. For instance, all 14 articles published in 2023 used qualitative methods exclusively. The years 2022 to 2024 saw the highest publication output, with qualitative studies consistently leading.

Authorship Characteristics

The analysis of authorship patterns reveals significant insights regarding collaboration trends and gender distribution in the field. Table 5 presents the distribution of single and multi-author publications across gender categories.

Table 5 reveals that collaboration emerges as the dominant publication model, with 30 multi-author publications compared to 10 single-author works. Two-author collaborations represent the most common publication arrangement with 13, followed by three-author and four-author publications with 6 each. The gender composition analysis reveals that 20 publications involve mixed-gender collaborations, while 13 are exclusively male-authored and 5 are exclusively female-authored.

Table 5: Authors' gender and relationships between author

Gender	Single Author	Two Authors	Three Authors	Four Authors	Five Authors	Six Authors	Seven Authors	Total
Male	6	0	0	0	0	0	0	6
Female	4	0	0	0	0	0	0	4
Two or More (Male)	0	6	2	1	0	0	0	9
Two or more (Female)	0	0	1	0	0	0	0	1
Two or more (Mixed gender)	0	7	5	4	0	2	2	20
Total	**10**	**13**	**8**	**5**	**0**	**2**	**2**	**40**

The relationship between team size and gender composition reveals notable patterns. Single-author publications demonstrate a moderate gender disparity, with male authors representing 6 of sole authorship. For publications with two authors, mixed-gender collaborations are most common with 7, followed by male-only collaborations with 5. For publications with three or more authors, mixed-gender collaborations become increasingly dominant, accounting for 5 of three-author publications, 5 of four-author publications and all 5 publications with five or more authors. This suggests that larger research teams in this field tend to incorporate greater gender diversity.

Author Productivity
The analysis of individual author contributions reveals patterns of productivity and specialised expertise in the field. Table 6 presents data on author productivity measured by publication output.

Table 6: List of authors and the number of written articles published

No.	Author	Number of Writers	Number of Publication
1	Norazlina Abd Wahab	1	4
2	Norliza Katuk, Nur Syaedah Kamis	2	3
3	Muhammad Ikhlas Rosele, Mohd Kamarul Khaidzir Saadan, Uwais, Najhan Muhamad Ibrahim, Azizi Bin Che Seman, Luqman Bin Haji Abdullah, Kuni Afifah, Zairy Zainol	8	2
4	Abdul Muneem, Noor Naemah Binti Abdul Rahman, Mohd Edil Bin Abd Sukor, Abdul Karim Bin Ali, Engku Muhammad Tajuddin Bin Engku Ali, Wan Nur Izzah Binti Wan Muhamad Fokri, Mohammad Azam Hussain, Selamah Maamor, Muhammad Amrullah Drs Nasrul, Nurin Athirah Mohd Alam Shah, Zati Ilham Abdul Manaf, Sadiya Jalal, Ahmad Sufian Che Abdullah, Muhammad Arief Jailani, Aishath Muneeza, Sodiq Omoola, Hafsat Kamal Ibrahim, Saheed Abdullahi Busaria, Hassan Suleiman, Habeebullah Zakariyah, Dedy Rachmad, Yogi Muhammad Rahman, Renny Supriyatni Bachro, Etty H Djukardi, U Sudjana, Achmad Fageh, Anisa Solikhawati, Heriyanto, Yulius Efendi, Teguh Wicaksono, Nicolas Mario Gunawan, Abdul Salam, Fathurrohman Siliwangi, Faiz Mufidi, Febrianti Dyahsitasari, Muhammad Yassir, Md Rozalafri Johori , Wawarah Saidpudin, Rosmawati Mohamad Rasit, Asvinitha Muniandy, Ijaz Ahmad, Siti N. Azizah, Apriliah, Wahyudin Darmalaksana, Akhmad Affandi Mahfudz, Peck-Yong Tey, Mohamad Sabri Sinal, Wan Aida Nadia Wan Abdullah, Erik Kurniadi, Heru Budianto, Mardziyah Mohd Isa, Nur Syamilah Md Noor, Mohd Yazid bin Zul Kepli, Tajul Aris Bustami, Fauzan Nazmi Al Galib, M.Dimas Eryadi, Firda Nur Amalina Wijaya, Muhammad Abdullah, Siti Solehah, Indi Auliya Romdoni, Mohd Shahid Mohd Noh, Hassan Muhammad Omar Al Hamrawy, Farah Katrina Batcho, Herman, M. Kunta Biddinika, Fitriah, Suwanti, Jannatul Husna, Dinan Yulianto, Nawwarah Iman, Khairul Azim Bin Amir Hassan, Syifa Barokah Aini, M. Labib Fahmi Arif, H. Hendri Tanjung, Hj. Qurroh Ayuniyyah, Mohd Fauzi Abu-Husin, Muhammad Abduh Tuasikal, Abdul Basid, Ahmed Saad Ali Al-Boraie, Ahmed Abdullah Khalil Abdo	80	1
	Total	**91**	**10**

Table 6 illustrates that from a total of 91 contributing authors, 11 researchers have produced multiple publications, collectively contributing 24 authorships across literature. Norazlina Abd Wahab emerges as the most prolific contributor with 4 publications, focusing primarily on inheritance and estate planning of digital assets. Two researchers, Norliza Katuk and Nur Syaedah Kamis, have each contributed to 3 publications, while eight researchers have contributed 2 publications each. The remaining 80 authors have contributed to a single publication. This authorship distribution indicates a relatively diffuse knowledge production network with a small core of specialised researchers making sustained contributions to the field.

Geographical Distribution
The geographical analysis of publication origins reveals distinct patterns in regional research activity. Table 7 illustrates the distribution of publications by country of origin.

Table 7: List of country for journal and number of articles published from year 2019-2024

No.	Country	Number of Articles Published from Year 2019-2024
1.	Malaysia	15
2.	Indonesia	16
3.	Egypt	2
4.	Algeria	1
5.	Singapore	1
6.	The United Kingdom	1
7.	The United States	1
8.	Pakistan	1
9.	Qatar	1
10.	Palestine	1
	Total	**40**

Table 7 indicates a pronounced concentration in Southeast Asia, with Indonesia and Malaysia collectively accounting for 31 of all publications. Indonesia leads with 16 publications, followed closely by Malaysia with 15 publications. Egypt contributes 2 of the literature, while seven other countries each contribute a single publication. This geographical concentration suggests that research on digital assets from Islamic perspectives is primarily conducted in regions with significant Muslim populations and developed Islamic financial systems.

Based on the analysis of recent research trends, the key observations regarding the study of digital assets from an Islamic perspective are as follows:

1. The increasing number of articles published each year shows that research on digital assets from Islamic perspective, particularly in the areas of inheritance and estate planning, is growing in relevance and importance. From just 1 article in 2019, the field saw significant growth to 14 articles each in 2023 and 2024, indicating a surge in scholarly interest. This trend may be attributed to the increasing adoption of digital assets globally and the need to address their implications within Islamic financial frameworks.

2. The widespread use of qualitative analysis research approach suggests that researchers are focusing on in-depth understanding of various aspects of Islamic finance and law related to digital assets. Out of 40 total publications, 38 employed qualitative methods, demonstrating a clear preference for this approach in exploring complex issues in the field. This aligns with the nature of Islamic jurisprudence, which often relies on interpretations and contextual analysis of religious texts and principles.

3. Among the data analysis methods, analytical and descriptive approaches are more popular among researchers compared to other patterns. These two methods account for 32 out of 40 publications (18 analytical and 14 descriptive), suggesting a focus on both detailed examination and comprehensive description of the subject matter. Analytical approaches are essential for dissecting the Shariah compliance of digital assets, while descriptive approaches help in understanding the landscape of digital assets within Islamic finance.

4. The writing pattern of the studies shows a strong trend toward collaboration, with many researchers of diverse genders working together. Out of 40 publications, 20 featured mixed-gender collaborations, with the largest teams (of six to seven authors) being mixed-gender, indicating a move toward diverse and inclusive research teams. This collaborative

approach enhances the richness and comprehensiveness of the research, as different perspectives and expertise are brought to bear on the subject matter.

5. Out of a total of 91 researchers contributing to the field, Norazlina Abd Wahab emerged as the most prolific, with 4 publications focusing on digital assets over the 6-year period. This was followed by Norliza Katuk and Nur Syaedah Kamis, each with 3 contributions, highlighting the concentration of expertise among a few key researchers. Their work significantly contributes to the growing body of knowledge on digital assets in Islamic finance.

6. Geographically, Indonesia and Malaysia dominate the research landscape in this field, with 16 and 15 publications, respectively out of the total 40. This suggests that these two countries are at the forefront of research, particularly in the context of digital assets and estate planning. This dominance may be due to the active Islamic financial sectors and the presence of regulatory bodies that are addressing the integration of digital assets within Islamic frameworks in these countries (Securities Commission Malaysia, 2020b; Indonesian Ulema Council, 2021).

CONCLUSION

Based on the literature review spanning 2019 to 2024, digital assets have emerged as a significant area of study within Islamic finance and law, with research showing a marked increase in publications, particularly in inheritance planning and Islamic rulings. The findings demonstrate that these assets are increasingly recognised as legitimate forms of property (*māl*) under Shariah principles, subject to specific conditions and regulations. The research landscape is dominated by qualitative studies from Indonesia and Malaysia, with collaborative mixed-gender teams producing many publications. Key areas of focus include the integration of digital assets into Islamic inheritance planning, zakat calculations, *waqf* frameworks and financial transactions, with scholars generally agreeing on their economic value while emphasising the need for Shariah compliance. The surge in publications from 1 article in 2019 to 14 articles each in 2023 and 2024 reflects the growing importance of understanding digital assets within Islamic jurisprudence, particularly as these assets continue to evolve and integrate into mainstream financial systems.

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