

Cryptocurrency and Shariah: Analyzing the Implications of Islamic Jurisprudence on Bitcoin and its Ethical Framework

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ABSTRACT

Bitcoin leads in the cryptocurrency market, outpacing its rivals and serving as a decentralized means of exchange that aims to reshape the landscape of the financial industry. The fact that it emerged as a non-physical high-value money served to attract ownership of this currency. Nevertheless, despite the fact that it offers a variety of innovations, bitcoin is plagued by problems of legality, regulatory uncertainty, and the fact that it serves as a platform for unlawful activity. In addition to this, it comes into conflict with Shariah compliance legislation, particularly with regard to its physicality and its relationship with Islamic financial transactions. The revolution may also result in innovative concepts regarding corporate practices, electoral systems, gaming legislation, energy consumption levels. Within the framework of Islamic finance, the current research investigates whether or not cryptocurrencies comply with Shariah law, with a particular focus on Bitcoin. The present study examines the Shariah compliance of cryptocurrencies, with a special emphasis on Bitcoin, within the context of Islamic banking. This paper employs qualitative content analysis of original Islamic sources, theoretical perspectives, and case studies to evaluate the ethical and legal compliance of digital currencies. The study emphasizes the prospective incorporation of blockchain technology into Islamic institutions, hence promoting ethical financial conduct in accordance with religious principles. The findings indicate that Bitcoin adheres to fundamental Islamic principles by excluding haram elements such as *riba* (usury), *gharar* (uncertainty), and *maysir* (gambling), while also possessing characteristics akin to conventional currency. Nonetheless, concerns regarding its environmental impact, potential changes, and adherence to regulations limit its acceptability. The findings indicate that, with appropriate frameworks and advancements in Islamic fintech, cryptocurrencies have the potential to serve as Shariah-compliant financial instruments while promoting inclusion and stability within Islamic banking.

Keywords: Bitcoin, Cryptocurrency, Ethical Framework, Implications, Islamic Jurisprudence

INTRODUCTION

Since the introduction of Bitcoin in 2008 (Nakamoto, 2008), the Information Technology (IT) sector has exhibited a significant interest in cryptocurrencies. Alternative currencies are gaining popularity due to factors such as user-friendliness, transparency, and decentralization. Different types of currencies are going to challenge conventional banks and other financial institutions in the near to medium term by offering more efficient trading mechanisms, such as national fiat currencies and commodity-based currencies like gold (Zhang et al., 2024). Following the swift advancement of technology, some individuals expressed concerns regarding its application and regulation, especially in regions with divergent ethical standards (Sestino et al., 2025). In evaluating a new financial instrument for compliance with Shariah law, Islamic banking implies strict adherence to fundamental religious and ethical principles.

Initially, Islamic banking opposed the concept of imposing interest on loans and some forms of commerce, including gambling and speculation. Contemporary Islamic sciences have endeavored to incorporate traditional principles into contracts and instruments essential to the modern economy that are absent from the core Islamic texts. Due to the technical advantages of digital currencies in addressing numerous persistent issues in Islamic banking and finance, it is essential to examine their features, applications, and compliance with Shariah law (Haroon et al., 2025). The emergence of Bitcoin as a pioneer in crypto finance, therefore, sparked debate among Islamic scholars regarding the permissibility of its use as a new currency. Although some scholars say that Bitcoin will cause its users to fall into *riba* (usury), *gharar* (ambiguity), or *maysir* (gambling) due to the nature of Bitcoin, which is present without a physical form and is not regulated by any government, and is highly susceptible to misuse for illegal activities (Al-hussaini et al, 2019). However, some argue for the necessity of using Bitcoin as a new medium in the financial world because Bitcoin shares characteristics with other currencies globally and possesses additional qualities not found in other currencies, such as anonymity, transfer speed, immutability through blockchain, and greater resistance to theft (Hamadou & Suleman, 2024). This study aims to establish a clear framework for each instrument and business sector, serving as a standard for regulators, Islamic banks, and institutional investors considering the utilization of digital currencies in Shariah-compliant contexts.

This paper is structured as follows. Section 2 discusses the literature review, and Section 3 describes the research methodology. Section 4 presents the findings and results. Section 5 provides the conclusion, including a summary of the findings and recommendations for future research.

LITERATURE REVIEW

Bitcoin and Cryptocurrency

Cryptocurrency is a form of digital currency that uses encryption to regulate the creation of units, safeguard transactions, and ensure the transfer of assets. Prior to Bitcoin, distributed electronic currencies such as e-gold were already existed (Rohilla et al., 2025). Due to Bitcoin's popularity and recognition, digital currency has been extensively rebranded as "cryptocurrency". Bitcoin was the inaugural peer-to-peer electronic currency enabling individuals to transfer funds directly via the internet, circumventing banks or other financial entities (Brichta, 2025).

Various cryptocurrencies may use one or more of the following technological mechanisms to generate and authenticate new currency: proof-of-work, proof-of-stake, cryptographic hashes, and Byzantine fault tolerance (Al-awamy et al., 2025; Touloupou et al., 2025). Miners are individuals or groups who generate bitcoins and facilitate transactions. They monitor transactions to prevent individuals from using the same funds multiple times (Vlahavas et al., 2024). Most cryptocurrency systems, by contrast, use a decentralized architecture that operates with little or no central authority. This differs from currencies issued by governments (Verdier, 2024).

Bitcoin and Ethereum remain the pre-eminent cryptocurrencies, but emerging alternatives are acquiring sufficient liquidity to prevent excessive concentration of power. Payment methods employ several mechanisms to facilitate the transfer of funds (Zekos, 2024). Mix coin and Conjoin obfuscate transaction tracking, while Crypto note and its derivatives depend on anonymous transactions within coin pools (Giannikou, 2021). The fundamental technology underlying cryptocurrencies is blockchain. It is a public ledger of all cryptocurrency transactions. A peer-to-peer network sustains and modifies it. The blockchain network comprises nodes that perform the functions of miners. When a bitcoin transaction occurs, the blockchain network receives the information (Sarode et al., 2021). To prevent double spending, the nodes verify each other's transactions. Multiple nodes are concurrently attempting to resolve a mathematical issue. The node that resolves the issue first is permitted to broadcast the transaction on the blockchain (Kang, 2023). The rivalry to solve the puzzle renders publishing transactions costly. This approach mitigates the challenge of incurring double expenditures.

The transaction method of Bitcoin is not completely anonymous; instead, it is pseudonymous. Users disclose their wallet's public keys in conjunction with their transactions. These public keys serve as enduring identifiers (Cipher, 2025). Decentralization is a fundamental characteristic of Bitcoin that has garnered significant interest from both users and service providers. This aspect is typically regarded as a fundamental distinction between

Bitcoin and conventional currency, which is issued as legal tender and regulated by central banks (Shah et al., 2023). This trait leads people to perceive Bitcoin as an unregulated currency, referring to it as an electronic cash system or digital currency (Khan & Hakami, 2022).

It is important to know whether Bitcoin is centralized or decentralized to set standards for judging its Shariah compliance. The Islamic economic philosophy forbids the accumulation of wealth and power among a limited number of individuals or entities (Hassan et al., 2025). A fully centralized currency goes against this idea. Bitcoin is somewhat decentralized, which means that no person or group has full control over the system. This feature distinguishes it from some cryptocurrencies that, although asserting decentralization, function similarly to government-backed and centralized digital currencies (Ma & Huang, 2022). Evaluating the depth of Bitcoin's decentralization facilitates the analysis of its adherence to Islamic financial regulations.

According to Sam sudden and Perera (2021), bitcoin's clandestine and private nature makes it useful for illicit things like money laundering, tax evasion, theft, and the acquisition of illegal goods and services. Anonymity hides identifying information from transactions, which lets criminals avoid responsibility and accountability when there are no rules or monitoring in place (Davis & Arrigo, 2021). Bitcoin addresses these issues through a cryptographically secure distributed ledger that enables users to authenticate the legitimacy of transactions without the necessity of an intermediary or regulatory authority (Karisma & Moslemzadeh Tehrani, 2023).

Different pseudonymous addresses for individuals and organizations exist, permanently stored in the ledger and not directly linked to their real-world identities. A Bitcoin address does not directly connect to a legal person. However, transactions that use regulated-wrapper services usually involve identity verification in line with the know-your-customer concept, which means they are not anonymous (Garg, 2024; Temo, 2023). Numerous articles on forums, conferences, and social media have sought to determine the compliance of Bitcoin and other cryptocurrencies with Shariah law. Authorities and scholars persist in examining the complex intersections of cryptocurrencies, fiat currency, and Islamic jurisprudence (Akhlaq et al., 2025).

The significant volatility of Bitcoin has elicited apprehensions regarding its adequacy for Islamic financial transactions. Volatility is a contentious topic characterized by varied and often conflicting assessments (Ahmed, 2024). The price of Bitcoin fluctuates approximately 5% daily, but the price of gold varies by roughly 0.5% per day. The volatility of Bitcoin complicates the determination of a fair price when it is regarded as a currency (Baur & Dimpfl, 2021). A system must have superior value stability to be recognised as a "medium of exchange" in Islamic finance (Anjum, 2022). One reason for the volatility of Bitcoin's price is that it saw significant fluctuations, frequently exceeding 100% daily, during the initial weeks following its inception. The absence of liquidity and the novelty of speculation contribute significantly to volatility (Jindai, 2024). The price of Bitcoin may indicate the market's perception of its future viability and potential for success. The significant price volatility indicates that it is a high-risk and speculative asset (Fang et al., 2022).

Price volatility remain a concern. The asset's value has fluctuated significantly compared to established fiat currencies due to speculation. Bitcoin's volatility renders it an insufficient store of value or unit of account, leading to debates regarding its designation as money (Bongini et al., 2025). Recently, prices have exhibited significantly reduced volatility. The volatility's tendency to incite speculation fosters immoral activity and has raised concerns about adherence to Islamic principles. In the absence of a stabilizing entity, such as an issuing bank, the volatile exchange rate encourages the development of new speculative markets within an unregulated environment that facilitates fraudulent and high-risk transactions. The introduced ambiguity heightens risks that contravene the regulations of a Shariah-compliant financial industry (Jibo, 2025). The significant volatility of Bitcoin presents a considerable speculative risk that may exceed acceptable levels of uncertainty; yet, numerous frameworks offer strategies to manage this volatility to maintain Shariah compliance. Its volatility and tendency to foster speculative activity make it challenging to accept. Despite its potential to be marketed as a commodity, it remains ambiguous whether it is a freely transferable currency or possesses inherent utility (Izadin et al., 2025).

The emergence of various cryptocurrencies indicates a continual exploration by individuals for alternatives to established currencies and solutions for contemporary economic challenges. Numerous new cryptocurrencies, referred to as "altcoins", emerged in the early 2010s (Roy & Lakshmi, 2025). Litecoin, Namecoin, Peercoin, Gridcoin, Ripple, Neo, Cardano, and Dogecoin were among them (Pernagallo, 2024). Cryptocurrencies can be

classified into many classes according to their cryptographic underpinnings. Each category typically contains multiple implementations that compete against one another and employ analogous design concepts. Analyzing primary categories uncovers unique traits and operating structures, hence enhancing comprehension of the bitcoin ecosystem pertinent to Islamic financial issues.

Islamic Perspectives on Cryptocurrency

Meyer (2001) present a widely recognised definition of money that delineates its functions into three principal roles which are measuring, storing, and transferring value. The Islamic monetary system regards money as possessing equivalent responsibilities, pointing out that it's a currency that facilitates borrowing, trading, acquiring, rewarding, and selling. Muhammad et al. (2016) assert that Shariah scholars regard money primarily as a vehicle of transaction and a repository of value (Alamad, 2024). Mohd Noh et al., (2025) classifies transactions as either acceptable or forbidden according to Shariah.

Purchasing, vending, lending, borrowing, donation, compensation for damages, depositing, and executing partnership agreements are all instances of allowable transactions (Hamour et al., 2019). Conversely, impermissible transactions encompass the sale of property not owned by the seller, engaging agents for transactions with exorbitant interest rates, some profit-sharing agreements, and selling items during the transfer of ownership (Taufik Syamlan et al., 2025). Islamic monetary theory provides a framework to assess the permissibility of bitcoin transactions and their compliance with Islamic currency regulations (Hassan et al., 2025).

The objective of integrating the concepts of justice, equality, and solidarity is to eliminate hatred in society. The Islamic monetary theory evolved concurrently with Shariah to govern business activities by delineating permissible transactions (Ayub & Khan, 2021). This framework serves as a foundational tool for contemplating Bitcoin via the lens of Islamic law. The primary purpose of possessing money is to facilitate the acquisition and payment for goods and services. Credit money and commodity money are the two fundamental categories of currency (Ab Shatar et al., 2021). Historically, monarchs produced gold and silver coins that served as currency. It subsequently expanded to include items such as dates or camels (Whitaker, 2024). Ibn Taimiyah's perspectives on transactions were shaped by the nascent Islamic legal framework, which was predicated on a commodity money system (Islahi, 2024).

In contemporary society, credit money is the predominant form of currency, facilitated by national currencies and fiat money (Ogachi et al., 2021). This contemporary monetary system introduces new similarities within Islamic jurisprudence. An essential Shariah screening delineates the criteria for the permissibility of transactions involving credit money, offering a framework for analyzing bitcoin transactions in alignment with Shariah (Arief Jailani & Muneeza, 2022).

Abu Bakar et al. (2017) and Nasrullah & Muthoifin (2024) outlines permitted and forbidden transactions within Islamic economic law, using classifications taken from the Qur'an and Sunnah. Permissible transactions encompass exchange (bay), sale or hire-purchase with deferred payment (Arbun), loan and repayment (Qardh), guardianship of property (Wadiah), and partnership (Musharakah). The prohibited transactions include engaging in the sale of non-existent objects, entering into ambiguous contracts (Gharar), trading in illicit goods, monopolizing and artificially inflating prices, and participating in gambling and speculating (Maysir). Certain transactions must adhere to Shariah law and special regulations, including the sale of debt (Bay Inah), the provision of loans (Kafalah), leasing (Ijarah), the transfer of debts and receivables (Salam and Istisna'), and profit generation on loans (Murabahah).

METHODOLOGY

This study used a qualitative and deductive technique, enabling the integration of perspectives, explanations, descriptions, and arguments without reaching at definitive conclusions. A thematic approach is used to assess the notion of using Bitcoin as a new kind of currency within its ethical context. Ideas may be more closely related to knowledge than to decision-making or object evaluation.

The primary sources for this study are the scriptures, *ijtihad*, and *ijma*; the secondary sources include books, journals, the internet and websites. The researchers used a content analysis of the materials to assess the narrative discussions. The literature review includes an analysis of authentic sources from the Quran, Sunnah, and Fiqh (Islamic law), augmented by citations from respected Islamic scholars, particularly in the field of Islamic economics.

The limited research on both governmental and private Islamic economies influenced the study's approach. Islamic academics employed renewal techniques based on Shariah scriptures, such as rational inquiry, specific documentation, and evidence or analogies, to enhance law and public administration.

FINDINGS AND RESULTS

For Islamic banking to be legitimate, bank institutions must obey the basic rules of Shariah. Numerous assessments have been conducted to determine the compliance of cryptocurrencies with Islamic law. Investigations of numerous institutions engaged with bitcoin emphasize the necessity of such regulations. Many believe that Bitcoin, the predominant cryptocurrency, is not fully compatible with Islamic principles. This conclusion requires a comprehensive analysis of the mechanisms affecting the link between rising monetary phenomena and normative religious perspective.

Shariah Compliance and Cryptocurrency

Islamic banking must conform to the fundamental principles of Shariah in order to be considered legitimate. Various standards have been created to see how well cryptocurrencies follow Islamic law (Hassan et al., 2025). Case studies that analyze the efforts of several parties involved in bitcoin operations underscore the need for such criteria (Klein et al., 2024). It is evident that, while analyzing several perspectives, Bitcoin, the preeminent cryptocurrency, does not fully align with Islamic beliefs. This evaluation requires an exhaustive analysis of the factors influencing the interplay between developing monetary phenomena and conventional religious doctrines (Akhlaq et al., 2025).

All online businesses must follow Islamic Shariah rules. For electronic payments to function, banks and other financial institutions must serve as dependable intermediaries. A completely non-reversible transaction environment is unfeasible, since these groups must arbitrate disputes (Stracca, 2025). The necessary mediation resources will always elevate transaction costs, impose a minimum transaction threshold, and make small, informal transactions impractical.

The inability to execute irreversible payments for services that are also irreversible contributes to an increase in price. Due to the potential for reversal, merchants must enhance their confidence in customers, necessitating more attentiveness and sometimes requiring more information than usual. Conditional permission for fraudulent behaviour arises as an unavoidable outcome. By engaging in direct transactions with physical currency in person allow to circumvent these expenses and hazards (Melnychenko, 2021). However, it is impossible to remit payment to an individual over a communication channel without the involvement of a trusted intermediary. A proposal for a novel digital currency has emerged: a cryptography-based system that eliminates the need for trust and allows two individuals to engage in trade directly, without the involvement of a third party. Irreversible transactions shield sellers from fraud, while standard escrow agreements protect purchasers (Bin Yusoff et al., 2024).

Khan & Rabbani (2022) have examined several cryptocurrency systems to ascertain their adherence to Islamic financial principles and Shariah compliance. The study indicates that Bitcoin is mostly regarded as the most Shariah-compliant cryptocurrency currently accessible, whereas Ethereum and Ripple fail to meet Shariah norms and are unlikely to do so in the foreseeable future (Muneeza & Mustapha, 2019).

Studies on the Bitcoin system and its foundational architecture suggest that it adheres to important Islamic principles. Bitcoin's design mostly avoids the undesirable things that are *riba* (usury), *gharar* (uncertainty), and *maysir* (gambling). This signifies that it satisfies the minimum standards for Islamic banking approval. The system's compliance with the essential attributes of money recognized by Islam and the legislation governing

Islamic banking operations enhances its ethical acceptability. Bitcoin is a digital way to trade real money, and it is a smart choice over traditional fiat currencies.

Bitcoin's Obstacles and Disputes

Due to the increasing prevalence of illegal activities associated with Bitcoin, more countries have imposed stricter on its usage as a payment method. The absence of explicit regulations and the presence of several security vulnerabilities hinder its use as a payment method. In the absence of data regulation, a Bitcoin account lacks the same degree of authority and protection for its holders as a conventional bank account. This is due to the fact that anyone with access to its blockchain data or private keys is able to use it.

Issues with regulations

In response to worries about the economy and financial stability, global regulatory bodies have set rules for bitcoin transactions. The rules include limits on advertising and a total prohibition on virtual money. Islamic financial agencies operating under traditional market norms generally have a similar perspective on cryptocurrencies. Such an attitude makes it harder to figure out how to use Bitcoin in Islamic banking (Khan et al., 2025). Officials have said that the fact that it's difficult to keep track of transactions has made it possible for people to use bitcoin for bad things like fraud, money laundering, and illicit trade (Nabilou, 2019).

Security threats and fraud

A significant concern surrounding Bitcoin among the Islamic community is the potential for fraud and the associated security risks related to its use. Islamic banking prioritizes integrity and elimination of deceit. Because of this, the possibility of crime and fraud makes it harder for more people to embrace it. The fact that it's difficult to verify things and that people may remain anonymous makes theft, forgery, and other financial crimes more common (Bhat et al., 2024). Given the circumstances, Agarwal et al., (2024) have suggested ways to make things more open, such as making all user profiles and transaction histories public. These steps might help solve problems like money laundering, avoiding zakat, and running scams, while also making tax assessments more accurate (Mansoor & Inam, 2025).

Due to practical issues with data collection and access, there have been proposals for semi-centralized systems that permit authorized individuals and authorities to review transaction records and recover lost data. This approach is different from completely decentralized systems since it tries to reduce the risks of data loss, which makes it easier to keep an eye on things and follow the rules. This guideline emphasizes the need for achieving a balance that fosters innovation and advancement amongst the many limitations in Islamic finance related to excessive uncertainty, ambiguity, and complexity. The goal is to make sure that the cryptographic methods and frameworks used by cryptocurrencies follow Shariah rules that govern contracts and benefit society.

Ethical Implications in Cryptocurrency

Islamic scholars and economists contend that financial mechanisms based on Islamic principles should advance social justice and equality. Digital currencies might help with economic transactions, but they could also make market failures worse, which would lead to financial instability and a bigger disparity between the rich and the poor.

The environmental effects of bitcoin lead many to question its moral implications. Some algorithms use so much energy that they have a carbon footprint that is bigger than that of whole countries. The existence of fraudulent operations and ongoing regulatory ambiguities hinders the evaluation of Islamic digital money. To understand how encryption-based decentralization might strengthen the central authority of Islamic institutions while also offering an ethical framework that fits with Islamic finance, it is important to look at the concepts behind Shariah.

Equity and Social Justice

In Islam, the allocation of resources to reduce social injustice is a complicated moral issue because of the differences in economic advancement. The Quran (al-Nisa', 4:135) emphasizes the importance of economic

equality and wealth distribution as fundamental tenets of social justice. The Quran's idea of justice also assumes that people would work together to use their money and resources to improve their lives. Islam strictly regulates trade and social behaviour to maintain equilibrium and prosperity in society (Ali et al., 2024). Individuals possess the economic liberty to manufacture and market, integrating material and ethical goals. Islamic teachings assert that all economic transactions must contribute positively to society and culture, contrary to prevalent practices (Kalkavan et al., 2021). The primary objectives of Shariah are religion (din), life (nafs), knowledge (aql), progeny (nasl), and wealth (mal) (Auda, 2008).

Environmental impact

Bitcoin mining employs a proof-of-work consensus mechanism to authenticate transactions via the resolution of mathematical problems (Todorović et al., 2022). The decentralized nature of mining and advanced technologies enables a powerful miner to potentially manipulate the transaction sequence and verify fraudulent or invalid transactions (Juárez & Bordel, 2023). Bitcoin mining consumes an amount of power and most of the country are endeavoring to reduce carbon emissions. However, several mining businesses continue to rely on fossil fuels. Elevated energy demands result in immoral behaviour, such as executing a 51% attack on appropriate bitcoins (Jones et al., 2025).

CONCLUSION AND RECOMMENDATIONS

Cryptocurrency emerged as a sort of decentralized digital money. It has garnered significant interest in Islamic finance because it may align with Shariah law. It is essential that Shariah compliance be made apparent because cryptocurrency platforms enable individuals to purchase and sell goods and services. There are many similarity characteristics of Bitcoin and fiat money. The word Shariah refers to the moral and ethical rules set by Allah. The Bitcoin system does not have any aspects that Shariah specifically forbids, yet, it shares similarities with Islamic finance, rendering it a potential possibility for acceptance as currency under Islamic law. Recognizing bitcoin as a currency creates a framework for the development of Islamic-compliant cryptocurrencies and highlights the essential criteria for Shariah certification and acceptability in Islamic banking and finance.

Future research should address the limitations by expanding the scope to include diverse data and exploring underpresented areas such as the dynamics of the financial implications of cryptocurrency within a limited socioeconomic context. By concentrating academic inquiry on domains such as cryptocurrency financial studies in Malaysia or other locations, researchers might provide a more thorough comprehension of the ethical frameworks governing cryptocurrencies. Concurrently promoting a local Islamic viewpoint on the use of cryptocurrency as an innovative financial instrument in the economic landscape. It is essential to examine the perspectives of Islamic scholars in Malaysia on cryptocurrencies and to establish standards for their usage in the country, especially with the application of Islamic law, such as zakat. This study highlights the dynamic and complex characteristics of finance in Sharia-compliant cryptocurrencies, setting the stage for future research to investigate new solutions and practical tactics for ensuring sustainability and development in the cryptocurrency sector.

The Future Directions of Cryptocurrency in Islamic Finance

People perceive cryptocurrency as a novel form of money, and their interest in investing in it continues to grow. An analysis indicates that bitcoin corresponds well with the Islamic conception of currency, implying its appropriateness for Islamic banking and finance. Islamic scholars, Shariah experts, and regulatory bodies should collaborate to establish suitable rules and guidelines for their effective implementation. A quasi-centralized method might help prevent data loss and make tax and zakat computations more accurate, which would make people more responsible. To prevent exploitation by criminals, ensure clarity regarding the transaction and the individuals involved.

The growth of Islamic fintech, which includes blockchain technology, has big effects on the future of financial technology in Islamic finance businesses. This will enable the provision of services that adhere to Shariah principles (Abu Bakar et al., 2017). This idea might make the worldwide Islamic financial industry more stable and secure by bringing the features of cryptocurrencies in line with the rules of Islamic banking.

Possibility of Integration

Cryptocurrency has emerged as a new kind of money that operates independently of any central authority and uses cryptographic technologies to protect transactions. Aloun (2024) said that David Chaum, a key figure in the creation of electronic money, came up with the idea of a decentralized digital currency. Later developments led to several forms of digital currency and electronic money. These sometime hurt decentralization since intermediaries like banks or private businesses were involved.

Bitcoin, which was released in 2009, is the first truly decentralised cryptocurrency. It makes a peer-to-peer network that works without middlemen. Bitcoin isn't produced by any government or central bank as fiat money is (Tommerdahl, 2024). Instead, it is built on a solid, open-source technology that lets people make transactions directly over the internet without using a middleman. This makes it hard to categorize, and there have been debates about how well it fits with various regulatory systems, especially those based on Islamic financial principles (Jouti et al., 2025).

Interest in Islamic finance keeps growing, and the Shariah compliance of Bitcoin remains a contentious topic of discussion. Despite these issues, blockchain-based financial technology (fintech) solutions have begun to emerge, using principles from cryptocurrencies in ways that seek to comply with Islamic law. This potential integration offers advantages for countries with significant Muslim populations, enabling the delivery of financial services to the underprivileged, reducing costs, and improving transparency and accountability—factors that are crucial for both Islamic finance and broader socio-economic inclusion.

Innovating ideas in Islamic Financial Technology (Fintech)

The widespread availability of technology has sparked innovation in Islamic fintech, with digital products competing for supremacy in the banking industry, especially during business hours. The Islamic financial institutions (IFIs) industry must strive to maintain its competitive advantage by continuous innovation while adhering to Shariah requirements. Islamic banks have built innovative apps that combine mobility and artificial intelligence to get more Islamic consumers. Companies that focus on blockchain, such as Wahed and Adab Solutions, are competing in the field of Shariah-compliant financial services (Amin, 2024). There are still many unanswered questions about Shariah.

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