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REVIEW

Crowdfunding, Blockchain, and Smart Contracts in Islamic Finance: Evaluating Compliance with Maqasid al-Shariah

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Abstract

Purpose: The rapid advancement of financial technology (FinTech) offers significant opportunities to strengthen Shariah-compliant financial systems through innovations such as crowdfunding, blockchain, and smart contracts. These technologies can enhance transparency, governance, and financial inclusion in line with the ethical and socio-economic objectives of Maqasid al-Shariah. This study systematically reviews how Islamic FinTech innovations are designed, implemented, and governed, and how they contribute to key maqasid objectives, particularly justice, transparency, and inclusive finance.

Methodology: A systematic literature review was conducted following PRISMA guidelines. Thirty-six peer-reviewed conceptual, empirical, and case-based studies were analyzed to examine the structures, applications, and governance mechanisms of Islamic FinTech solutions.

Results: The findings show that Islamic crowdfunding effectively mobilizes capital for SMEs and social-impact initiatives when based on equity and profit-sharing contracts, although governance and Shariah oversight challenges remain. Blockchain technology demonstrates strong potential to improve auditability, reduce information asymmetry, and support Shariah-compliant validation across zakat, waqf, and sukuk. Smart contracts offer promise in automating permissible transactions and strengthening compliance, but require careful jurisprudential design to maintain contractual intent and flexibility. Collectively, these technologies advance maqasid objectives such as wealth protection, justice, equitable distribution, and financial inclusion, subject to regulatory harmonization and robust Shariah governance.

Novelty and contribution: The study provides a consolidated maqasid-oriented synthesis of Islamic FinTech research, highlighting gaps in empirical validation and maqasid-based evaluation frameworks.

Practical and social implications: The findings inform regulators, Islamic financial institutions, and FinTech developers seeking to design ethical, inclusive, and transparent Shariah-compliant financial systems.

Keywords: Crowdfunding, Blockchain technology, Smart Contracts, Islamic Finance, Maqasid al-Shariah

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1 Introduction

The rapid expansion of financial technology (FinTech) has transformed the architecture of modern financial systems, redefining how value is created, stored, and exchanged across global markets. Innovations such as crowdfunding, blockchain, distributed-ledger systems, and smart contracts have disrupted conventional financial intermediation by enabling decentralized, transparent, and automated forms of economic interaction (Zetzsche, Buckley, Arner & Barberis, 2020). As these technologies mature, they offer unique opportunities for Islamic finance, a system built on principles of risk-sharing, ethical conduct, asset-backing, and the prohibition of riba, gharar, and maysir, to address long-standing structural challenges related to trust, transparency, contract enforcement, and financial inclusion (Mohamed & Ali, 2022). Consequently, scholars and practitioners increasingly view FinTech as a catalyst for reshaping Shariah-compliant financial ecosystems and extending their socio-economic impact.

Crowdfunding has emerged as one of the most influential FinTech applications for widening access to finance, especially for microenterprises, small and medium-sized firms, start-ups, and social-impact projects. In the Islamic finance context, crowdfunding models, particularly equity-based, donation-based, and profit-sharing structures, have been developed to align with principles of risk-sharing and interest prohibition. Studies show that Islamic crowdfunding can mobilize capital for underserved communities, promote ethical investment behaviors, and support asset-backed ventures when structured around Shariah-compliant contracts such as musharakah, mudarabah, and murabahah (Hassan, Ladhari & Foutz, 2021). However, concerns persist regarding platform governance, Shariah screening processes, transparency in fund allocation, and the extent to which existing platforms truly uphold Islamic legal and ethical norms (Purwatiningsih, 2024). These challenges highlight the need for systematic inquiry into how crowdfunding structures operationalize risk-sharing while avoiding riba-based returns.

Parallel to the rise of crowdfunding, blockchain technology has attracted substantial interest for its ability to enhance transparency, immutability, and auditability in financial transactions. Islamic finance, which emphasizes trustworthiness (amana), transparency (wuduh), and fairness (adl), stands to benefit significantly from blockchain's capacity to provide verifiable transaction histories, enforce asset-backing, and reduce information asymmetry. Research demonstrates its potential for transforming Islamic instruments such as Sukuk, waqf management, zakat distribution, and Islamic microfinance through secure, traceable, and tamper-proof records (Kunhibava, 2024). For example, case studies of blockchain-based Sukuk issuances suggest reductions in operational costs, increased investor confidence, and improved Shariah governance through automated compliance monitoring (Pekerti et al., 2024). Nevertheless, blockchain implementation raises questions related to regulatory harmonization, Shariah interpretation, privacy norms, and the legitimacy of decentralized governance models within Islamic jurisprudential frameworks.

Smart contracts, self-executing digital contracts embedded with predefined rules, extend blockchain's capabilities by enabling automated, transparent enforcement of financial agreements. In Islamic finance, smart contracts have been proposed as mechanisms for enforcing payment conditions, eliminating hidden terms, strengthening accountability, and reducing opportunities for non-compliant behavior. Early studies illustrate their potential to automate mudarabah profit distribution, ensure real-time Shariah validation in murabahah transactions, and support programmable Sukuk structures (Rejeb, Rejeb & Keogh, 2021). Yet scholars caution that automation must reflect the nuances of Islamic jurisprudence, which values intention (niyyah), moral agency, flexibility in contract renegotiation, and contextual interpretation, elements that may be difficult to encode into rigid algorithmic scripts (Elasrag, 2019; Raimi et al., 2024). This tension underscores the need to evaluate how effectively smart contracts translate Shariah rules into executable code without reducing the richness of Islamic legal reasoning.

Central to evaluating these FinTech innovations is the framework of Maqasid al-Shariah, the higher objectives of Islamic law. While classical jurists articulated five core maqasid, protection of religion, life, intellect, lineage, and wealth, contemporary scholars emphasize broader principles such as justice, fairness, social welfare, transparency, and financial inclusion (Auda, 2008). The relevance of maqasid in financial innovation lies in determining whether technological systems advance human well-being, preserve dignity, promote equitable access to resources, and prevent exploitation or harm. Recent studies on Islamic digital finance argue that technology must not only improve efficiency but also strengthen ethical behavior, reduce injustice, and enhance socio-economic prosperity (Abdur-Rauf & Ali, 2024; Nur, Adam & Muttaqien, 2020). Accordingly, examining crowdfunding, blockchain, and smart contracts through a maqasid lens enables a holistic assessment of their alignment with Shariah's ethical objectives.

Despite growing scholarly interest, the literature remains fragmented across isolated research streams that examine crowdfunding compliance, blockchain applications, or smart contract design separately. Few studies provide an integrated assessment of how these technologies collectively reshape Islamic finance or to what extent they fulfill maqasid-driven objectives. Moreover, existing empirical evidence varies widely in methodological rigor, conceptual framing, and jurisdictional focus, making it difficult to draw consolidated conclusions about Shariah compliance and ethical impact. This fragmentation reveals a significant knowledge gap: the Islamic finance industry lacks a systematic synthesis that brings together technological, jurisprudential, and ethical dimensions to evaluate FinTech's transformative potential.

Given these gaps, a systematic literature review is essential to consolidate evidence on how crowdfunding, blockchain, and smart contracts are conceptualized, structured, implemented, and governed within Islamic finance, and how they contribute to the realization of Maqasid al-Shariah. This review integrates insights from finance, information systems, Islamic jurisprudence, and digital governance to develop a comprehensive understanding of the opportunities and limitations of emerging Islamic FinTech. Accordingly, this review is guided by the following research questions:

RQ1: How have crowdfunding platforms been structured to comply with Islamic principles of risk-sharing and the prohibition of riba?

RQ2: In what ways can blockchain technology enhance transparency, trust, and accountability in Islamic financial systems?

RQ3: To what extent can smart contracts effectively automate and enforce Shariah-compliant financial agreements?

RQ4: How do these FinTech innovations collectively contribute to the realization of Maqasid al-Shariah, particularly in promoting justice, fairness, and financial inclusion?

By addressing these questions, this review offers theoretical, empirical, and practical contributions. It clarifies how FinTech tools are operationalized within Shariah constraints, synthesizes evidence on compliance mechanisms and governance structures, and evaluates the degree to which these innovations advance the ethical, social, and distributive justice objectives of Islamic finance. Ultimately, this review provides a foundation for building technologically advanced yet ethically grounded Islamic financial systems capable of supporting inclusive, transparent, and socially responsible economic development.

2 Methodoloy

2.1 Review Approach and Rationale

This study adopted a Systematic Literature Review (SLR) to synthesize scholarly evidence on crowdfunding, blockchain, and smart contracts within the context of Islamic finance, with a specific focus on how these innovations align with the objectives of Maqasid al-Shariah. The SLR method was selected because it offers a structured, transparent, and replicable process for evaluating and integrating findings across multidisciplinary fields such as Shariah-compliant financial systems, digital innovation, Islamic jurisprudence, ethical finance, and developmental economics. The review adhered to the PRISMA 2020 guidelines, which provide a standardized and rigorous framework for identifying, screening, and synthesizing relevant research (Abdur-Rauf et al., 2025; Ahmed et al., 2025; Page et al., 2021). Applying this framework ensured that the review systematically examined how modern Fintech tools promote principles of justice, fairness, transparency, prohibition of riba, risk-sharing, and financial inclusion, core components of Islamic finance and Maqasid al-Shariah (Abdur-Rauf & Raimi, 2024; Akinson et al., 2025; Bamiro et al., 2023; Page et al., 2021).

2.2 Search Procedure and Data Sources

The search strategy was designed to be comprehensive, replicable, and sensitive to the interdisciplinary nature of the topic. Scopus served as the primary database due to its extensive coverage of peer-reviewed publications across finance, economics, technology, ethics, and Islamic studies. Google Scholar was used as a supplementary source to capture emerging and cross-disciplinary research, particularly within rapidly developing areas such as blockchain applications and smart contract automation. The search covered publications between 2015 and 2025, reflecting the period during which Islamic crowdfunding platforms expanded, blockchain technology gained credibility within

financial ecosystems, and smart contract applications began to be discussed within Shariah-compliant finance. The search terms combined controlled vocabulary and free-text keywords, utilizing Boolean operators, truncation, and phrase searching to ensure that variations of key concepts were captured. Search expressions included terminology relating to Islamic crowdfunding and risk-sharing, blockchain-enabled trust and transparency, Shariah-compliant automation through smart contracts, and Fintech-driven contributions to Maqasid al-Shariah. All retrieved records were exported into Microsoft Excel to support organization, preliminary cleaning, and deduplication. Additional relevant studies were identified through reference chaining, where both backward citations (reference lists) and forward citations (articles citing foundational works) were reviewed.

2.3 Eligibility Standards

Inclusion and exclusion criteria were established prior to screening to ensure consistency, transparency, and objectivity throughout the review. Studies were included if they were peer-reviewed, published in English, and situated within the defined period of 2015 to 2025. Eligible studies needed to address Islamic crowdfunding, blockchain applications, smart contracts, Shariah compliance, or the broader implications of Fintech for Maqasid al-Shariah. Studies were required to contribute meaningfully to at least one of the guiding research questions. Conceptual analyses, theoretical developments, empirical findings, and methodological innovations were all permitted as long as they offered insight into Shariah-compliant use of Fintech. Studies were excluded if they lacked peer review, if they focused solely on technical blockchain engineering without Islamic finance relevance, if they were outside the specified time frame, or if they did not contribute directly to the core themes of the review. These criteria ensured that the included studies provided high-quality, thematically relevant, and methodologically sound contributions to the analysis.

Table 1 Eligibility criteria

	Inclusion	**Exclusion**
Year	2015 – 2025	Below 2015
Language	English	Non-English
Paper type	Peer reviewed scholarly articles	Conference, books, book chapters, news
Type of technology	Crowdfunding, Blockchain, and Smart Contracts	General digital technology
Type of study	Empirical study	Reviews and non-empirical.

2.4 Screening and Selection Workflow

The screening process followed the four stages outlined in the PRISMA 2020 framework as seen in Figure 1. The initial database search produced a total of 712 records. After merging search results and removing 96 duplicate entries, 616 studies remained for the first level of review. Titles and abstracts were examined to assess their relevance to the themes of Islamic finance, crowdfunding, blockchain technology, smart contracts, and Shariah compliance. A total of 481 records were excluded at this stage because they lacked Islamic finance relevance, did not address Fintech applications, or were not aligned with the principles of Maqasid al-Shariah. The remaining 135 studies underwent a full-text screening to determine their methodological quality, conceptual alignment, and relevance to the research questions. Following detailed examination, 99 studies were excluded due to insufficient Shariah engagement, lack of Fintech applicability, or limited relevance to the research focus. A total of 36 studies met all eligibility conditions and were included in the final synthesis. This systematic procedure ensured that the final evidence base was robust, credible, and reflective of the intersection between Islamic finance and modern Fintech innovation.

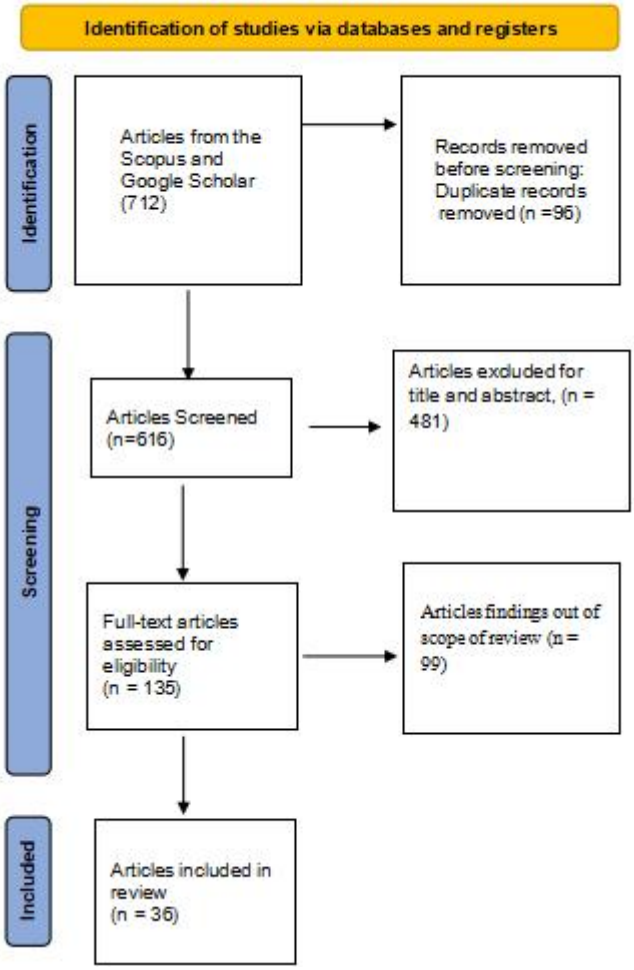

Figure 1 PRISMA flow diagram

3 Results

3.1 Data Extraction

As seen in table 2, data extraction was carried out for all thirty-six studies that satisfied the inclusion criteria of this review. To ensure consistency, accuracy, and a systematic comparison across all selected publications, a comprehensive data extraction template was developed. This template was structured around the core analytical dimensions of the study and included the following fields: Author and Year, Country, Technology Focus, Islamic Finance Model, Shariah Compliance Focus, Maqasid al-Shariah Aspect Addressed, Methodology, and Journal of Publication. These categories were selected because they directly correspond to the central themes of the review and the four research questions guiding the study.

For each of the thirty-six included studies, bibliographic information and contextual characteristics were meticulously documented. Recording details such as the country of study and the specific technological focus made it possible to trace geographical patterns in the adoption of crowdfunding, blockchain, and smart contracts within Islamic finance. Capturing data on the Islamic finance models explored in each study, such as mudarabah, musharakah, waqf-based crowdfunding, sukuk tokenization, or Shariah governance structures, allowed for a clearer understanding of how Fintech is being integrated into various Shariah-compliant frameworks. The extraction of information related to Shariah compliance considerations and Maqasid al-Shariah dimensions provided insight into the ethical and jurisprudential foundations that informed each study's arguments or empirical findings.

In addition, methodological details were documented to highlight the diversity of empirical and conceptual approaches within the literature. Identifying the journals in which the studies were published further contributed to

an understanding of the scholarly domains, such as Islamic economics, digital finance, law, and development studies, in which discussions on Islamic Fintech are most prominent. Collectively, this organised and comprehensive extraction process ensured that the evidence base was coherent, comparable, and analytically robust. It also provided a solid foundation for the thematic synthesis of findings, allowing the review to produce meaningful and credible insights aligned with the overall objectives of the study.

Table 2 Data Extraction Table

S/N	Author & Year	Country	Technology Focus	Islamic Finance Model	Shariah Compliance Focus	Maqasid al-Shariah Aspect Addressed	Methodology	Journal
1	Ningrat and Nurzaman (2019)	Indonesia	FinTech-enabled agricultural value chain platform	Community-based Sharia-compliant financing	Community-based Sharia-compliant financing	Community-based Sharia-compliant financing	Qualitative	Journal of Islamic Monetary Economics and Finance
2	Ashari and Rahman (2025)	Malaysia	Crowdfunding platforms	Islamic crowdfunding	Risk-sharing, riba-free financing	Financial inclusion, fairness	Quantitative	International Journal of Accounting and Economics Studies
3	Thaker (2025)	Malaysia	Crowdfunding platforms	Donation- and reward-based Islamic crowdfunding	Risk-sharing, riba-free financing	Financial inclusion and fairness	Quantitative	Journal of Fatwa Management and Research
4	Wahyudi et al. (2025)	Indonesia	Digital platforms for crowdfunding and e-wakaf	Islamic crowdfunding & e-wakaf	Risk-sharing, riba avoidance, waqf transparency	Justice, fairness, financial inclusion	Quantitative	International Journal of Economics and Financial Issues
5	Elmi et al. (2025)	Somalia	Crowdfunding platforms	Islamic crowdfunding	Risk-sharing, riba-free financing	Justice, fairness, financial inclusion	Quantitative	Journal of the International Council for Small Business
6	Mahfudz et al. (2025)	Indonesia	Crowdfunding	Equity-based / security-based Islamic crowdfunding	Focus on governance, risk-sharing, compliance, and avoidance of riba	Hifz al-Mal; justice; financial inclusion	Mixed-Method	Review of Financial Economics
7	Muhamed et al. (2025)	Malaysia	Crowdfunding	Donation-based crowdfunding	Shariah governance, contractual compliance, financial management	Hifz al-Mal; Adl (justice); financial inclusion	Qualitative	Qualitative Research in Financial Markets
8	Muneem et al. (2025)	Malaysia	Islamic Crowdfunding	Equity-based and peer-to-peer crowdfunding	Shariah compliance	Hifz al-Mal; justice; financial inclusion	Qualitative	International Journal of Business and Systems Research
9	Ishak et al. (2024)	Malaysia	Islamic Crowdfunding	SME-focused Islamic crowdfunding	Shariah compliance	financial inclusion	Qualitative	Malaysian Journal of Syariah and Law
10	Sudarwanto et al. (2024)	Malaysia, UK, Indonesia	Islamic Crowdfunding	Equity-based and social finance crowdfunding	Shariah compliance regulation	Hifz al-Mal; justice; financial inclusion	Qualitative	Journal of Financial Crime
11	Al-Daihani	Malaysia	Crowdfundi	Muzāraʿah	Shariah compliance	Poverty	Qualitative	ISRA international

	et al. (2024)		ng and Waqf	Contracts	through risk-sharing	alleviation, ethical finance, inclusivity		journal of islamic finance
12	Ishak et al. (2024)	Malaysia	Islamic Crowdfunding	Islamic crowdfunding models for micro-entrepreneurs	Appropriate Shariah contract selection; avoidance of riba and gharar; risk management	Financial inclusion, empowerment, social cooperation, poverty alleviation	Qualitative	Qualitative Research in Financial Markets
13	Susanti et al. (2024)	Indonesia	Shariah Crowdfunding	Profit-sharing investment crowdfunding	Prohibition of riba, speculation, unlawful activities; Shariah-compliant contracts	Hifz al-mal, public welfare, equitable participation in development	Qualitative	PETITA
14	Aysan et al. (2024)	Saudi Arabia	Real Estate Crowdfunding (RECF); Digital Crowdfunding Platform	Islamic Crowdfunding; Profit-sharing investment pools	Shariah-compliant RECF structure; compliance disclosures; prohibition of riba via equity-based models	Wealth protection (hifz al-mal); financial inclusion; equitable wealth distribution	Qualitative	Journal of Science and Technology Policy Management
15	Abdeldayem and Aldulaimi (2023)	Middle East	Islamic Crowdfunding	SME-focused ICF model (reward, donation, loan, equity-based)	Shariah-compliant project ideas, funding goals, risk-return clarity, funding commitments	Justice, financial inclusion, ethical financing, SME development	Qualitative	International Journal of Organizational Analysis
16	Ramli et al. (2023)	Malaysia	Islamic Crowdfunding	Murabahah (cost-plus sale)	Avoidance of riba through asset-backed sale; investor & entrepreneur screening; SCM regulatory compliance; transparency measures	Financial inclusion (SMEs), fairness through transparency, justice in financing access	Qualitative	Asian Journal of Accounting Research
17	Aderemi and Ishak (2023)	Malaysia	Islamic Crowdfunding with potential Blockchain Integration	Qard Hasan (interest-free loan)	Prohibition of riba; ethical fund mobilization; risk management using FinTech (e.g., blockchain for due diligence & monitoring)	Poverty alleviation, financial inclusion, reduction of inequality, promotion of social cooperation and fairness	Qualitative	Qualitative Research in Financial Markets
18	Ramli et al. (2023)	Malaysia	Islamic Equity Crowdfunding	Equity-based crowdfunding under Shariah governance	Shariah governance framework; ensuring activities comply with Shariah rulings; maintaining trust and transparency	Wealth distribution, socio-justice, transparency, fairness	Qualitative	Journal of Governance and Regulation
19	Nasir et al. (2023)	Malaysia	Islamic Crowdfunding	Mudharabah, Infaq, Qard Hasan	Use of appropriate Shariah-compliant instruments depending on entrepreneur/project type	Financial inclusion, poverty alleviation, social justice, empowerment of vulnerable	Qualitative	Corporate and Business Strategy Review

						groups		
20	Ishak et al. (2022)	Malaysia	Islamic Crowdfunding	Mudharabah	Risk-sharing, fraud prevention, monitoring, Shariah-based applicant requirements	Inclusion of small publishers, knowledge preservation, support for writers, social welfare	Qualitative	Journal of Islamic Marketing
21	Sahri (2021)	Malaysia	Fintech in Islamic Crowdfunding (NGO platforms)	Donation-based, reward-based, social lending structures	Transparency, compliance for NGO operations	Financial inclusion, social justice, NGO support, equitable distribution of funds	Quantitative	Journal of Fatwa Management and Research
22	Ahmad et al. (2024)	Malaysia	Smart Contracts on Blockchain	Islamic Contract Theory	Autonomy of contracting parties; Contract manipulation; Conformity with Shariah contract principles	Not explicitly discussed	Qualitative	Samarah: Jurnal Hukum Keluarga Dan Hukum Islam
23	Fauzan (2025)	Indonesia	Smart Contracts, Blockchain for P2P Lending	Murabahah, Mudharabah, Musyarakah	Reduction of riba, gharar, and contract non-compliance; automation of Shariah rules	Accountability, transparency, trust, and integrity aligned with Maqasid al-Shariah	Qualitative	Journal of Society and Scientific Studies
24	Syahmi Zulkepli et al. (2025)	Malaysia	Blockchain-based Smart Contracts	Tawarruq in Islamic Banks	Shariah non-compliance risk; transparency; operational integrity	Not stated	Qualitative	Islāmiyyāt: International Journal of Islamic Studies
25	Antova and Tayachi (2019)	Saudi Arabia	Blockchain & Smart Contracts	General Islamic contracts; Risk management	Risk management Reduction of gharar; transparency; Shariah-based execution	Preservation of wealth, justice, transparency	Qualitative	Journal of Islamic financial studies
26	Desky and Hye (2025)	Thailand	Blockchain & Smart Contracts	Murabaha, Mudarabah, Ijarah	Avoidance of riba and gharar; Shariah-compliant automation	Justice, transparency, protection of wealth	Mixed-Method	AT-TIJARAH
27	Rafaheh (2024)	Malaysia	Smart Contracts	General Islamic finance principles	Identification of Gharar risks; alignment with ethical, fair, and transparent mandates	Protection of wealth	Qualitative	Islamic Economics Journal
28	Rahmani and Kadari (2024)	Algeria	Smart Contracts	General Islamic finance contracts	Ensuring ethical and Shariah-compliant implementation	Ethical Finance	Qualitative	Journal of Finance, Investment and Sustainable Development
29	Soualhi and Saleh (2024)	Malaysia	Smart contracts; blockchain-based automation	Islamic financial products	Legitimacy of smart contracts; Avoiding gharar and ensuring clear contractual terms	Justice and fairness in transactions	Qualitative	Malaysian Journal of Syariah and Law
30	Zulkepli et	Malaysia	Smart contracts;	Tawarruq-based	Alignment of smart-contract execution	Preservation of	Qualitative	Jurnal Fiqh

	al. (2021)		blockchain-based automation	financing products	with Shariah contract elements; reduction of Shariah non-compliance risk	wealth		
31	Al-Sakran and Al-Shamaileh (2021)	Saudi Arabia	Blockchain; smart contracts; middleware infrastructure for Islamic investment	Musharakah (profit-loss-sharing joint venture)	Elimination of riba, true risk-sharing	Justice and fairness through real profit-loss sharing	Qualitative	Journal of Theoretical and Applied Information Technology
32	Zulkepli et al. (2023)	Malaysia	Blockchain; blockchain-based smart contracts	General Shariah contracts	iḥsān (flexibility, adjustment of terms)	Justice and fairness through flexible contract mechanisms	Qualitative	International Journal of Islamic Economics and Finance Research
33	Iftikhar and Saba (2020)	Pakistan	Blockchain and smart contracts	Sukuk issuance	Shariah-compliant Sukuk structure	Justice (transparent processes); preservation of wealth	Qualitative	Journal of Finance and Economics Research
34	Alhejaili (2025)	Saudi Arabia	Blockchain; smart contracts	Legal enforceability of smart contracts	Consent, capacity, and contract validity	Preservation of wealth, Justice & fairness, Public interest, and Accountability	Qualitative	International Journal of Law and Management
35	Wijaya et al. (2025)	Indonesia	Blockchain technology	Digital waqf management	Shariah legitimacy through usul fiqh and MUI fatwas	Preservation of wealth (ḥifẓ al-māl)	Qualitative	Journal of Islamic Economics
36	Mousavi et al. (2025)	Indonesia	Blockchain; smart contracts	Sukuk issuance	Automation of Shariah rules in Sukuk issuance	Preservation of wealth (ḥifẓ al-māl)	Qualitative	Access Journal

3.2 Analysis of Research Countries of the Articles Reviewed

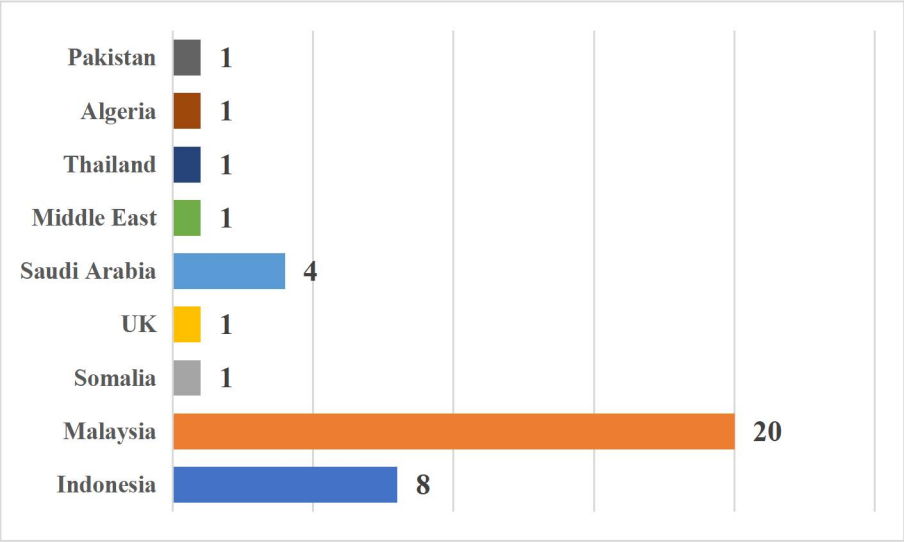

Figure 2 Research Country Analysis

As seen in Figure 2, the geographical distribution of the reviewed articles reflects a concentration of research activity within a few leading regions, with Malaysia contributing the highest number of studies (n = 20). This dominance suggests a strong scholarly interest in the subject matter within Malaysia, where research communities have demonstrated sustained engagement with issues surrounding financial inclusion, fintech development, and related economic themes. Indonesia followed with a moderate contribution of eight studies, indicating growing research attention across Southeast Asia and reinforcing the region's emerging role in shaping discourse in this field.

Saudi Arabia accounted for four studies, demonstrating meaningful engagement from the Middle Eastern context. At the same time, several other countries appeared only once, including Somalia, the United Kingdom, the broader Middle East region, Thailand, Algeria, and Pakistan. These individual contributions indicate a dispersed yet limited global footprint, suggesting that while the topic has garnered international interest, its scholarly development remains uneven across regions. The general pattern reveals that the current evidence base is shaped primarily by studies originating from Muslim-majority economies with well-developed Islamic finance ecosystems.

Also, the distribution reveals that existing research is heavily influenced by Southeast Asian contributions, with comparatively minimal representation from Africa, Europe, and other global regions. This imbalance highlights the need for broader geographical diversification in future studies to improve generalisability and ensure that insights reflect a wider range of socio-economic and cultural environments.

Additionally, this geographical concentration further reflects the religious and institutional foundations that underpin Islamic finance research. Countries such as Malaysia, Indonesia, and Saudi Arabia have integrated Shariah principles into their financial systems, creating environments that naturally support greater scholarly engagement with topics such as crowdfunding, blockchain, and smart contracts within an Islamic context. Conversely, the minimal representation of studies from non-Muslim or mixed-religion countries suggests limited adoption of Shariah-compliant financial systems in those regions. This may also indicate that Muslim minorities in such countries have fewer Shariah-compliant financial options available to them, which in turn contributes to reduced academic attention and a narrower research base. The overall distribution, therefore, demonstrates that the development of Islamic finance scholarship is closely tied to contexts where Islamic economic principles are institutionally embedded, while also highlighting opportunities for broader cross-regional exploration and greater representation from under-researched environments.

3.3 Analysis of Research Methodologies of the Articles Reviewed

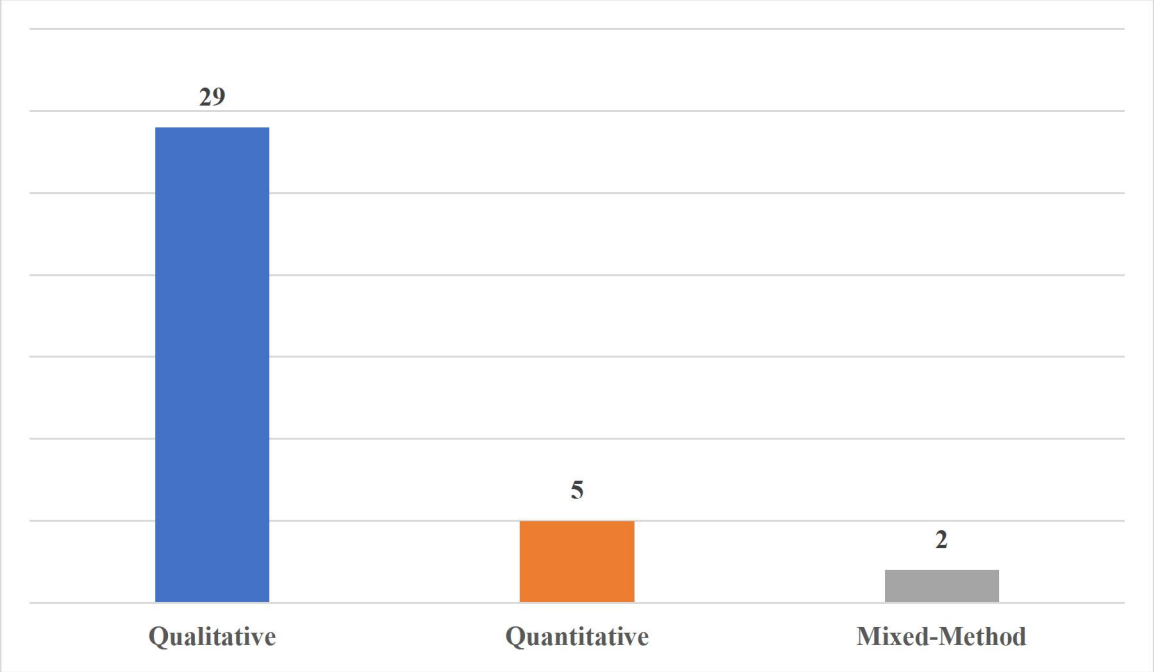

Figure 3 Research Methodology Analysis

As seen in Figure 3, the analysis of research methodologies employed in the thirty-six included studies reveals a pronounced preference for qualitative approaches. Twenty-nine of the studies adopted qualitative designs, indicating that the exploration of crowdfunding, blockchain, and smart contracts within Islamic finance is predominantly interpretive, conceptual, or case-study driven. This strong reliance on qualitative methods reflects the complex and context-specific nature of Shariah compliance, the ethical dimensions of Maqasid al-Shariah, and the relatively nascent stage of research on Fintech applications in Islamic finance. Qualitative approaches allow researchers to engage deeply with jurisprudential reasoning, organizational practices, and stakeholder perspectives, which are essential for understanding compliance, risk-sharing mechanisms, and the practical implications of emerging technologies within Shariah frameworks.

Quantitative methodologies were considerably less common, with five studies employing statistical or numerical analyses to examine patterns, correlations, or outcomes related to Islamic finance models and Fintech innovations. These studies provide empirical evidence on adoption trends, performance metrics, or the effectiveness of blockchain and smart contract implementations in supporting Shariah compliance. Mixed-methods research was the least represented, with only two studies integrating both qualitative and quantitative approaches. While limited in number, these mixed-method studies offer a valuable combination of conceptual depth and empirical validation, highlighting the potential for future research to bridge interpretive insights with measurable outcomes. Overall, the methodological distribution underscores the early developmental stage of Fintech research within Islamic finance, with a clear need for increased empirical and mixed-method investigations to complement the dominant qualitative literature.

3.4 Analysis of Publication Years of the Articles Reviewed

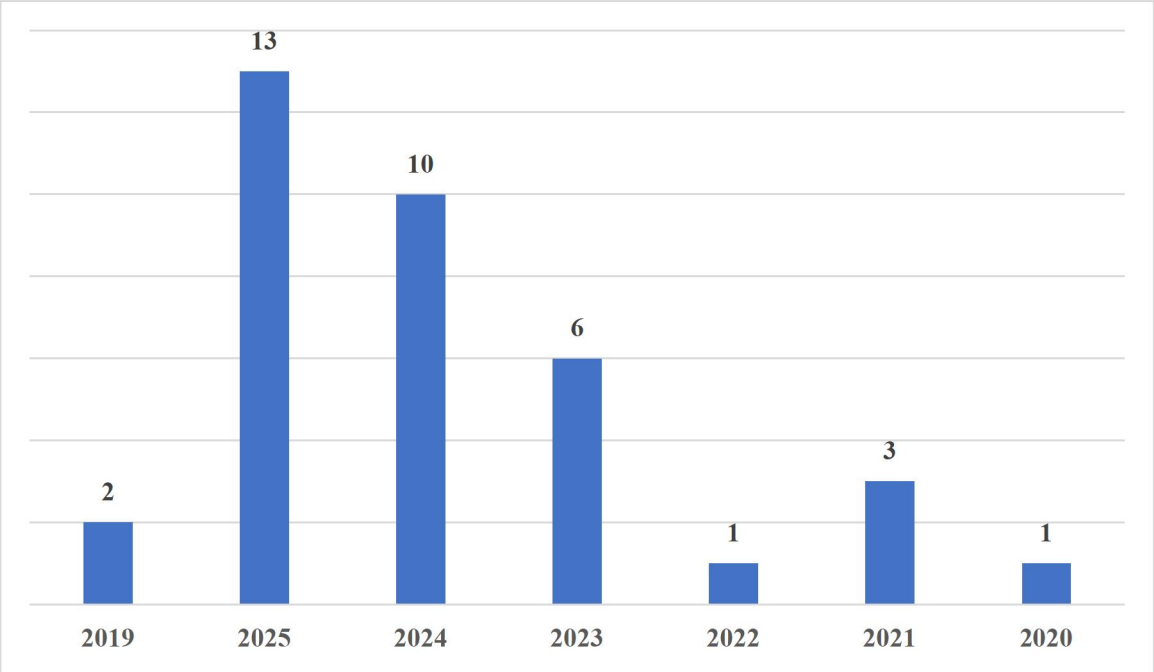

Figure 4 Year of Publication

As seen in Figure 4, the distribution of publication years indicates that research on crowdfunding, blockchain, and smart contracts within Islamic finance has gained substantial momentum in recent years. The majority of the studies were published between 2023 and 2025, with thirteen studies appearing in 2025, ten in 2024, and six in 2023. This rapid increase reflects the growing academic and practical interest in the intersection of Fintech innovations and Shariah-compliant financial practices, as well as the accelerating adoption of digital financial tools globally. The rising trend also suggests that scholars are increasingly recognizing the importance of blockchain technology, smart contracts, and crowdfunding platforms in advancing the objectives of Maqasid al-Shariah, particularly in promoting transparency, fairness, and financial inclusion.

Fewer studies were published in earlier years, with three articles in 2021, two in 2019, and only one each in 2020 and 2022. This limited representation in earlier years highlights that Islamic finance-focused Fintech research is relatively nascent and that the proliferation of publications is a recent phenomenon, likely driven by technological developments and increasing institutional support for digital Shariah-compliant solutions. Overall, the temporal distribution underscores the emergent nature of the field, indicating a sharp upward trajectory in scholarly output that aligns with global trends in digital finance and the integration of ethical, Shariah-compliant principles in financial innovations.

3.5 Analysis of Technology Focus of the Articles Reviewed

The analysis of technology focus reveals that the majority of the reviewed studies concentrated on crowdfunding platforms, particularly in the context of Islamic finance. A significant portion of the literature examined various forms of crowdfunding, including Islamic crowdfunding, equity crowdfunding, waqf-based crowdfunding, and digital crowdfunding platforms linked to NGOs. This emphasis reflects the central role that crowdfunding plays in enabling Shariah-compliant financial participation, risk-sharing, and access to capital, aligning closely with the objectives of Maqasid al-Shariah, such as promoting justice, inclusiveness, and equitable resource distribution. Several studies also explored the integration of blockchain within crowdfunding systems, highlighting its potential to enhance transparency, traceability, and trust between funders and recipients, which are critical in Shariah-compliant financial environments.

In addition to crowdfunding, a notable segment of the literature focused explicitly on blockchain technology and smart contracts, either individually or in combination. Studies in this category investigated the deployment of blockchain for peer-to-peer lending, automated contract execution, and middleware infrastructures for Islamic investment. Smart contracts were examined as tools to enforce Shariah-compliant agreements automatically, reducing operational risk and ensuring adherence to ethical and regulatory principles. A smaller number of studies considered the application of FinTech-enabled platforms in specific sectors, such as agricultural value chains, demonstrating the versatility of digital financial technologies in facilitating Shariah-compliant economic activities beyond traditional investment instruments. Overall, the distribution of technology focus illustrates a clear scholarly interest in exploring both crowdfunding and blockchain-based solutions, with an emerging trend toward integrating these technologies to support efficient, transparent, and Shariah-compliant financial systems.

3.6 Analysis of Islamic Finance Models in the Reviewed Studies

The Islamic finance models represented in the reviewed studies demonstrate a wide variety of Shariah-compliant approaches, reflecting both traditional and modern applications of Islamic financial principles. The most frequently studied model is Islamic crowdfunding, which appears in multiple forms, including community-based crowdfunding, donation- and reward-based platforms, equity- and security-based crowdfunding, and SME-focused models. These studies illustrate the diverse mechanisms through which crowdfunding can facilitate risk-sharing, equitable capital access, and financial inclusion while adhering to Shariah principles. Several studies also explored crowdfunding in combination with e-wakaf, demonstrating how digital platforms are enabling charitable endowments in addition to investment-based models.

Beyond crowdfunding, the literature highlights the use of classical Islamic contracts such as Murabahah (cost-plus sale), Mudharabah (profit-sharing), Musyarakah (joint venture), Tawarruq, and Qard Hasan (interest-free loans). These models are applied in various Fintech-enabled contexts, including equity-based investment pools, SME financing, micro-entrepreneur support, and Sukuk issuance, showing how traditional contracts are adapted for modern digital finance applications. Some studies also address general Shariah-compliant contracts and the legal enforceability of smart contracts, indicating an emerging interest in ensuring that digital financial instruments comply with Islamic jurisprudence while maintaining operational efficiency. Additionally, digital waqf management platforms were examined, reflecting the use of technology to administer charitable and social finance instruments in accordance with Shariah.

Overall, the distribution of Islamic finance models indicates that scholarly attention is concentrated on crowdfunding mechanisms while also encompassing a range of classical Shariah contracts adapted to modern digital finance

contexts. This highlights the dual focus of the field: leveraging Fintech to expand financial inclusion and innovation while ensuring adherence to traditional Shariah principles and the broader objectives of Maqasid al-Shariah.

3.7 Analysis of Shariah Compliance Focus in the Reviewed Studies

The Shariah compliance focus of the reviewed studies demonstrates a comprehensive engagement with the principles and practical requirements of Islamic finance. Many studies emphasized risk-sharing and the avoidance of riba, reflecting the central role these principles play in ensuring ethical, Shariah-compliant financial interactions. This includes both community-based financing and equity-based models where capital is mobilized without interest, and risk is appropriately distributed among participants. Several studies also highlighted the prohibition of gharar (excessive uncertainty or speculation) and the importance of transparency, ethical fund mobilization, and clear contractual terms, particularly in crowdfunding and smart contract applications.

Governance and regulatory considerations were also a prominent focus. Some studies explored Shariah governance frameworks, contractual compliance, and financial management mechanisms designed to ensure that digital platforms, crowdfunding structures, and blockchain-based operations conform to Shariah rulings. Others specifically examined the use of technology, such as blockchain and smart contracts, to automate compliance, reduce operational risk, enhance transparency, and strengthen monitoring mechanisms, ensuring that financial agreements align with both ethical and jurisprudential standards.

In addition, several studies addressed the adaptation of traditional Shariah instruments to modern digital finance contexts, including project screening, contract selection, and Sukuk issuance, emphasizing the reduction of non-compliance risks and alignment with the broader objectives of Maqasid al-Shariah. Some studies even incorporated concepts of iḥsān (flexibility and adjustment of terms) to ensure ethical fairness while maintaining compliance with Shariah principles. Overall, the literature demonstrates a strong focus on integrating ethical, legal, and operational mechanisms to uphold Shariah principles, showing that compliance is both a doctrinal requirement and a practical driver of trust, transparency, and accountability in Fintech-enabled Islamic finance systems.

3.8 Analysis of Maqasid al-Shariah Aspects Addressed in the Reviewed Studies

The reviewed studies demonstrate a strong emphasis on several key aspects of Maqasid al-Shariah, reflecting the ethical and social objectives that guide Shariah-compliant financial systems. A major focus across the literature is financial inclusion, which appears consistently in studies examining crowdfunding, blockchain, and smart contracts. This focus highlights the role of Fintech innovations in expanding access to Shariah-compliant financial services for underrepresented groups, small businesses, and micro-entrepreneurs, ensuring equitable participation in economic activities. Closely linked to financial inclusion is the principle of justice and fairness, which underpins both the structuring of contracts and the distribution of wealth in Shariah-compliant platforms. Several studies also emphasize wealth protection (ḥifẓ al-māl), safeguarding capital while ensuring ethical investment practices, as well as poverty alleviation and social cooperation, reflecting broader socio-economic objectives of Islamic finance.

Transparency, accountability, and trust emerge as additional recurrent themes, particularly in studies exploring blockchain and smart contracts. These technologies are seen as mechanisms to operationalize Maqasid principles by enhancing compliance, minimizing ethical and operational risks, and fostering integrity in financial transactions. Some studies also address empowerment of vulnerable groups, equitable wealth distribution, and the support of social welfare initiatives such as NGOs or knowledge preservation. A few studies did not explicitly discuss Maqasid aspects, suggesting either a conceptual focus on technological implementation or a nascent integration of Shariah objectives in certain Fintech applications. Overall, the literature reflects a multi-dimensional engagement with Maqasid al-Shariah, demonstrating that the integration of ethical, social, and financial objectives remains central to the design, governance, and implementation of Shariah-compliant Fintech innovations.

4 Discussions of Findings

RQ1: How have crowdfunding platforms been structured to comply with Islamic principles of risk-sharing and the prohibition of riba?

Across the reviewed studies, a clear consensus emerges that Islamic crowdfunding platforms maintain Shariah compliance by embedding risk-sharing mechanisms, riba-free contractual structures, and strong governance frameworks into their operational design. The literature shows that platforms consistently move away from interest-based, debt-driven financing toward models rooted in Islamic participatory contracts, ethical screening, and transparent fund management.

A central theme across the findings is the reliance on profit-and-loss sharing structures such as mudarabah and musharakah, which enable investors and entrepreneurs to jointly bear risks and share outcomes. Platforms such as those examined in Aysan et al. (2024) and Sudarwanto et al. (2024) adopt equity-based structures to eliminate guaranteed returns, ensuring that investors' gains correspond to asset performance rather than interest-based obligations. This contractual design directly operationalizes the Islamic principle that financial reward must be tied to exposure to real economic risk. Similar approaches are evident in the Salam–Muzāraʿah and agricultural value-chain models, where risk-sharing occurs across farmers, landowners, and waqf institutions, further demonstrating the adaptability of Shariah-compliant crowdfunding structures across sectors.

Alongside equity-based risk sharing, many studies highlight the use of non-interest instruments, including qard hasan, infaq, donation, and reward-based models, as additional mechanisms for avoiding riba while expanding access to finance. Research by Thaker (2025), Aderemi and Ishak (2023), and Nasir et al. (2023) shows that these structures are especially relevant for micro-enterprises and vulnerable groups unable to meet collateral or credit requirements. By eliminating interest and replacing it with benevolent financing or contribution-based support, platforms maintain full Shariah compliance while addressing financial exclusion. These models demonstrate that riba-free design is not limited to profit-sharing arrangements but extends to socially oriented financing aligned with Islamic ethical values.

The literature also emphasizes the role of Shariah governance and regulatory oversight as foundational to compliant platform structures. Multiple studies, including Mahfudz et al. (2025), Muhamed et al. (2025), and Ramli et al. (2023), show that Islamic crowdfunding achieves compliance not merely through contractual forms but through systematic governance mechanisms such as Shariah Supervisory Boards, clear contract documentation, risk and compliance units, project screening, and fraud-prevention protocols. These governance structures ensure transparency, prevent misuse of funds, and safeguard investors from impermissible activities, thereby reinforcing adherence to the prohibition of riba, gharar, and maisir. Where governance is weak, as noted in equity platforms lacking mandatory Shariah oversight, the risk of non-compliance increases significantly.

A recurring observation in the findings is that technological integration, including digital tools and, in some cases, blockchain, supports Shariah compliance by enhancing transparency, traceability, and consistency in risk-sharing implementation. Studies note that digital platforms expand equitable access to capital while maintaining clear disclosures and compliant mechanisms for fund mobilisation. In markets such as Malaysia, Indonesia, Somalia, and the UK, digital facilitation strengthens the structural rigor of Shariah-compliant crowdfunding, even as sociocultural and regulatory conditions influence adoption.

Finally, the literature collectively illustrates that the structuring of Islamic crowdfunding is context-sensitive yet unified by core principles, avoidance of riba, equitable distribution of risk, ethical project selection, and transparent governance. Whether applied to agriculture, SMEs, real estate, waqf development, or social finance, the same foundational logic guides platform design. Islamic crowdfunding is thus not a single model but a spectrum of Shariah-compliant configurations that achieve the same objectives: ensuring that financial participation occurs without interest, without exploitation, and within a framework where all parties share both risks and rewards.

RQ2: How blockchain enhances transparency, trust, and accountability in Islamic financial systems

Across the reviewed studies, the evidence consistently shows that blockchain strengthens transparency, trust, and accountability in Islamic finance by providing immutable, secure, and traceable records that align with Shariah expectations for clarity and ethical conduct. Numerous authors emphasise that the decentralised ledger infrastructure reduces information asymmetry and protects transactional integrity. For instance, Aderemi and Ishak (2023)

demonstrate that blockchain improves due diligence, monitoring, and repayment tracking within Qard Hasan crowdfunding, thereby enhancing trust between financiers and micro-entrepreneurs. Similar conclusions are reflected in Sahri (2021), who argues that fintech-driven transparency enhances the credibility of Islamic NGOs by enabling donors to track fund utilisation.

A recurring theme in the findings is the role of immutability in promoting accountability. Fauzan (2025) notes that blockchain-supported smart contracts produce auditable and tamper-resistant records that reduce manipulation and strengthen honesty among contracting parties. This aligns with the work of Antova and Tayachi (2019), whose analysis shows that verifiable and decentralised transaction histories reduce ambiguity and operational opacity in Islamic financial institutions.

The studies also converge on the importance of traceability for Shariah governance. Research by Syahmi Zulkepli et al. (2025), Zulkepli et al. (2021), and Zulkepli et al. (2023) consistently highlights that blockchain records allow all steps of tawarruq processes to be monitored in real time, ensuring compliance with Islamic jurisprudential requirements. This traceability strengthens confidence in the authenticity of the transaction sequence and reduces risks associated with improper execution.

Moreover, findings from various sectors confirm the technology's cross-cutting benefits. Iftikhar and Saba (2020) and Mousavi et al. (2025) show that blockchain-based Sukuk issuance improves transparency, reduces operational costs, and enhances verifiability for regulators and investors. Studies such as Al-Sakran and Al-Shamaileh (2021), Alhejaili (2025), and Rahmani and Kadari (2024) further demonstrate that decentralised platforms reduce reliance on intermediaries, mitigate fraud risk, and support trustworthy contract enforcement.

Evidence from waqf and social finance also reinforces these outcomes. Wijaya et al. (2025) and Desky and Hye (2025) provide compelling arguments that blockchain reduces operational ambiguity, eliminates human error, and ensures transparent handling of charitable assets. Collectively, these studies affirm that blockchain's inherent properties, including immutability, verifiability, and decentralisation, directly enhance transparency, trust, and accountability across Islamic finance operations in ways that uphold Shariah values of honesty, fairness, and responsible conduct.

RQ3: The extent to which smart contracts can automate and enforce Shariah-compliant financial agreements

The findings reveal broad agreement that smart contracts have strong potential to automate and enforce Shariah-compliant financial agreements, although important limitations remain. Many studies highlight that smart contracts improve procedural compliance by embedding Shariah rules directly into code. For example, Fauzan (2025), Syahmi Zulkepli et al. (2025), and Antova and Tayachi (2019) show that automation ensures that murabahah, tawarruq, mudharabah, and musharakah contracts follow their correct contractual sequences, thereby reducing gharar, operational lapses, and human manipulation.

A number of studies further emphasise the efficiency and accuracy gained from automation. Desky and Hye (2025), Rahmani and Kadari (2024), and Soualhi and Saleh (2024) argue that self-executing codes minimise errors and support consistent enforcement, preventing unauthorised actions that could compromise Shariah compliance. Evidence from the Sukuk sector reinforces these benefits. Iftikhar and Saba (2020) and Mousavi et al. (2025) demonstrate that smart contracts streamline issuance, automate profit distribution, facilitate asset verification, and ensure timely fulfilment of obligations without intermediary delays.

However, limitations related to contractual autonomy and flexibility are also strongly emphasised. Ahmad et al. (2024) provides one of the most critical assessments, showing that fully automated contracts may undermine essential Islamic legal principles such as the freedom to negotiate and the ability to modify terms. These concerns are echoed by Rafaheh (2024), who warns that poorly designed smart contracts may introduce excessive rigidity that could trigger gharar or restrict permissible adjustments based on iḥsān. Zulkepli et al. (2023) highlight similar obstacles, noting that immutable code may conflict with ethical expectations for compassion-driven contract restructuring.

Despite these concerns, the reviewed literature also presents potential solutions. Al-Sakran and Al-Shamaileh (2021) and Zulkepli et al. (2023) propose middleware architectures and upgradeable smart contracts that would permit controlled modifications while preserving transparency. These innovations indicate that technological enhancements can address current deficiencies and enable smart contracts to support Shariah governance more effectively.

Overall, the studies show that smart contracts already demonstrate substantial capability to automate and enforce Shariah-compliant agreements by enhancing accuracy, consistency, and compliance. Yet, full adoption requires systems that preserve human agency, support Shariah-sanctioned flexibility, and integrate continuous oversight from scholars and regulators.

RQ4: Contribution of blockchain and smart contracts to Maqasid al-Shariah

The findings reveal consistent evidence that fintech innovations such as blockchain and smart contracts contribute meaningfully to Maqasid al-Shariah through enhancing justice, fairness, welfare, financial inclusion, and the protection of wealth. Central to this contribution is the role of fintech in expanding access to Shariah-compliant financing. Numerous studies, including those by Ashari and Rahman (2025), Thaker (2025), Elmi et al. (2025), Ishak et al. (2024), and Muneem et al. (2025), show that Islamic crowdfunding platforms provide accessible capital to SMEs, start-ups, farmers, self-publishers, and financially excluded groups. These findings depict fintech as a mechanism for reducing barriers, promoting equity, and enabling socio-economic empowerment, particularly for vulnerable populations.

A second theme relates to ethical financial governance. Studies such as Sahri (2021), Muhamed et al. (2025), Sudarwanto et al. (2024), and Mahfudz et al. (2025) demonstrate that enhanced governance frameworks and transparent fund utilisation support fairness, accountability, and responsible wealth protection. Similarly, Abdeldayem and Aldulaimi (2023), Ramli et al. (2023), and Aderemi and Ishak (2023) highlight that Shariah-compliant crowdfunding promotes just and equitable resource distribution while eliminating exploitative elements of conventional financing.

The contribution of blockchain to Maqasid al-Shariah appears particularly significant in the areas of wealth preservation and justice. Studies by Antova and Tayachi (2019), Desky and Hye (2025), Zulkepli et al. (2021), Zulkepli et al. (2023), Alhejaili (2025), and Fauzan (2025) consistently show that blockchain and smart contracts strengthen transparency, eliminate fraud opportunities, reduce uncertainty, and lower transactional costs. These effects align with the objectives of hifz al-mal, fairness, and ethical conduct.

Additionally, blockchain-based waqf and smart Sukuk provide unique contributions to communal welfare and financial inclusivity. Wijaya et al. (2025) and Mousavi et al. (2025) show that transparent and accountable waqf and Sukuk systems enhance societal welfare, broaden participation, and support ethical wealth distribution. Aysan et al. (2024) further illustrates how real-estate crowdfunding enables wider participation in ethical investments, promoting fairness and inclusive growth.

Similarly, technological applications in social finance, as described by Soualhi and Saleh (2024), support justice, welfare, and equitable resource allocation. Studies such as Nasir et al. (2023), Susanti et al. (2024), and Ishak et al. (2022) enrich these perspectives by demonstrating tangible social benefits for women, young writers, and underserved communities.

Collectively, the findings show that fintech innovations meaningfully advance the higher objectives of Shariah by promoting justice, fairness, transparency, ethical governance, and socially beneficial financial inclusion. Blockchain and smart contracts achieve these outcomes by improving efficiency, providing secure and accountable systems, and widening access to Islamic financial services.

Conceptual Framework for Crowdfunding, Blockchain, and Smart Contracts in Islamic Finance

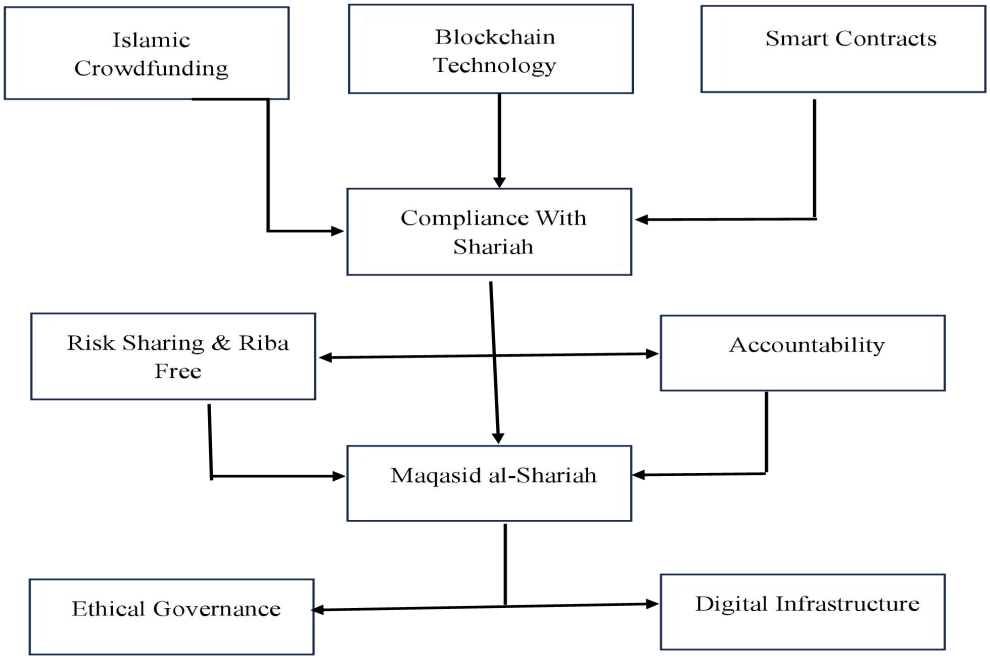

Figure 5 Conceptual Framework by Author

The conceptual framework emerging from the findings of this review integrates the roles of Islamic crowdfunding structures, blockchain technology, and smart contracts to illustrate how these fintech mechanisms collectively promote Shariah compliance and advance the objectives of Maqasid al-Shariah. The framework is grounded exclusively in the empirical and conceptual evidence from the 36 reviewed studies and reflects the relationships consistently highlighted across RQ1–RQ4.

The first major construct in the framework is Islamic Crowdfunding Structures, which includes equity-based profit-and-loss sharing models such as mudarabah and musharakah, as well as non-interest financing instruments like qard hasan, infaq, donation-based funding, and reward-based contributions. These structures appear in the framework because the findings show that risk-sharing and riba avoidance form the core foundation of Islamic crowdfunding models. Studies by Aysan et al. (2024) and Sudarwanto et al. (2024) highlight that equity crowdfunding ensures that financial returns correspond to real economic activity and shared outcomes, while Thaker (2025), Aderemi and Ishak (2023), and Nasir et al. (2023) demonstrate that benevolent financing instruments expand financial access without violating the prohibition of riba. These mechanisms feed directly into the construct Risk-Sharing & Riba-Free Contracts, as they operationalise equitable risk distribution and interest elimination, both of which are essential to Shariah compliance.

Alongside contractual design, the findings highlight the critical role of Shariah Governance and Ethical Oversight. Studies such as Mahfudz et al. (2025), Muhamed et al. (2025), and Ramli et al. (2023) show that governance structures – including Shariah Supervisory Boards, project screening, compliance units, and fraud-prevention systems, are foundational for ensuring transparency and preventing prohibited elements such as gharar and maisir. These governance mechanisms therefore appear in the framework as a direct enabler of Shariah Compliance, ensuring that platform structures are consistent with Islamic jurisprudential principles.

The second major pathway in the framework is technological, centred on Blockchain Technology. Blockchain appears as a key construct because the findings consistently show that transparency, traceability, and immutability are inherent to its operation. These characteristics strengthen trust and accountability, making blockchain a direct contributor to Shariah compliance. Aderemi and Ishak (2023) and Sahri (2021) show that blockchain reduces information asymmetry and increases donor or investor trust by providing verifiable records, while Fauzan (2025) and

Antova and Tayachi (2019) highlight that immutability prevents manipulation and preserves the integrity of financial data. The traceability functions documented by Syahmi Zulkepli et al. (2025), Zulkepli et al. (2021), and Zulkepli et al. (2023) demonstrate how blockchain ensures correct execution of steps in contracts such as tawarruq, thereby reinforcing compliance with fiqh requirements. These insights justify the directional link between Blockchain Technology and Transparency, Trust & Accountability in the framework.

The third major element is Smart Contracts, which form a distinct construct because the findings show that they automate and enforce Shariah-compliant financial agreements. Automation embeds rules directly into code, ensuring consistency and reducing human error. Studies by Fauzan (2025), Syahmi Zulkepli et al. (2025), and Antova and Tayachi (2019) illustrate how smart contracts can enforce correct sequences in murabahah, mudharabah, and musharakah agreements. Desky and Hye (2025), Rahmani and Kadari (2024), and Soualhi and Saleh (2024) show that automation enhances accuracy, reduces delays, and prevents non-compliant practices. The framework therefore links Smart Contracts to both Automation of Shariah-Compliant Rules and Enhanced Accountability, reflecting their dual functions in enforcement and transparency.

However, the findings also indicate constraints related to the Flexibility and Human Agency required in Islamic jurisprudence. Studies by Ahmad et al. (2024) and Rafaheh (2024) warn that excessive automation may restrict permissible renegotiation or compassionate contract restructuring. Zulkepli et al. (2023) similarly note that immutability may conflict with iḥsān-based adjustments. This evidence necessitates the inclusion of Shariah-Governed Flexibility Requirements as a moderating construct in the framework, influencing the relationship between smart contracts and Shariah compliance. The findings also introduce technological solutions proposed by Al-Sakran and Al-Shamaileh (2021) and Zulkepli et al. (2023), such as upgradeable or middleware-based smart contract designs that enable controlled adjustments without compromising transparency. These insights justify the moderated relationship included in the conceptual framework.

The final and overarching construct in the framework is Maqasid al-Shariah, which the findings show is advanced through the combined impact of Islamic crowdfunding structures, blockchain systems, and smart contract implementation. Studies such as Ashari and Rahman (2025), Thaker (2025), Ishak et al. (2024), Elmi et al. (2025), and Muneem et al. (2025) provide strong evidence that crowdfunding platforms promote financial inclusion, support vulnerable populations, and empower SMEs – directly contributing to justice, welfare, and removal of hardship. The literature also demonstrates blockchain's role in hifz al-mal (protection of wealth) through fraud reduction, cost minimisation, and operational integrity, as shown by Antova and Tayachi (2019), Zulkepli et al. (2021), Alhejaili (2025), and Fauzan (2025). Smart Sukuk and blockchain-enabled waqf, documented by Wijaya et al. (2025) and Mousavi et al. (2025), further support social welfare and ethical wealth distribution, enhancing communal well-being. Collectively, these findings demonstrate that the technological and financial mechanisms in the framework converge to advance justice, fairness, ethical governance, transparency, and wealth protection, core components of Maqasid al-Shariah.

Overall, the conceptual framework reflects a sequential and reinforcing logic: Shariah-compliant crowdfunding structures provide foundational risk-sharing mechanisms; blockchain technology enhances transparency, trust, and accountability; and smart contracts automate and enforce correct contractual processes. Together, these constructs interact to strengthen Shariah compliance and advance the higher objectives of Islamic law. The framework thus captures how fintech innovations operationalise Islamic ethical principles and promote socio-economic welfare in ways that are deeply aligned with Maqasid al-Shariah.

5 Conclusions

This systematic literature review examined 36 peer-reviewed studies to evaluate how blockchain technology, smart contracts, and Islamic fintech innovations contribute to transparency, trust, accountability, Shariah-compliant automation, and the realization of Maqasid al-Shariah. Across the reviewed literature, blockchain consistently emerged as a transformative infrastructure capable of strengthening Islamic financial systems. The study findings demonstrated that blockchain's immutable, auditable, and tamper-resistant architecture significantly enhances transparency, reduces information asymmetry, and strengthens trust among stakeholders. This improvement was evident across diverse Islamic finance domains, tawarruq operations, sukuk structuring, waqf governance,

crowdfunding, and investment transactions, confirming its role as a foundational layer for improving accountability and governance in Shariah-based financial activities.

The evidence shows that smart contracts possess strong potential to automate and enforce Shariah-compliant financial agreements by embedding permissible terms directly into programmable code. Although certain studies highlighted structural limitations, particularly immutability challenges, restrictions on human agency, and potential constraints related to iḥsān and contractual flexibility, the majority of findings indicate that carefully designed, Shariah-informed smart contracts can substantially improve operational efficiency, minimize human error, reduce gharar, and strengthen compliance in Islamic financial transactions. Their capacity for consistent, rule-based execution positions them as a key innovation in future Islamic financial architectures.

Additionally, the review found strong convergence that blockchain, smart contracts, and Islamic crowdfunding collectively advance core objectives of Maqasid al-Shariah, including justice, fairness, financial inclusion, and the protection of wealth (ḥifẓ al-māl). Fintech-enabled Islamic social finance models, such as waqf platforms, agricultural financing, SME crowdfunding, and smart sukuk, expand access to ethical financing, strengthen governance, and support socio-economic welfare. The technologies promote equitable wealth distribution, strengthen trust in financial dealings, and empower marginalized groups, thereby aligning the financial system with Shariah's higher purposes of socio-economic justice and public benefit (maṣlaḥah).

Overall, findings across the 36 studies demonstrate that Islamic fintech innovations hold significant promise for building ethical, transparent, and inclusively governed Islamic financial ecosystems. However, the effectiveness of these innovations depends on regulatory readiness, Shariah governance structures, and technological adaptation that respects Islamic jurisprudential principles.

Theoretical Implications

This review contributes to the evolving discourse on Islamic fintech by offering an integrated synthesis of how blockchain and smart contracts interface with Islamic legal theory, governance structures, and Maqasid al-Shariah. The findings provide evidence that emerging technologies are not merely operational tools but also theoretical enablers capable of reinforcing Islamic jurisprudential principles such as transparency, accountability, and fairness. The review also highlights the need for deeper theoretical engagement to clarify how immutability, automation, and digital codification intersect with classical contracting doctrines.

Practical / Managerial Implications

For Islamic financial institutions, the findings underscore the urgent need to adopt blockchain-based systems for transaction verification, auditability, sukuk issuance, waqf management, and crowdfunding oversight. These innovations can reduce fraud, strengthen governance, improve consumer confidence, and lower operational costs. Financial managers and Islamic banks can leverage smart contracts to automate Shariah-compliant financing (murabaha, mudarabah, musharakah, ijarah), reduce manual errors, and enhance compliance monitoring. Crowdfunding and waqf institutions can use blockchain to strengthen public trust, improve donor engagement, and demonstrate ethical stewardship.

Policy and Regulatory Implications

Regulators and Shariah boards should develop clearer standards for blockchain integration, smart contract governance, and Islamic fintech certification. The evidence shows that regulatory frameworks must address challenges related to contractual flexibility, dispute resolution, data privacy, and Shariah supervision in digital environments. Policies enabling flexible or upgradable contract templates could help harmonize technological efficiency with Islamic jurisprudence. Additionally, governments and central banks can use blockchain-based models to support financial inclusion initiatives, strengthen social finance infrastructures, and enable transparent public-benefit programs.

Implications for Shariah Governance

The review highlights the increasing importance of digitally enhanced Shariah oversight. Blockchain and smart contracts can support real-time monitoring of compliance, reduce inconsistencies in contract enforcement, and enhance the credibility of Islamic financial products. Shariah scholars will need to collaborate more closely with technologists to ensure that Islamic principles are encoded correctly and that technological features—such as immutability—are adapted to allow Shariah-permissible flexibility when necessary.

Limitations of the Study and Future Recommendation

Despite its contributions, this study has several limitations. First, although the review incorporated 36 studies, the rapidly evolving nature of blockchain and Islamic fintech means new evidence may emerge that could shift or refine the synthesized conclusions. Second, the included studies varied in methodological rigor, ranging from conceptual analyses to empirical case studies, which may affect the comparability and generalizability of findings. Third, geographic representation was uneven, with a strong concentration of studies from Southeast Asia and limited empirical work from regions such as Africa, the GCC, and Central Asia. This uneven distribution restricts the ability to generalize findings to the global Islamic finance context. Finally, the review relied exclusively on published academic studies and did not include industry white papers, regulatory reports, or proprietary fintech implementation data, which may contain additional practical insights. Future research should adopt a continuous review approach to account for the rapidly evolving landscape of blockchain and Islamic fintech. Periodic updates or living systematic reviews would help capture emerging technologies, regulatory changes, and novel applications that may significantly influence current conclusions. Additionally, greater emphasis should be placed on empirical and methodologically rigorous studies, particularly large-scale quantitative analyses and mixed-method approaches, to improve comparability, robustness, and generalizability of findings across contexts.

Further studies are strongly encouraged in underrepresented regions such as Africa, and Central Asia, where Islamic finance is expanding but empirical evidence on blockchain adoption remains limited. Context-specific investigations in these regions would enhance the global relevance of the literature and uncover unique institutional, regulatory, and socio-cultural dynamics influencing adoption.

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Declaration of Use Of Generative AI

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Conflict of Interest

The authors declare no conflicts of interest.

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