

Research Article

Sharia-Compliant Crowdfunding Platforms as a Financial Innovation for Supporting Green Startups in Emerging Economies

Abdul Rahim^{1*}, Trie Hierdawati², Elman Azizov³

- 1 Institut Agama Islam Sumbar rahimabdul22@gmail.com
 - 2 Universitas Muhammadiyah Jambi TrieHierdawati09@gmail.com
 - 3 John Jay College of Criminal Justice, USA azizovelman@gmail.com
- * Corresponding Author: e-mail : rahimabdul22@gmail.com

Abstract: This study explores the role of Sharia-compliant crowdfunding platforms as ethical financial innovations in supporting green startups, particularly in emerging economies. Green startups, which are inherently mission-driven and environmentally conscious, often face challenges in accessing traditional funding due to the long-term nature of their returns and perceived investment risks. Conventional financing mechanisms are frequently profit-oriented and risk-averse, making them unsuitable for ventures that prioritize sustainability and community impact. In contrast, Sharia-compliant crowdfunding platforms offer alternative financing pathways that are grounded in Islamic ethical principles, such as profit-and-loss sharing and the prohibition of interest and speculation. The research uses a qualitative-comparative case study approach, drawing from secondary data and interviews with platform operators and green startup founders. Thematic and comparative analyses reveal that Sharia crowdfunding platforms not only attract ethically motivated investors but also foster trust, transparency, and alignment with the values of environmentally conscious communities. These platforms provide higher levels of ethical accountability, although they are currently limited by low public literacy and a lack of regulatory frameworks in many regions. The study concludes that Sharia-compliant crowdfunding platforms have significant potential to bridge the financing gap for green startups. Their success depends on collaborative support from government, financial institutions, and academia, along with increased efforts in education and regulatory development. By integrating religious ethics and sustainable finance, these platforms can help create inclusive, transparent, and socially responsible funding ecosystems that contribute meaningfully to green economic growth.

Keywords: Ethical Finance; Financial Innovation; Green Startups; Sharia Crowdfunding; Sustainable Development

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1. Introduction

In recent years, green startups have emerged as critical agents of sustainable development due to their focus on eco-friendly innovations and long-term environmental benefits. Despite their potential to contribute significantly to environmental and social well-being, these startups often face considerable obstacles in securing financial support, particularly in emerging economies. Traditional investors frequently perceive green startups as high-risk ventures due to technological uncertainties, exit risks, and political instability (Bergset, 2018). The lack of business education and the high degree of innovation required further compound the difficulties these startups encounter when seeking financial capital (Gupta et al., 2023).

These challenges have highlighted the pressing need for alternative financing models that align not only with sustainability principles but also with ethical and religious values. In many Muslim-majority developing countries, Islamic finance provides a promising solution to this dilemma. Rooted in the principles of *Maqāṣid al-Sharī'ah*, Islamic green finance aims to protect faith, life, intellect, progeny, and wealth while promoting ethical and socially responsible investments (Rahim et al., 2024; Obaid et al., 2024). Financing tools such as *sukuk* (Islamic bonds), *zakat* (almsgiving), and *waqf* (endowments) can be strategically employed to fund environmentally sustainable projects that serve the public good (Al-Shaghdari et al., 2024).

However, green startups in developing economies must navigate additional barriers such as limited infrastructure, low technological capacity, and minimal access to formal financial systems (Gupta et al., 2023). Addressing these challenges requires stronger policy support and expanded government funding initiatives (Kaushik & Garg, 2024). Moreover, hybrid financing models and robust risk-sharing mechanisms are essential to de-risk investments and mobilize private sector capital. In this context, crowdfunding-particularly Sharia-compliant crowdfunding-has emerged as a viable alternative for channeling ethical investments into sustainable ventures. By enabling direct contributions from ethically motivated individuals, these platforms can bridge critical financing gaps in regions with underdeveloped institutional support (Al-Shaghdari et al., 2024).

Crowdfunding has emerged as an innovative financial mechanism that democratizes access to capital by enabling small-scale investors to support a wide range of projects, including those focused on environmental sustainability. In particular, crowdfunding platforms have proven effective in financing green initiatives, allowing project initiators to raise funds for eco-friendly ventures while contributing to the broader goal of carbon emission reduction (Adhami et al., 2019). However, despite their rising popularity, these platforms remain underutilized in many developing countries, where innovation is often stifled by limited financial access and institutional support (Abushaban, 2014).

This financial gap highlights the need for inclusive and culturally relevant funding models that address both ethical and developmental concerns. Sharia-compliant crowdfunding platforms, rooted in Islamic financial principles such as the prohibition of *riba* (interest) and *gharar* (speculation), offer a viable solution. These platforms typically operate on partnership-based contracts such as *Musharaka* and *Mudharabah*, ensuring mutual risk-sharing and ethical transparency (Hendratmi et al., 2020). They are particularly appealing to entrepreneurs in Muslim-majority societies who seek financing that aligns with their religious values and avoids conventional banking structures.

Emerging studies suggest that Sharia-compliant crowdfunding can provide crucial support for startups that lack traditional financial collateral (Hendratmi et al., 2020). However, the extent to which these platforms can effectively support green startups-those focused on sustainable environmental innovation-remains underexplored. This study aims to fill that gap by examining how Islamic crowdfunding models can contribute to the financing of environmentally conscious startups in developing economies.

The research seeks to assess the effectiveness of Sharia-compliant crowdfunding platforms in supporting green startups and evaluate their potential as innovative instruments for sustainable development. In addition to aligning with Islamic ethical values, these platforms can support the achievement of the United Nations Sustainable Development Goals (SDGs) by fostering inclusive economic participation and environmental responsibility (Johan, 2022). Moreover, the integration of blockchain technology into these platforms enhances transparency, trust, and operational efficiency, which are essential to attracting ethical investors and ensuring responsible fund usage (Hasna et al., 2022).

2. Literature Review

Crowdfunding as a Financial Innovation

Crowdfunding has emerged as a transformative innovation in financial inclusion, providing a decentralized method for raising funds from a large number of individuals via online platforms. Defined as a financing mechanism where entrepreneurs solicit small contributions from the public to support new ideas or projects, crowdfunding bypasses traditional financial intermediaries like banks and venture capitalists (Katseli & Boufounou, 2020; Morales-Alonso et al., 2022). Its mechanisms typically involve three principal actors: the project initiator, the public (or crowd), and the crowdfunding platform that facilitates interactions and transactions. Common models include reward-based, donation-based, equity-based, and debt-based crowdfunding (Hsueh et al., 2017; Sirma et al., 2019).

Social media and digital marketing play a pivotal role in amplifying campaign visibility, building trust, and increasing community engagement (Morales-Alonso et al., 2022). Since its widespread adoption in 2008 in the United States, crowdfunding has rapidly expanded globally. In Europe, crowdfunding has evolved into a more regulated framework, particularly for loan- and equity-based models (Bal, 2018). In emerging economies such as Morocco, however, crowdfunding remains in its early stages, with governments only recently beginning to establish legal frameworks (Ezziadi & Fikri, 2021).

The Concept of Sharia-Compliant Crowdfunding

Islamic finance presents a unique paradigm that governs financial transactions through ethical and religious principles rooted in *Sharia*. Three fundamental prohibitions distinguish Sharia-compliant finance from its conventional counterpart: the ban on *riba* (interest), *gharar* (excessive uncertainty), and *maisir* (gambling) (Suzuki & Miah, 2018; Noor et al., 2015). In the context of crowdfunding, these principles ensure that financial mechanisms are designed to be fair, transparent, and mutually beneficial.

Sharia-compliant crowdfunding incorporates various Islamic contracts (*akad*) that form the basis of financial relationships. *Musyarakah* is a partnership contract where all parties contribute capital and share profits and losses proportionally. This model is particularly effective in ensuring risk-sharing and encouraging joint responsibility (Noor et al., 2015). *Mudharabah*, on the other hand, involves a partnership in which one party provides capital and the other provides expertise. While profits are shared, losses are borne solely by the capital provider, making it ideal for entrepreneurial financing where the entrepreneur lacks initial funds (Noor et al., 2015). *Wakalah*, or agency contracts, are also employed, allowing one party to act on behalf of another in managing investments (Chowdhury et al., 2023).

Development and Challenges of Sharia Crowdfunding

Despite its potential, Sharia-compliant crowdfunding faces several challenges. In Malaysia and other Muslim-majority countries, the growth of such platforms is hindered by inconsistencies in the application of Sharia standards, low public awareness, and difficulties in implementing appropriate *akad* structures (Suzuki & Miah, 2018). There is a pressing need for regulatory frameworks that balance innovation with religious compliance, ensuring both investor protection and adherence to Islamic principles.

Innovation in this field has been bolstered by technological advancements. For instance, the integration of blockchain technology has been proposed to enhance transparency, traceability, and security in Islamic crowdfunding platforms (Chowdhury et al., 2023). Blockchain can also support decentralized financial systems that align well with Islamic ideals of equity and social justice (Reddy et al., 2024). With the right infrastructure and legal support, Sharia-compliant crowdfunding has the potential to revolutionize ethical finance and serve as a bridge between faith-based investment and sustainable development.

Green Startups and Their Characteristics

Green startups are emerging enterprises that integrate environmental responsibility into their core business strategies. These startups are characterized by their innovative approaches in addressing climate-related issues and their commitment to eco-friendly practices, including circular economy models and sustainable resource management (Phani et al., 2024). Typically, green startups operate at the intersection of technology, sustainability, and entrepreneurship, often relying on human capital and stakeholder engagement due to limited financial and physical resources during their early development stages (Bergset, 2015).

These ventures are often led by technically skilled individuals who may lack formal business education but exhibit strong social awareness and environmental motivation (Bergset, 2015). Unlike traditional startups that prioritize short-term financial returns, green startups tend to have long-term environmental and social impact goals embedded in their missions and visions.

Challenges in Conventional Financing for Green Startups

Securing adequate financing remains one of the major hurdles for green startups. Conventional funding mechanisms, such as bank loans or private equity investments, often fail to meet the unique financial needs of green startups. These traditional avenues typically require quick returns on investment, offer limited risk tolerance, and are unsuitable for ventures with long gestation periods or high upfront capital expenditures (Mukherjee et al., 2024). Furthermore, green technologies are often perceived as disruptive or unproven, making them less attractive to risk-averse financial institutions (Smit et al., 2016).

As a result, green startups frequently encounter greater difficulties in obtaining early-stage funding compared to other startups (Bergset, 2015). Their focus on non-traditional products and long-term social or environmental returns challenges existing financial frameworks that are not designed to accommodate such business models.

Ethical Investing as an Alternative Funding Path

To address the financing gap, ethical investing has gained traction as a crucial alternative for green startups. Ethical investors prioritize funding ventures that align with personal moral codes and contribute positively to society and the environment (Zhang & Huang, 2024). These investors are particularly drawn to sectors such as renewable energy and sustainable agriculture, where investments serve a dual purpose—financial return and societal benefit (Amalia et al., 2024).

Ethical investment is typically driven by non-financial goals, such as promoting responsible corporate practices and avoiding industries with negative externalities (Babu & Vineeth, 2023). This alignment between investor values and startup missions makes ethical investing a powerful catalyst for green innovation. Moreover, crowdfunding models rooted in ethical finance, such as Islamic green crowdfunding, have emerged to support environmental projects while adhering to moral and religious principles (Al-Shaghdari et al., 2024).

Theory of Financial Innovation

Financial innovation plays a vital role in bridging the gap between traditional finance and the evolving needs of green startups. Defined as the creation and application of new financial instruments, services, and processes, financial innovation often emerges as a response to regulatory, technological, or economic constraints (Zyuulu, 2018). According to the Constraint-Induced Innovation theory and Regulatory Dialectic Theory, financial innovation occurs when existing systems are unable to efficiently meet new demands or when regulatory pressures encourage market adaptation (Smit et al., 2016).

The Bundling and Unbundling Process Theory adds that innovation in financial services often involves breaking down existing products into customizable components or

recombining them into novel offerings (Guendouz, 2017). These frameworks provide a lens for understanding how new financial mechanisms such as green bonds, impact investing, and ethical crowdfunding evolve to support the unique needs of sustainability-focused ventures.

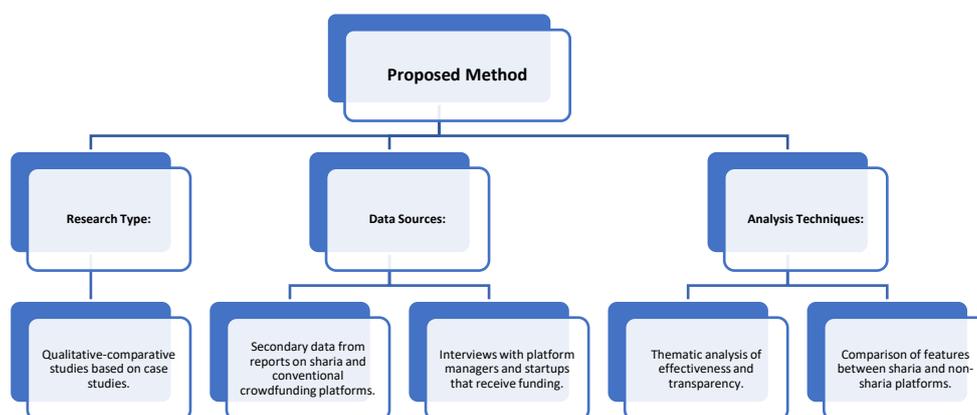
Theory of Ethical Investor Behavior

The Theory of Planned Behavior (TPB) has been widely adopted to analyze the psychological factors behind ethical investing. TPB posits that behavior is shaped by three main components: attitudes toward the behavior, subjective norms, and perceived behavioral control (Babu & Vineeth, 2023). In the context of ethical investment, these elements translate into the investor's ethical attitudes, social influences, and belief in their ability to effect change through financial decisions.

Furthermore, recent adaptations of TPB integrate variables such as financial literacy and risk propensity to explain variations in socially responsible investment (SRI) behaviors (Zhang & Huang, 2024). Ethical investors often demonstrate a willingness to sacrifice potential returns in favor of supporting ventures with strong ethical or environmental missions (Amalia et al., 2024). This theoretical framework helps explain why ethical investing remains a promising and viable path for green startups seeking mission-aligned capital.

3. Materials and Method

This study uses a qualitative-comparative case study approach to evaluate the effectiveness and transparency of Sharia-compliant crowdfunding platforms in supporting green startups. Data are collected through secondary sources such as platform reports and primary interviews with platform managers and startup founders. Thematic analysis is applied to identify key patterns, followed by a comparative analysis between Sharia and conventional crowdfunding platforms to assess differences in financing mechanisms, ethical alignment, and governance, providing practical insights into sustainable and faith-aligned funding strategies.



Figur 1. The structure of the Research Methodology flowchart.

Research Design

This study employs a qualitative-comparative case study approach. The qualitative design allows for an in-depth exploration of how Sharia-compliant crowdfunding platforms function in supporting green startups. The comparative element focuses on identifying differences and similarities between Sharia-compliant and conventional crowdfunding platforms, particularly in terms of funding mechanisms, transparency, and investor engagement.

Data Sources

The study uses a combination of secondary and primary data sources. Secondary data includes official reports, website content, platform documentation, and previous studies related to both Sharia and conventional crowdfunding platforms. These documents provide background information on the platforms' operations, funding structures, and regulatory contexts.

Primary data will be collected through in-depth interviews with platform managers and founders of green startups that have received funding. These interviews aim to capture real-world experiences and perceptions related to the effectiveness, trustworthiness, and ethical alignment of the funding models.

Data Analysis Techniques

The collected data will be analyzed using thematic analysis, which involves identifying and interpreting key patterns or themes related to the platforms' effectiveness and transparency. This analysis will help reveal the strengths, weaknesses, and unique characteristics of Sharia-based crowdfunding.

A comparative analysis will also be conducted to contrast the operational features of Sharia-compliant platforms with conventional crowdfunding systems. The comparison will focus on contract structures, investor relations, governance mechanisms, and the platforms' ability to attract funding for environmentally sustainable projects.

4. Results and Discussion

Sharia-compliant crowdfunding platforms effectively attract ethically driven investors and support green startups by aligning financial mechanisms with sustainability and moral values. These platforms offer strengths such as transparency, ethical accountability, and community trust, making them suitable for environmentally focused ventures. However, their impact is limited by low awareness and adoption among new entrepreneurs. To enhance their effectiveness, government support, regulatory frameworks, and financial literacy programs are essential for expanding access and ensuring successful implementation in the green economy.

Interpretation

These findings suggest that Islamic ethics foster a mindset in which environmental stewardship is viewed not merely as compliance, but as a moral obligation. The ethical framework encourages businesses to embed sustainability into their strategy, governance, and stakeholder engagement. As firms internalize principles of fairness, responsibility, and care for the earth, their long-term commitment to environmental practices strengthens, improving reputation, stakeholder trust, and competitive advantage. The alignment of business objectives with ethical values leads to more resilient and sustainable operations.

Key Findings

This study found that Sharia-compliant crowdfunding platforms are effective in attracting investors who prioritize ethical and religious values. These platforms create a sense of trust and moral responsibility among investors, especially in regions where ethical finance is culturally significant. Green startups that utilize these platforms are better able to connect with communities that support sustainability, allowing them to build strong relationships and gain social legitimacy.

Strengths and Weaknesses

One of the strengths of Sharia-compliant crowdfunding is its high level of transparency and clear contractual frameworks. These platforms emphasize fairness in profit-sharing and accountability, which helps build community trust. They also promote inclusive participation and align closely with the values of environmental and social responsibility. However, there are notable weaknesses, particularly the limited awareness and understanding of Sharia financial principles among early-stage entrepreneurs. Many startups may find the contractual structures complex or unfamiliar, and the reach of these platforms is often limited by geographic and regulatory constraints.

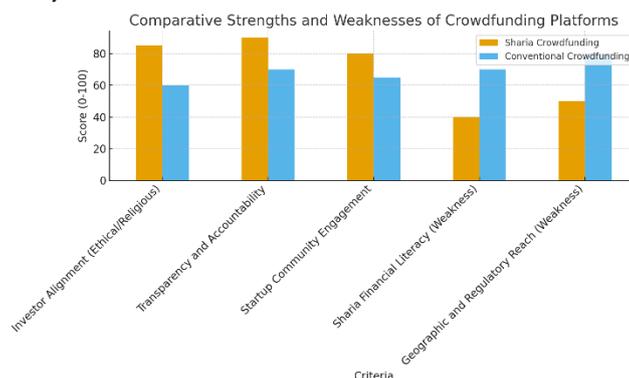


Figure 2. Comparative Strengths and Weaknesses of Crowdfunding Platforms

Chart explanation: a.) This chart compares five key aspects between Sharia-compliant crowdfunding platforms and conventional crowdfunding. b.) Sharia-compliant crowdfunding excels in investor alignment, transparency, and community engagement. c.) However, its weaknesses lie in low Sharia financial literacy and limited regional reach. d.) Conversely, conventional platforms have broader reach but lack ethical engagement and transparency.

Role of Government and Financial Institutions

To maximize the potential of Sharia-compliant crowdfunding, government support is essential. Regulatory frameworks should be established or strengthened to facilitate ethical investment while ensuring financial security. In addition, education and training on Islamic finance and digital tools can empower more startups and investors to participate effectively. Financial institutions can support this ecosystem by providing mentoring, verification mechanisms, and technological infrastructure, which will enhance trust and encourage broader use of ethical crowdfunding in financing green innovation.

5. Comparison

A comparison between Sharia-compliant and conventional crowdfunding platforms highlights several fundamental differences in principles, operations, and investor engagement. Sharia crowdfunding is grounded in Islamic ethical finance, prohibiting interest and speculation, and operates based on risk-sharing contracts such as *mudharabah* and *musyarakah*. This model is designed to attract investors with ethical and religious motivations and emphasizes transparency and clear contractual agreements.

In contrast, conventional crowdfunding is typically driven by profit motives and serves a broader investor base. It offers more diverse funding models, including equity investments, debt-based financing, and donation or reward systems. Transparency levels vary widely depending on the platform's governance, and public trust is often influenced by brand reputation rather than ethical alignment.

Table 1. below summarizes the key differences.

Aspect	Sharia-Compliant Crowdfunding	Conventional Crowdfunding
Basic Principle	Based on Sharia principles (no interest, no speculation)	Profit-oriented, not bound by religious principles
Investor Target	Ethically and religiously motivated investors	General public, wider target group
Contract Mechanism	Uses <i>mudharabah</i> , <i>musarakah</i> , and <i>wakalah</i>	Uses investment, lending, donation, or reward models
Transparency Level	High; requires clear contracts and accountability	Varies; depends on platform structure and policies
Public Trust	High among Muslim communities due to religious alignment	Depends on platform reputation and track record

This comparison shows that while both models aim to facilitate capital access, Sharia-compliant crowdfunding integrates financial ethics and religious values, offering a niche yet growing alternative especially for sustainable and community-oriented ventures.

6. Conclusion

Sharia-compliant crowdfunding platforms play a significant role as ethical financial innovations to support green startups, especially in developing countries with predominantly Muslim populations. These platforms provide a financing alternative that aligns with religious values and sustainability goals, enabling startups to access capital through transparent and trust-based mechanisms. By bridging the gap between ethical investing and environmental responsibility, they contribute meaningfully to the development of a green economy.

To maximize the potential of Sharia-based crowdfunding in supporting sustainable entrepreneurship, several key actions are recommended. First, there is a need to enhance financial literacy, particularly in Islamic finance, among startup founders and prospective investors. This will help improve understanding, trust, and participation in Sharia-compliant funding platforms. Second, policymakers should provide regulatory support that integrates Islamic crowdfunding into national green economy agendas. Clear legal frameworks and incentives can encourage broader adoption and innovation. Lastly, strong cross-sector collaboration among crowdfunding platforms, startups, and academic institutions is essential to expand outreach, strengthen impact, and promote a sustainable and ethically grounded startup ecosystem.

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