

Innovation in Islamic finance: Integrating blockchain with Maqāṣid al Sharī'ah & Ḥifẓ al Māl

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ARTICLE INFO

Article history:

Received 13 November 2024

Revised 11 December 2024

Accepted 21 January 2025

Published 31 January 2025

Keywords:

Blockchain

Maqāṣid al Sharī'ah

Islamic finance

Innovation

Sustainability

DOI:

10.24191/jeeir.v13i1.3852

ABSTRACT

Innovation in Islamic finance has a close linkage with the new technology. The blockchain technology carries unlimited opportunities for Islamic finance to enable it to meet the Maqāṣid al Sharī'ah. However, this aspect is not visible in the literature due to the tendency to connect blockchain with the cryptocurrencies. This study combined an insightful review of Maqāṣid al Sharī'ah and ḥifẓ al māl along with technical analysis of blockchain to cater to the Islamic finance ethical innovation. This was a qualitative analytical research paper. It addressed the questions related to integrating the theories of Maqāṣid Al Sharī'ah and Ḥifẓ al māl with the blockchain. The result was a futuristic vision for innovation in Islamic finance with the theme of preserving wealth using a combination of the salient features of blockchain technology and characteristics of Ibn 'Ashur's theory of ḥifẓ al māl for wealth and money. The study found that it is possible to create a matrix with the collaboration between the ḥifẓ al māl objectives, namely wealth circulation, justice, ownership protection, creating easiness, robustness and transparency, and the technical characteristics of blockchain, namely decentralization, immutability, transparency, and cryptographic hashing. Together, this approach has the potential for producing ethical, secure, and innovative Islamic finance solutions. This study falls under the contemporary literature that discusses Maqāṣid al Sharī'ah and Ibn 'Ashur's theory of ḥifẓ al māl beyond its theoretical nature in combination with blockchain technology to cater to the growing requirements of innovation in Islamic finance as a part of Maqāṣid al Sharī'ah's sustainable ecosystem.

1. Introduction

Islamic finance is growing rapidly; likewise new technologies are. Blockchain is a technology that

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became famous due to its link with cryptocurrencies. Ever since, studies have discussed mostly crypto permissibility under the Shari'ah law. Nevertheless, the fact is that due to its salient features, blockchain had become very famous as an advanced fintech technology. Hence, it had been integrated into a variety of conventional banking transactions. However, its use in Islamic finance is not yet visible (Unal & Aysan, 2022).

This study represented a progressive approach towards integrating three concepts in a theoretical and practical manner. Blockchain-based concepts and prototypes are promising and found in good numbers but relating them scientifically to Maqāṣid al Shari'ah was not found in the publications. This resulted in a lack of academic works related to the blockchain technology potential to serve the innovation in Islamic finance major objectives, such as ḥifẓ al māl. In other words, there was a gap to discuss the pragmatic approach to using the blockchain to meet different desirable results that can correlate with the Shari'ah objectives to achieve the ḥifẓ al māl. This is a concept that is missing in the recent papers that discussed fintech in Islamic finance, such as Rabbani et al. (2020), Aysan & Unal (2021), Aljamos et al. (2022), and Unal & Aysan (2022). Hence, the approach adopted in this study was to find a common ground for the development of blockchain-based Islamic finance solutions within the framework of ḥifẓ al māl that meets the requirement of Maqāṣid al Shari'ah.

Innovation in Islamic finance for catering to the ḥifẓ al māl challenge based on new technologies such as blockchain in accordance with the principles of Shari'ah is an underexplored topic. To overcome this shortfall, this study carried out an analysis of the blockchain technology in order to integrate its technical features with the Maqāṣid al Shari'ah theory with the aim to serving the innovation in Islamic finance and providing a new vision for a sustainable and Shari'ah-compliant development of the Maqāṣid al Shari'ah-based ecosystem (Abubakar & Ringim, 2018). In this context, the study used the theories related to Maqāṣid al Shari'ah (divine objective) (Ghazālī, 1998), specifically those that are related to money and known as the ḥifẓ al māl (preserving the wealth) (Ibn 'Āshūr, 2013).

The study followed a qualitative analytical approach. This research is unique from other studies that were mainly focused on the permissibility and Shari'ah rulings about the blockchain. The major questions were how to extract the empirical aspects of Maqāṣid al Shari'ah and connect it with blockchain features. Additionally, explore what the potential was for conceptualization of the relationship between the salient features of blockchain technology and the main characteristics of Maqāṣid al Shari'ah in connection to ḥifẓ al māl. The goal was to find out if blockchain technology could be used with Islamic finance in a way that followed the rules set out in Maqāṣid al Shari'ah.

The study resulted in a matrix with a unique design that merged the blockchain technology features with ethical and sustainability values derived from objectives of ḥifẓ al māl values, namely wuḍūḥ (clarity), thabāt (stability), 'adl (justice), and rawāj (availability, accessibility, and marketability) (Ibn 'Āshūr, 2013; Dewaya, 2024). The study paved the way for its implementation in the various modern initiatives related to innovation in Islamic finance; therefore, it presented the findings in the shape of a matrix that correlated the technical features of blockchain with the characteristics of ḥifẓ al māl specifically and Maqāṣid al Shari'ah in general.

2. Method

This study followed a qualitative analytical method. Through an analytical research approach, the primary data collection was based on theoretical Maqāṣid al Shari'ah fiqhi references. Additionally, the ḥifẓ al māl-related fiqhi literature was explored as the wealth chapter of Maqāṣid al Shari'ah to shape the base of pragmatic entrance towards linking the same with the contemporary application in Islamic finance. Subsequently, further connections were established with the innovation in Islamic finance through focusing on the impact. Accordingly, despite the qualitative nature of the research, it was connected to the technical aspects of blockchain and financial operational aspects of Islamic finance. This triangulation method provided a synthesized schematic representation of the research and contributed towards answering the

query about the potential of connecting the empirical aspects of Maqāṣid al Sharī'ah with the new technologies such as blockchain.

Therefore, data sources encompassed specialized books related to Maqāṣid al Sharī'ah and blockchain. It included examining the literature and resources that discuss blockchain from different dimensions to find answers to the questions related to the know-how of blockchain, its working design, and its salient characteristics. Further, blockchain technology articles along with the Maqāṣid al Shariah or ḥifẓ al māl literature were reviewed.

Hence, to ensure rigor and relevance of the academic papers, the search was narrowed to the research of knowing the ethical fundamentals that are part of the concept of ḥifẓ al māl that can be mirrored with the key features of blockchain technology design to reach impactful results. An extensive literature review was conducted, focusing on databases such as Scopus, Emerald Insight, ScienceDirect, and other online journals that were screened from different search engines and reference lists using the search terms “Maqāṣid al Sharī'ah” and “ḥifẓ al māl” in conjunction with the blockchain.

3. Literature Review

The bibliometric analysis of literature related to innovation in Islamic finance revealed that the tendency for literature in recent years was to discuss the Islamic fintech, hence, highlighting the potential to develop the blockchain as a tool for implementing social aspects of Islamic finance such as Zakat, sadaqah, or waqf (Aysan & Unal 2021; Unal & Aysan, 2022). In this context, this literature review highlights gaps that needed to be addressed. On top is the requirement to have an approach for integrating the Maqāṣid al Sharī'ah and modern technology as the two means for innovation. While doing so, the research should not neglect the deep meanings and objectives that were discussed in the classical Islamic literature of Maqāṣid al Sharī'ah but not end up with results that have no practical implications. At the same time, while discussing the blockchain technology, the research should not follow the conventional approach that has fallen into discussing the permissibility of cryptocurrencies, which is a repeated approach that ends with neglecting the real essence and advantages of blockchain that can cater to many requirements of innovation in Islamic finance (Dewaya, 2024).

3.1 Maqāṣid al Sharī'ah Overview

Maqāṣid al Sharī'ah consists of two Arabic words. Maqāṣid's literal meaning is objectives, aims, or goals. As a term, it refers to intents and rationales that were understood from Sharī'ah rulings. Whereas Sharī'ah is the way of practicing divine orders (Al Khādimī, 2001, and Ibn Manẓūr, 2003). In this context, the religious experts all agreed that maṣāliḥ (rationales and benefits) could be found in Sharī'ah rulings in this situation (Ibn Taimiyyah, 2004).

According to Ghazālī (1998), Maqāṣid al Sharī'ah are the noticeable wisdom of the Lawgiver for all and most of the circumstances. This encompasses the visible meanings of Sharī'ah rulings and the results based on them. Each ruling of Sharī'ah has some objectives. The objectives lead to achieving the maṣāliḥ (benefits). Maqāṣid al Sharī'ah aimed to gain a benefit and avoid harms. (Ghazālī, 1998, and Al-Mubarak & Osmani, 2010).

In this context, the scholars introduced the fiqhi maxim ‘jalb al maṣlaḥa wa daf‘ al maḍarrah’ (Al Āmidī, 1984). Jalb al maṣāliḥ means achieving the interests; on the other hand, dar‘ al mafāsīd means avoiding the evils and their bad consequences. Maqāṣid can also be understood as the acts that lead to reforms. Any act itself cannot be considered part of Maqāṣid unless it has some useful impact (Dewaya, 2024).

According to Ibn ‘Āshūr (2013), Maqāṣid al Sharī'ah is the balanced approach to fulfilling the rights of Almighty, the creator, and the rights of the human beings. These rights cannot be ignored; otherwise, it will lead to ignoring the universal necessity to preserve objectives of the Sharī'ah (Ibn ‘Āshūr, 2013).

Maqāṣid studies unanimously stipulated that a scholar named imām al Ḥaramayn al Juwaynī and his disciple, the imām al Ghazālī, introduced the three priority categories of Maqāṣid al Sharī'ah. Namely: 1- Ḍarūriyyah (Necessities), 2- Ḥājiyyah (Complementary), and 3- Taḥsīniyyah (Embellishment). In this context, they introduced the ḥifẓ terminology that means preserving the five necessities as the principle requirement of Sharī'ah legislations, namely the Dīn (faith), Nafs (lives), 'Aql (intellect), Nasl (posterity), and Māl (wealth) (Ghazālī, 1998; Shāṭibī, 2004; Abu Zahrah, 1958; Al-Raysuni, 2005; Jasser, 2008; Dusuki, 2009; Akram Laldin & Furqani, 2013, and Fisol et al., 2017).

3.2 *Ḥifẓ al Māl*

Traditionally, the approach of ḥifẓ (preservation) under Maqāṣid al Sharī'ah became the central theme for all Maqāṣid literature. In Arabic, the literal meaning of ḥifẓ is to preserve, safeguard, and protect. The significance of the financial objective is due to the importance of preserving and growing the money. This study adopted the theory introduced by Ibn 'Āshūr (2013), which summarized the characteristics of ḥifẓ al māl into clarity (الوضوح), stability (الثبات), justice (العدل), availability, accessibility, and marketability (الرواج) (Ibn 'Āshūr, 2013).

Sharī'ah created room to accommodate the changes as per the norms and usages of people and industries. The philosophy behind ḥifẓ al māl concept required a universal definition of māl (wealth/money) in order to determine the requirements of ḥifẓ al māl as per the changing circumstances of each time and place. Māl includes customarily known all things capable of being owned (Ibn Manẓūr, 2003). As per the Ḥanafī school, Māl is everything that attracted people and could be saved for the time of need. In addition, māl is something that has materialistic or fiscal value known and recognized by people, with some added conditions that it should be permissible to be used unconditionally and owned (Qaradaghi, 2008). Māl includes the assets, usufruct, and rights (Dewayya, 2024). According to Al 'Askar (2013), māl is an Arabic word, and it includes whatever is suitable to be possessed and good to be owned using gold and silver. Later, it became applicable to any assets that are beneficial for ownership (Al 'Askar, 2013). Nevertheless, the most famous form of Māl is money. The money is instrumental in setting the fair value of other properties. It carries the intrinsic value to buy and sell other items. Money has an important role in economic life (Dewayya, 2024).

In the financial sphere, the concept of ḥifẓ al māl goes beyond its literal meaning to preserve or safeguard. The notion also means to protect the value of the wealth and its growth. It does not mean merely to preserve the wealth by protecting the asset or money (Dewayya, 2024). According to Al-Khadimi (2001), wealth is the backbone for business; hence, the Almighty has forbidden the squandering and the waste of money. Islam urged protecting it from loss and damage. Preserving wealth includes its growth and investment (Al-Khadimi, 2001). Hence, it is important to explore the means that suite the latest best practices and foster a safe, just, trustworthy, and efficient financial ecosystem (Al-Suwaylim, 2009; Soualhi, 2015, and Dewayya, 2024).

Wealth (māl) preservation is one of the five necessities of the Maqāṣid al Sharī'ah. To achieve this, Sharī'ah introduced a full set of legislation for ownership, including protection of rights. It legislated lawful means for the development and acquisition of wealth and called for the circulation of wealth. It also urged protecting it from all damage. Hence, it recognized the factors that lead to loss of its value (Dusuki & Bouheraoua, 2011).

This objective included identifying the unethical financial practices and prohibited immersion in illegal, anti-social, or environmentally harmful activities to comply with Sharī'ah-compliant just, fair, and transparent transactions. (Dusuki, 2009).

3.2.1 Innovation in Islamic Finance for *Ḥifẓ al Māl*

In connection with the Maqāṣid comes the role of innovation. Sharī'ah has urged using wealth for sustainable community development (Dewaya, 2024). It legislated just and fair rules for wealth circulation and opportunities equality (Siddiqi, 2004). Traditionally, the Dirham (Silver coin) and Dīnār (golden coin) were the backbone of money and wealth. The money is valid to buy all other things, in other words, meant by the Lawgiver to be exchanged from hand to hand. The scholars explained that money and currency are means and not commodities per se (Ghazālī, 1993).

In Arabic fiqh terminology, innovation is known as Ijtihad. According to Ibn 'Āshūr (2013), Ijtihād is a collective obligation. It is sinful if scholars stop doing ijtihād (Ibn 'Āshūr, 2013). Ijtihād includes efforts to find Sharī'ah-compliant rulings for new developments with aims to reaching results based on the Maqāṣid al Sharī'ah understanding. Ijtihād entails finding Sharī'ah-compliant solutions for the community problems by understanding the deeper meanings and Sharī'ah objectives. It encompasses reaching the best decision among contradicting factors (Ibn 'Āshūr, 2013).

An example of ijtihād to achieve ḥifẓ al māl can be understood from suftajah practice. Suftajah might be the earlier shape of banking cheque clearance. It included delivery of funds in a different city without physical transfer of funds from one city to another. This helped to reduce the risk of physically transferring the funds by road (Dewaya, 2024).

The scholars have two opinions about suftajah. The first opinion declared it as Ḥarām because they see that it is a qarḍ that will turn to be Ribā due to the benefits affiliated with it. Ibn Taimiyyah (2004) considered that Suftajah was a qarḍ (loan) transaction. Accordingly, party A gave an amount to party B as a qarḍ. Whereby, both agreed that party A will get back the qarḍ amount in another city from party B. This was recorded by party B issuing a suftajah note in favor of party A (Ibn Taimiyyah, 2004).

However, according to the Maqāṣid assessment of benefits and harms, the second opinion was that suftajah was a permissible transaction. This party gave a fatwa of permissibility because the transaction has benefits to avoid the risks of robbery or losing money, or what is known as the risks of way. Suftajah was important practice to achieve the wealth preservation objective, namely ḥifẓ al māl (Ibn Taimiyyah, 2004). The suftajah is a good example of innovation to achieve the ḥifẓ al māl (Dewaya, 2024).

3.3 Blockchain

This section provided fundamental knowledge about the functionalities of the blockchain technology (BT) and its characteristics. The name blockchain came from its style of work that organizes data that is similar to distributed ledger technology into blocks. Powered by its cryptographically and chronologically designed it uses kinds of consensus mechanisms and smart contracts (Anwar, 2019; Benčić and Žarko, 2018). This forms a cryptographically secured chain that can include extra functionalities like time-stamping (Haber & Stornetta, 1991; Bayer et al., 1993).

The cumulative impact of the blockchain is that it provided opportunities for decentralization, immutability, transparency, and cryptographic hashing (Nakamoto, 2008; Beck et al., 2016). Blockchain's known types are public or permissionless in which there is open permission to everyone to join and participate. On the other hand, private and consortium or federated blockchains are categorized as permissioned blockchains because only people with access rights can use them according to the consensus policy (Buterin, 2015; Swanson, 2015; Kravchenko, 2016; Zheng et al., 2017; Casino et al., 2018).

Blockchain technology has the ability to handle more complex applications in a steady and robust manner and automate governance. It provides infrastructure for projects that can create new decentralized autonomous organizations (DAOs) (Swan, 2015b; Jentzsch, 2016; Aste et al., 2017; Puthal et al., 2018).

Decentralization means that there is no aspect of a centralized server of a single organization that controls the global transactions. It enables avoiding central authorities and intermediaries; hence, it is known as decentralized technology with peer-to-peer network trusted operations; this is the reason why some people call it “trustless trust”. Blockchain includes independent nodes to record, synchronize and share transactions in a decentralized network (Kakavand et al., 2017).

The multiple user systems connected to the network (decentralized nodes) take the role of verification and authenticity with a timestamp (Gipp et al., 2015; Lin & Liao, 2017; Zheng et al., 2017; Abraham and Mahlkhi, 2017). This verification process makes blockchain a tamperproof technology (Gipp et al., 2015; Zyskind et al., 2015). The programmed nodes enable all users in the network to be responsible for verification of the transaction to make sure everything is valid prior to execution. No change or tempering can take place due to various types of consensus mechanisms that require all users' consensus mechanisms (Nakamoto, 2008; Hoffmann, 2015; Christidis & Devetsikiotis, 2016; Catalini & Gans, 2020, and Tschorsch & Scheuermann, 2016).

Except the first “genesis”, all subsequent blocks get chronological order assigned, with a unique cryptographic hash that has reference to the previous one in the shape of a chain. The unique hash creates structural data for each block that includes transaction details. (Crosby et al., 2016; Beck et al., 2016). The hash method prevents transactions from altering of data and makes the blockchain a read-only file with the possibility of appending new blocks based on Proof-of-Work (PoW) or Proof-of-Stake (PoS) (King and Nadal, 2012; BitFury Group, 2015; Swan, 2015a; Yli-Huuma et al., 2016; Tschorsch and Scheuermann, 2016; Zheng et al., 2017). Cryptohashing can work as the channel for offering and recording consent for asset-based transactions.

Blockchain was greatly affiliated with the crypto currencies, such currencies currently exceeded 2,000 in number, and the market value of some of these currencies witnessed hypes in their values due to multiple factors, including media coverage. The most famous of them is Bitcoin. Bitcoin was created by “Satoshi Nakamoto” as a novel digital currency based on the peer-to-peer application of the blockchain (Nakamoto, 2008; Chohan, 2021).

Nevertheless, blockchain should be looked at as an infrastructural environment for a variety of applications and not only to manage currencies. This is proved by the great attention paid by the researchers to the attempted use of blockchain in different fields (Casino et al., 2018). Blockchain technology popularity is increasingly related to the expansion of its applications in the financial area. Existing applications based on blockchain include crowdfunding in industry and the public sector (Conley, 2017; Casino et al., 2018; Arnold et al., 2019); supply chain management through tracking of goods (Schönhals et al., 2018); authentication (Ihle & Sanchez, 2019); vote casting and control (Osgood, 2016); blockchain enables the exchange of value units without the involvement of intermediaries (Nakamoto, 2008; Sasson et al., 2014).

The study of Blockchain Technology from the Maqāṣid al Sharī'ah Perspective by Aljamos et al. (2022) was a good attempt to combine the Maqāṣid and blockchain in a single study. However, the fundamental difference of approach is that they tried to prove that blockchain technology per se has some qualities that made it fit in some aspects of Maqāṣid al Shariah, which is not a major challenge in itself because no one disputed that technology can be developed for both bad or good. On the contrary, this study discussed the blockchain as a means (Waseela) that should be developed to achieve the ḥifẓ al māl in contemporary Islamic finance. Hence, this study examined different features of blockchain to assess their compliance with the goals and impacts desired by ḥifẓ al māl and Maqāṣid al Sharī'ah ethical theories. Subsequently, this resulted in a matrix design that has the potential to be adopted as an ethical Maqāṣid al Sharī'ah ecosystem.

The three-tier literature review of Maqāṣid al Sharī'ah, ḥifẓ al māl, and the blockchain in this study formed a good base for discussing the blender of innovation with the ethical requirements to fulfil the growing demands among the Muslim audience who are increasingly involved in technology and, at the same time, became more conscious about the moral aspects of Islamic finance. They demand to implement the Maqāṣid al Sharī'ah in the rapidly growing Islamic finance around the world by identifying

contemporary scopes of achieving the maṣlaḥah and determining the mafsadah in order to avoid it (Shaharuddin, 2010).

4. Discussion and findings

4.1 *Maqāṣid al Sharī'ah & Ḥifẓ al Māl cum Blockchain integrated matrix*

This research is designed differently to explore the blockchain technology characteristics within the framework of the Maqāṣid al Sharī'ah in connection to achieving the objective of ḥifẓ al māl. Comparing the goals and needs of ḥifẓ al māl with the blockchain characteristics is the method to understand the impact of developing a Maqāṣid based ecosystem. Hence, it highlighted the potential of blockchain technology as the core development that leads to utilizing its features to protect and preserve the assets, rights, and obligations related to wealth. In other words, encourage the ethical innovation and development of technology and mitigate its possible harms. This is an original approach that shall guide further research and development efforts.

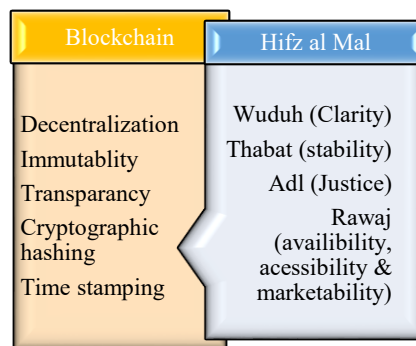


Figure 1: Blockchain correlation with *Ḥifẓ al Māl*. Source: Author's own.

The (Figure 1) mirrored the Blockchain with ḥifẓ al māl. It summarized the technical characteristics of Blockchain versus the ḥifẓ al māl theory (Ibn Ashur, 2013).

Integrated Maqāṣid al Sharī'ah, Ḥifẓ al Māl and blockchain technology is a sustainable and ethical model that can be considered as the core standards of ethical development of blockchain cum Maqāṣid al Sharī'ah ecosystem for the innovation in Islamic finance. Maqāṣid al Sharī'ah matrix is a futuristic approach to produce modern integrated and most balanced scale and guideline for the sustainable ethical finance.

Table 1: Integrated *Maqāṣid al Sharī'ah*, *Hifz al Māl* and blockchain technology matrix. Source: Author's own

1	2	3	4	5
Blockchain cum <i>hifz al māl</i>	Wuduh	Rawaj	Thabat	‘Adl
Decentralize	Block harmful & Non-ethical activities	Promote the benefits (<i>maṣlahah</i>)	<i>Hifz al Dīn</i>	<i>Ḍarūriyyah</i>
Immutability	Block Maisir /Gambling	Maṣlahah ‘Ammah	<i>Hifz al Nafs</i>	<i>Hājiyyah</i>
Transparency	Minimize Gharar	Maṣlahah Khāṣṣah	<i>Hifz al ‘Aql</i>	<i>Taḥsiniyyah</i>
Cryptographic & Time stamping	Riba control	Macro impact	<i>Hifz al Nasl</i>	Social welfare
Hashing	Innah free	Micro impact	<i>Hifz al Māl</i>	Sustainability

Table 1 visualized the components of the matrix in a single glance illustration and summarized the concept model that is introduced in this study. It included all the technical features of the blockchain technology that provided the backbone for developing a system that will initiate, control and govern the transactions of Islamic finance. Governance included blocking the bad elements known as *Mafṣadah* that shall be blocked using the blockchain cum *hifz al māl* integrated matrix. At the same time encourage the projects that will promote the ethical goals and objectives known as *maṣlahah*. In this *maṣlahah Ammah* has macro impact, hence, get priority over the *maṣlahah khassah* or the micro level benefits and interests.

The *Maqāṣid* based *Ijtihād* (innovation) to assess the empirical impacts of applying the new technologies such as blockchain leads to collaborate and contribute towards sustainable ecosystem for the Islamic finance innovation, structuring and product development. Accordingly, new technology should be dedicated for safeguarding the five *Ḍarūriyyat* or the fundamental needs of people namely, their *Dīn* (faith), their *Nafs* (lives), their *‘Aql* (intellect), their *Nasl* (posterity), and their *Māl* (wealth) (Ibn ‘Āshūr, 2013). The impact is measured in terms of the sustainable goals that are important to comply with priority categories namely 1- *Ḍarūriyyah* (Necessities), 2- *Hājiyyah* (Complementary) and 3- *Taḥsiniyyah* (Embellishment). (Ghazālī, 1998; Shāṭibī, 2004; Abu Zahrah, 1958; -Raysuni, 2005; Jasser, 2008; Dusuki, 2009; Akram Laldin & Furqani, 2013; Fisol et al., 2017).

The ethical and ultimate elements of *hifz al māl* can be expanded according to the specific requirements of Islamic banks, funds or Sukuk products. For example, applying the technology to make sure that all the transactions are usury free, and that the money is used to create real assets, and that it complies with other elements such as legal and ethical requirements of the *hifz al māl*.

The *hifz al māl* objective in the *Sharī'ah* requires to establish a solid community and form the components of a stable social system. According to Ibn ‘Āshūr (2013), the important *Maqāṣid* of *hifz al māl* are to save the wealth from falling into the hands of others without having a proper exchange consent and benefits (Ibn ‘Āshūr, 2013; El-Mesawi & Ahmed, 2016), this can be set as the macro level objectives. The money of individuals (micro-level) cannot be preserved unless it has been protected and preserved on the macro level.

The blockchain technology originally meant to decentralize the transactions, in other way, it has the infrastructure to get the transactions free from the monopoly of the international central banking control.

This is an international demand due to hindering factors for global transactions such as cost of transactions and to avoid the delays in transactions due to the global money exchange practices. In terms of *Maqāṣid al Sharī'ah* it is a fundamental right of every country and individual to do its transactions and business in a free and independent way, henceforth, the impacts should be distinctive through the capability to develop real economic growth, improve livelihood and reduce poverty (Rosly, 2005).

The decentralized authentication system and the controlled access to the data by all the parties represents the quality of blockchain technology to perform the transactions with minimum doubts of any party being ignorant of the transaction details. Everyone can openly participate, collaborate, and contribute to build their own ecosystem for transactions. This transparent and handy process is direct impact of the philosophy of *ḥifẓ al mal* to achieve the *Wuḍūḥ*, *Rawāj* and *ʿAdl*, and the *Thabāt*.

However, decentralization does not mean to avoid any regulatory or fair control that contributes to a general goal of having secure and authentic transactions that practically contributes to *ḥifẓ al māl*. Hence, it is necessary to distinguish between the central system that aimed to regulate, protect, watch and govern the financial transactions and the one which is designed to create monopoly and unethical control over others money.

On the global level, Blockchain technology forms an opportunity to explore solutions for challenges existed due to the international system that is interest-based banking system. The developing countries' past and present financial economic challenges and difficulties are good example for the consequences of the centralized global controlled finance and FX challenges through US. The dollar system was placed to control the global transaction, placed monopoly and used the money for political control through interest based financial system.

Rawāj is one of the important factors that can be well steered through Blockchain. Transparency is a prerequisite for achieving the *Rawāj*. This can be done through introducing the blockchain applications that exemplify the *Maqāṣid al Sharī'ah*. Blockchain structure has the capability to maintain unchangeable records of ownership of the asset, eventually, it shares such information between all the users of the blockchain. Any unauthorized deal will not be validated by the rest of users because the ownership data is shared and saved through a hashed block. The results of these activities, are freely available to all users of the blockchain to eliminate any malicious behavior. The immutability feature of the blockchain technology correlates with the fundamental of stability (*thabāt*) in Ibn Āshūr's theory. The stability according to Ibn Āshūr (2013) means that the rights of ownership should be protected and be clear to all parties (Ibn Āshūr, 2013, El-Mesawi & Ahmed, 2016).

ʿAdl denotes the ever renewable demand of fair and just transactions. It is equal to transparent justice and applying that through blockchain complements the self-restrain religious desire to achieve just and fair dealings. Blockchain technology forms a check and balance system that is based on transparent recording of free consent by all parties of the transaction. *Wuḍūḥ*, *Rawāj* and *ʿAdl* is observed in the sense that blockchain can assure that all users confidence and consent was taken over every step done due to immutability, append-only function, and a systemic display of records of all transactions. The protection and preservation are a universal demand for all the transactions without any discrimination. At the same time the compliance with *Sharī'ah* principles is a fundamental condition of Islamic finance.

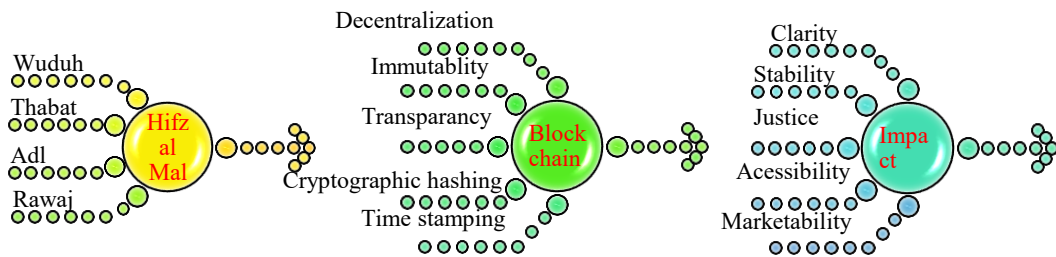


Figure 2: The *ḥifẓ al māl* cum blockchain impact design. Source: Author's own

Figure 2 illustrated that the Blockchain characteristics namely decentralization, immutability, transparency, cryptographic hashing (cryptographically secured chain) and time-stamping powered by its cryptographically and chronologically design (Haber & Stornetta, 1991; Bayer et al., 1993; Anwar, 2019; Benčić and Žarko, 2018) actually qualified to facilitate the realization of corresponding *ḥifẓ al māl* parameters as introduced by Ibn ‘Āshūr (2013), namely, the wuḍūḥ, thabāt, ‘adl, and rawāj (Ibn ‘Āshūr, 2013). The result of combination of *ḥifẓ al māl* and Blockchain was a pragmatic design with impacts to name few such as clarity, stability, accessibility and marketability among many other desirable strategic impacts (Dewayana, 2024).

To showcase a practical example, Murabaha transactions using Blockchain is very relevant. Murabaha is very popular structure in Islamic finance. Blockchain can work as trusted platform to develop a data sharing, execution and distribution platform for all the contracting parties of a Murabaha transaction. Blockchain can be useful for control and record of transfer of physical or digital assets (Casino et al., 2018). The *ḥifẓ al māl* cum Blockchain shall allow banks or individuals to sell their assets by issuing offer and acceptance on a marketplace to sell the property and transfer the ownerships of land or real-estate or any other asset (Draskovic & Saleh, 2017).

Practical application of *ḥifẓ al māl* cum Blockchain in this sense will carry secured record and fulfil customers legal and legitimate needs. Hence, avoiding many risks and ambiguities related to the ownership of the asset with a controlled decentralized system that carries all the records of the ownership of the asset. When blockchain is used in this scope, it means that no one can claim the right to sell, purchase, dismiss or use an asset that is not owned by him. There is pressing need for innovation of such platform in Islamic finance to have real purchase of cars, goods, homes, commodities among different parties to fulfill the objective of market making according to the principles of *ḥifẓ al māl* and objectives of Maqāṣid al Sharī‘ah.

Similarly, the blockchain technology used to create smart contracts offers great unique combination of characteristics, on one hand to achieve decentralization, immutability, and transparency for control and governance purpose of the Murabaha assets and on the other hand, increases the efficiency and easiness of the execution of Murabaha documentation. It is clear that *ḥifẓ al māl* cum blockchain dmatrix facilitated legitimate transfer of money and goods. Eventually exchange of wealth between hands legitimately, shall lead to justified circulation of wealth, creating equal opportunities, and creating welfare society under the umbrella of Maqāṣid al Sharī‘ah ecosystem.

5. Summary & Conclusion

Blockchain technology has attracted the attention of developers in different areas; nevertheless, in Islamic finance it is still in an early development phase. This study explored the innovation in Islamic finance with a unique focus on creating ethical business models by implementing the concept of *ḥifẓ al māl* values, namely *wuḍūḥ* (clarity), *ṭhabāt* (stability), *‘adl* (justice), and *rawāj* (availability, accessibility, and marketability), in combination with blockchain technology salient features, namely decentralization, immutability, transparency, and cryptographic hashing, to form a sustainable matrix.

It is recommended to use the combined values of *Maqāṣid al Sharī’ah*, *ḥifẓ al māl*, and blockchain technology for the development of Fintech and smart contracts in order to achieve the innovation in Islamic finance in compliance with the *Maqāṣid al Sharī’ah*. Blockchain provided the opportunity to have secured and ethical innovation of Islamic finance to compete in the era of Fintech. Introducing *ḥifẓ al māl* cum blockchain technology-based matrix is a milestone to help research and development efforts. The matrix of *ḥifẓ al māl* cum blockchain is an exceptional ethical and technical architecture. It has the flexibility to get adapted for a variety of purposes and practical solutions for central banks, interbank, sukuk tokenization, and capital markets of Islamic finance and Islamic social finance to create robot systems that can filter the non-Sharī’ah-compliant transactions, at the same time protecting the capital by detecting any potential threat to the preservation of wealth and assets. The integration of blockchain with *ḥifẓ al māl* creates collective responsibility for determining the feasibility and increasing the investment and growth opportunities of the Islamic finance transactions. The ability to increase the trust, collaboration, stability, and accessibility in Islamic finance is a few of the many impacts of *ḥifẓ al māl* cum Blockchain matrix.

The study recommends the researchers to carry out similar studies of Islamic finance that combine *Maqāṣid al Sharī’ah* and *ḥifẓ al māl* theories and maxims with the new technologies such as Blockchain. The aim of the research studies should be to develop practical solutions. The products development and innovation in Islamic finance should take advantage of such contemporary studies.

Conflict of interest statement

The author agree that this research was conducted in the absence of any self-benefits, commercial or financial conflicts and declare the absence of conflicting interests with the funders.

Acknowledgements

The author would like to acknowledge the significant role of Universiti Teknologi Mara (UiTM), in the field of research and development through their esteemed Journal of Emerging Economies & Islamic Research.

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Authors' contributions

Muhammad Abdullah carried out the research, wrote and revised the article. He was responsible for formatting and editing the article and completed the research progress. He took all the responsibility for review, revision and article submission.



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