

Developing an Integrative Fintech Model for Productive Waqf Management: A Case Study of LMI Surabaya

Agung Wijayanto¹, Basar Dikuraisyin²

¹Program Studi Ekonomi Syariah, Pascasarjana Universitas Islam Negeri Sunan Ampel Surabaya, Indonesia

²Program Manajemen Zakat dan Wakaf, Fakultas Ekonomi dan Bisnis Islam, Universitas Islam Negeri Sunan Ampel Surabaya, Indonesia

ABSTRACT

This study addresses the challenges of idle waqf assets and the continued reliance on conventional waqf management practices, which limit transparency, efficiency and public participation. To address these issues, the Infak and Sedekah Management Institution (LMI) Surabaya has undertaken a digital transformation through Sharia-compliant financial technology (fintech). This study aims to examine the transformation process and develop an Integrative Sharia Fintech Model for productive waqf management. Using a qualitative case study approach, data were collected through in-depth interviews, institutional documents, and digital platform observations, and analyzed through data reduction, display, interpretation, and conclusion drawing. The findings show that productive waqf management has been digitally transformed through the integration of platforms such as wakafo.org and lmizakat.org for fundraising, recording, management, monitoring, and reporting activities. This transformation improves operational efficiency, expands waqif participation, and enhances transparency and accountability. The study contributes by developing an Integrative Sharia Fintech Model consisting of three interconnected dimensions: Digital Technology Infrastructure, Waqf Governance and Institutional Management, and Sharia and Regulatory Compliance. The interaction among these dimensions creates an integrated productive *waqf* ecosystem that strengthens trust, participation, efficiency, and sustainability. The model extends the literature on Islamic social finance by providing a comprehensive framework for digital productive waqf management.

ARTICLE HISTORY

Received 06 June 2026

Revised 15 June 2026

Accepted 29 June 2026

KEYWORDS

Productive Waqf, Fintech, Instrument Integration, Management

SUBJECTS

Economy, Islamic Filantropy, Islamic Economy

CORRESPONDING AUTHOR Agung Wijayanto author.email@institution.ac.id Program Studi Ekonomi Syariah, Pascasarjana Universitas Islam Negeri Sunan Ampel Surabaya, Indonesia.

© Year The Author(s). Published by [Public Power Publisher].

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

1. Introduction

Previous studies have highlighted the growing role of financial technology in supporting Islamic social finance and waqf management. Research on fintech and productive waqf has demonstrated the potential of digital platforms to facilitate fundraising, expand donor participation, and improve financial inclusion. Similarly, studies on waqf crowdfunding have emphasized the effectiveness of technology-based fundraising mechanisms in mobilizing public contributions for social and productive projects (Udeagha & Muchapondwa, 2023). Meanwhile, governance-oriented studies have focused on enhancing transparency, accountability, and institutional performance in waqf management through better organizational practices and regulatory oversight.

Despite these contributions, the existing literature remains fragmented in three important respects. First, studies on fintech and waqf primarily focus on fundraising efficiency and digital adoption, with limited attention to how technology can be integrated into the broader governance and management of productive waqf assets (Darmansyah et al., 2021). Second, governance studies emphasize accountability and transparency but rarely consider the role of fintech as a strategic governance mechanism (Siddik et al., 2023). Third, research on Sharia-compliant fintech generally discusses regulatory and compliance issues separately from the operational management of productive waqf institutions (Manser Payne et al., 2021). As a result, digital infrastructure, governance mechanisms, and Sharia-regulatory compliance continue to be examined as separate domains rather than as components of a unified management framework.

Accordingly, a significant research gap remains regarding how these dimensions can be integrated into a comprehensive model for productive waqf management (Banna et al., 2021). To the best of our knowledge, empirical studies that systematically explain the interaction between digital technology infrastructure, institutional governance, and Sharia-regulatory compliance within a single productive waqf management framework are still limited (Faccia & Petratos, 2021).

This study addresses this gap by developing an Integrative Sharia Fintech Model based on the digital transformation experience of LMI Surabaya. The novelty of this study lies in its integration of three interrelated dimensions: (1) Digital Technology Infrastructure, which supports fundraising, recording, monitoring, and reporting processes; (2) Waqf Governance and Institutional Management, which ensures effective collection, management, supervision, and accountability; and (3) Sharia and Regulatory Compliance, which guarantees conformity with Islamic principles and waqf regulations (Soni et al., 2022). Unlike previous studies that examine these dimensions independently, this study explains their interrelationships within a single productive waqf management ecosystem.

The study contributes to the literature on Islamic social finance in three ways. First, it extends existing fintech-waqf research by proposing a holistic framework that integrates

technological, institutional, and regulatory dimensions. Second, it provides empirical evidence from the implementation of digital waqf management at LMI Surabaya, thereby enriching the limited body of evidence-based studies in this field. Third, it offers a practical model that can be adapted by waqf institutions seeking to strengthen transparency, accountability, stakeholder participation, operational efficiency, and the sustainability of productive waqf assets.

2. Methods

This study employed a qualitative single-case study design to explore the digital transformation of productive waqf management and the development of an Integrative Sharia Fintech Model at LMI Surabaya. A case study approach was considered appropriate because it enables an in-depth understanding of complex organizational processes within their real-life context. Data were collected through semi-structured interviews, institutional documentation, and observations of digital platforms used in waqf management. The study involved 10 informants selected through purposive sampling (Kartikawati, 2024). The informants consisted of LMI executives, waqf management officers, digital platform administrators, and strategic partners directly involved in productive waqf collection, management, monitoring, and reporting processes.

The inclusion criteria required participants to have at least one year of experience in productive waqf management or fintech implementation within LMI and to be directly involved in decision-making or operational activities. Individuals without direct involvement in productive waqf programs or digital platform operations were excluded from the study. Data collection continued until theoretical saturation was achieved, indicated by the absence of new themes, categories, or insights emerging from subsequent interviews. To enhance credibility, interview findings were triangulated with institutional reports, financial documents, operational guidelines, and digital platform records (Tewksbury, 2012).

Ethical considerations were strictly observed throughout the research process. All participants were informed about the purpose of the study and voluntarily agreed to participate. Informed consent was obtained prior to the interviews. Participant confidentiality and anonymity were maintained by removing identifying information from transcripts and research reports. All collected data were used solely for academic purposes. Data analysis followed the interactive model of Miles, Huberman, and Saldaña, consisting of data condensation, data display, conclusion drawing, and verification (Allsop et al., 2022). This analytical process enabled the identification of key themes and the formulation of the Integrative Sharia Fintech Model for productive waqf management.

Table 1. Development of the Integrative Sharia Fintech Model

Sample Codes	Categories	Model Dimensions
--------------	------------	------------------

Online fundraising, digital payment gateway, crowdfunding platform	Digital fundraising system	Digital Technology Infrastructure
Digital database, automated recording, monitoring dashboard	Digital information management	Digital Technology Infrastructure
Asset supervision, stakeholder engagement, accountability reporting	Governance mechanisms	Waqf Governance and Institutional Management
Fund management, project evaluation, institutional control	Management practices	Waqf Governance and Institutional Management
Sharia screening, compliance monitoring, regulatory adherence	Compliance mechanisms	Sharia-Regulatory Compliance
Institutional oversight, legal conformity	Regulatory governance	Sharia-Regulatory Compliance

3. Results and Discussion

3.1. The Implementation of Fintech in Waqf Fundraising

The empirical findings indicate that the implementation of fintech in productive waqf management at LMI extends beyond the digitalization of fundraising activities. Data obtained from interviews, institutional documents, and platform observations reveal three interconnected dimensions that collectively support productive waqf management: digital technology infrastructure, governance and accountability mechanisms, and Sharia-regulatory compliance. These dimensions emerged consistently throughout the coding and categorization process and subsequently formed the basis for the development of the Integrative Sharia Fintech Model.

The first category emerging from the analysis concerns digital accessibility and fundraising efficiency. Informants consistently emphasized that the presence of Wakafo.org has significantly simplified the waqf payment process by allowing donors to contribute through multiple digital payment channels, including QRIS, GoPay, ShopeePay, online banking, and virtual accounts. According to one informant: “The existence of Wakafo.org makes waqf payments easier because donors can contribute anytime and anywhere without having to visit the institution directly” (Khomarudin, 2026).

Platform observations support this finding. Wakafo.org functions not only as a fundraising platform but also as an integrated transaction system that provides information regarding waqf programs, fundraising targets, and donation progress. The availability of these digital features has reduced procedural barriers that previously limited public participation in productive waqf programs. This finding suggests that fintech adoption enhances fundraising accessibility and facilitates broader community involvement in waqf activities. A second category identified from the data relates to transparency and accountability. Analysis of institutional documents and platform features shows that fundraising statistics, donor participation, and transaction updates are displayed in real time. The public availability of this information enables donors to monitor fundraising developments and increases institutional transparency. One participant

explained: “The transparency provided through the digital dashboard increases public confidence because donors can directly monitor fundraising developments” (Afianto, 2026)

Further evidence of accountability is reflected in the donation confirmation mechanism. Every donor is required to submit proof of payment before transactions are validated within the system. Informants described this procedure as an important governance mechanism that minimizes reporting discrepancies and strengthens financial accountability. As noted by an informant: “Every donation must be verified before being recorded in the system. This process helps us maintain accountability and avoid discrepancies in financial reporting” (Marsiono, 2026).

These findings indicate that fintech functions not merely as a fundraising tool but also as a governance instrument that strengthens reporting accuracy, monitoring, and institutional accountability. The analysis further reveals the importance of Sharia and regulatory compliance in sustaining public trust. Documentary evidence demonstrates that the platform operates under the legal framework established by the Indonesian Waqf Board, the Ministry of Religious Affairs, and other relevant authorities. Informants repeatedly emphasized that technological convenience alone is insufficient to attract public participation without clear institutional legitimacy and compliance with Islamic principles. As stated by one participant: “Technology can facilitate transactions, but public trust ultimately depends on whether the institution operates according to Sharia principles and legal regulations” (Suwandi, 2026).

In addition, LMI has implemented personal data protection and privacy policies governing the collection and use of donor information. This finding suggests that fintech implementation encompasses not only transaction efficiency but also responsible data governance, regulatory adherence, and compliance with Sharia principles. Such mechanisms contribute to enhancing institutional credibility and strengthening donor confidence in digital waqf transactions.

The integration of these findings demonstrates that productive waqf management at LMI is supported by a mutually reinforcing relationship between technological infrastructure, governance mechanisms, and Sharia-regulatory compliance. Digital technology improves fundraising accessibility and operational efficiency; governance mechanisms ensure transparency, accountability, and effective management; while Sharia-regulatory compliance provides legitimacy and strengthens public trust. The interaction among these dimensions creates a comprehensive productive waqf ecosystem capable of enhancing participation, transparency, accountability, efficiency, and sustainability.

Based on these empirical findings, this study develops an Integrative Sharia Fintech Model for productive waqf management. The model explains that successful digital transformation in waqf institutions cannot rely solely on technological innovation. Rather, sustainable productive waqf management requires the simultaneous integration of digital technology infrastructure, institutional governance, and Sharia-regulatory compliance

within a unified management framework. This finding extends the existing literature by providing empirical evidence that these dimensions operate synergistically to support effective and sustainable productive waqf management.

Table 2. Categories Emerging from Empirical Findings

Categories	Empirical Evidence	Contribution
Digital accessibility and fundraising efficiency	Digital payment channels, online fundraising platform, donor convenience	Digital Technology Infrastructure
Transparency and accountability	Real-time dashboard, donation verification, reporting system	Governance and Institutional Management
Institutional legitimacy and compliance	Legal authorization, Sharia compliance, privacy policy	Sharia-Regulatory Compliance
Stakeholder trust and participation	Increased donor confidence and engagement	Model Outcomes

Source. waqf distribution report data (2025)

3.2. Fintech-Based Waqf Fundraising Strategies

The LMI digital platform demonstrates that a waqf fundraising strategy is built from the ground up by fostering trust among waqf donors in the fundraising channels used. This trust does not arise spontaneously, but is cultivated through a simple platform interface, easy access, and the availability of fundraising information that is openly accessible to the public. In the context of relationship marketing, this is crucial because a strong relationship between the institution and the wakif always begins with a sense of security and confidence that the funds contributed will be managed properly. Wakafo.org, as LMI's wakaf payment platform, demonstrates that digital fundraising is designed to create a wakaf experience that is both practical and reassuring.

The relational communication strategy implemented by the wakaf management institution at LMI is built through a personal, educational, and sustainable approach. Communication is not limited to the fundraising process but is maintained even after the wakif has fulfilled their wakaf obligation. This approach is realized through periodic reports, updates on program progress, in-person visits, digital communication, and consultative services that allow donors to openly access information regarding wakaf management. (Suwandi, 2026)

Based on field observations, relational communication is also evident in how the institution educates the public about the urgency of productive wakaf. Education is conducted through social media, study forums, seminars, and interpersonal communication. This strategy demonstrates that waqf fundraising cannot rely solely on administrative promotion but requires a continuous process of social and spiritual awareness. The better the quality of communication established, the greater the likelihood of fostering donor loyalty. One informant explained that communication with donors is

maintained consistently to ensure the relationship remains strong even after the waqf process is complete. The informant stated: “We don’t just contact donors when there’s a fundraising campaign. After the endowment is made, we continue to provide program progress reports, send documentation, and sometimes even visit them in person so that donors feel close to the institution.” (Pamungkas, 2026)

Relational communication in endowment fundraising has three main dimensions. First, the informative dimension, which involves communication that conveys reports, programs, and updates on waqf management. Second, the emotional dimension, which builds personal closeness and a sense of ownership toward the waqf program. Third, the participatory dimension, which provides opportunities for the waqf donor to engage in the institution’s activities. These three dimensions are interrelated in fostering long-term relationships between the institution and the waqf donor. Informative communication fosters transparency, emotional communication builds closeness, while participatory communication enhances the wakif’s social engagement. If all three operate simultaneously, waqf fundraising will be more stable and sustainable. (Khomarudin, 2026)

Wakif loyalty at LMI is built through a combination of service quality, management transparency, relational communication, and the success of productive waqf programs whose benefits are felt by the community. Donors who are satisfied with waqf management tend to have a higher commitment to continue channeling their waqf through the same institution. In fact, some donors not only make repeated donations but also recommend the institution to their families and social networks. Researchers found that donor loyalty is not formed instantly but through a process of long-term relationships built consistently. In relationship marketing theory, loyalty is the result of trust and commitment maintained through continuous interaction between the institution and the wakif. The higher the level of trust a wakif has in the institution, the greater the likelihood of long-term loyalty forming.

In practice, waqf management institutions strive to maintain wakif loyalty by providing responsive and communicative service. (Suwandi, 2026) Donors are given access to information regarding program developments, reports on the distribution of waqf benefits, and documentation of empowerment activities. This strategy fosters a sense of involvement so that donors do not feel they are merely handing over funds, but are also part of the social empowerment process carried out by the institution. One informant explained that donor loyalty is greatly influenced by the institution’s ability to maintain personal relationships with donors. He stated:

A well-maintained relationship between the institution and the waqf donor typically encourages the donor to continue contributing to the waqf on an ongoing basis. When services are provided in a friendly, open, and professional manner, a sense of comfort and trust in the institution develops. This situation even motivates some donors to invite their family members or close friends to participate in the waqf because they have experienced satisfaction with the services and management provided by the institution.

This quote indicates that donor loyalty has a relational attachment dimension. The closeness of the personal relationship between the institution and the donor creates a sense of comfort and emotional attachment that drives the continuity of waqf participation. From a relationship marketing perspective, this indicates that loyalty is built not only through rational aspects but also through sustained emotional connections. The researchers also found that the success of productive waqf programs is a key factor in enhancing waqf donors' loyalty. Programs that deliver tangible benefits to the community reinforce donors' belief that the waqf they have entrusted truly provides social and economic benefits. The greater the impact felt by the community, the higher the level of donor satisfaction with the waqf management institution.(Afianto, 2026)

Additionally, researchers found that the transparency of waqf management reports has a significant influence on the sustainability of waqf donors' loyalty. Reports presented on a regular basis create a sense of security and reinforce the belief that the institution manages the trust professionally. This transparency also serves as a form of the institution's moral accountability to the community. Efforts to maintain waqf donors' loyalty are carried out through the provision of reports that are regular, open, and easily understood by the community. "When wakifs receive detailed information regarding program developments, fund usage, and achieved results, their level of trust in the institution grows stronger, leading them to maintain their participation in the waqf program."

Wakif loyalty is closely tied to institutional credibility. Trust in the institution's professionalism strengthens long-term relationships and encourages wakifs to remain engaged in productive waqf programs. In relationship marketing theory, transparency is a crucial component of efforts to maintain customer retention. This study also found that donor loyalty manifests as advocacy behavior. Loyal donors not only make repeated endowment contributions but also serve as informal promotional agents for the institution. They recommend endowment programs to family, friends, and their social communities. This phenomenon demonstrates that loyalty generates a multiplier effect on endowment fundraising.(Khomarudin, 2026)

In the context of productive waqf fundraising, advocacy behavior has strategic implications because personal recommendations tend to be more trusted by the public than formal institutional promotions. Thus, waqf donors' loyalty indirectly functions as a social marketing tool that expands the waqf fundraising network. These findings also indicate that modern waqf institutions need to shift their fundraising orientation from merely collecting funds toward building long-term relationships with waqf donors. Loyalty cannot be built through fleeting promotions but requires consistent service and the sustained strengthening of social relationships.

Donor loyalty serves as a vital social capital in the development of productive endowments. Strong loyalty enhances the sustainability of fundraising, expands the network of community participation, and strengthens the legitimacy of endowment

management institutions within the community. Therefore, managing donor loyalty must be positioned as a key strategy in the development of relationship marketing for productive endowments.

3.3. Development of the Integrative Sharia Fintech Model

The findings indicate that the integration of fintech in productive waqf management extends beyond the digitalization of fundraising activities. Through the coding, categorization, and thematic analysis of interview data, institutional documents, and platform observations, three interrelated dimensions consistently emerged: Digital Technology Infrastructure, Waqf Governance and Institutional Management, and Sharia-Regulatory Compliance. These dimensions collectively form the foundation of the Integrative Sharia Fintech Model proposed in this study.

The first dimension, Digital Technology Infrastructure, emerged from categories related to digital fundraising accessibility, transaction convenience, real-time monitoring, integrated payment systems, donor databases, and automated reporting mechanisms. Informants consistently emphasized that digital platforms such as Wakafo.org enable waqf transactions to be conducted more efficiently, transparently, and without geographical constraints (Pamungkas, 2026). The integration of multiple payment channels and digital reporting systems reduces procedural barriers and encourages broader participation in productive waqf programs.

The second dimension, Waqf Governance and Institutional Management, emerged from categories associated with accountability, transaction verification, stakeholder engagement, reporting systems, and relationship management. The findings reveal that fintech not only facilitates transactions but also strengthens institutional governance through improved documentation, monitoring, and communication with donors. Digital systems enable waqf institutions to maintain continuous engagement with wakif through personalized communication, project updates, and transparent reporting (Suwandi, 2026). As a result, fintech functions as an instrument for strengthening trust, loyalty, and long-term donor relationships.

The third dimension, Sharia-Regulatory Compliance, emerged from categories related to institutional legitimacy, regulatory adherence, Sharia compliance, and data governance. The findings demonstrate that technological innovation alone is insufficient to sustain public participation in waqf programs. Instead, donor trust depends on the institution's ability to ensure compliance with Islamic principles, legal regulations, and ethical standards governing digital financial transactions. The presence of formal institutional authorization, compliance procedures, and privacy protection mechanisms enhances the credibility and legitimacy of digital waqf management.

The analysis further reveals that these three dimensions are mutually reinforcing rather than operating independently. Digital Technology Infrastructure enhances operational efficiency and accessibility; Waqf Governance and Institutional Management

ensure transparency, accountability, and stakeholder engagement; while Sharia-Regulatory Compliance provides legitimacy, trust, and institutional credibility (Marsiono, 2026). The interaction among these dimensions creates an integrated productive waqf ecosystem that supports sustainable fundraising, effective asset management, and stronger public participation.

Based on these empirical findings, this study develops the Integrative Sharia Fintech Model for Productive Waqf Management. Unlike previous studies that examine fintech adoption, governance mechanisms, or Sharia compliance separately, the proposed model demonstrates how these dimensions interact within a unified framework. The model suggests that successful digital transformation in waqf institutions depends not merely on technological innovation but on the simultaneous integration of digital infrastructure, governance mechanisms, and Sharia-regulatory compliance.

4. Discussion

4.1. Theoretical Implications of the Integrative Sharia Fintech Model

The findings of this study extend Relationship Marketing Theory by demonstrating that fintech serves not merely as a transactional technology but as a relational infrastructure that facilitates long-term engagement between waqf institutions and wakif. Berry's Relationship Marketing Theory emphasizes the importance of attracting, maintaining, and enhancing customer relationships through service quality and sustained interaction (Umam et al., 2024). The present study shows that digital platforms such as Wakafo.org enable waqf institutions to move beyond one-time fundraising activities toward continuous relationship building through real-time reporting, transaction transparency, personalized communication, and donor engagement mechanisms (Nugroho et al., 2020). Consequently, relationship marketing in productive waqf management is no longer dependent on face-to-face interactions but can be institutionalized through digital systems that continuously connect wakif and waqf institutions (Suhairi et al., 2021).

The findings also contribute to Commitment-Trust Theory proposed by Morgan and Hunt. While the theory identifies trust and commitment as the primary determinants of relationship success, this study demonstrates how fintech functions as an enabling mechanism for generating both variables within the context of Islamic philanthropy (Umam et al., 2024). The empirical evidence suggests that transparency, transaction verification, reporting systems, and compliance mechanisms strengthen donor trust, while continuous communication, program updates, and personalized engagement foster relationship commitment. More importantly, the findings indicate that trust alone is insufficient to sustain donor participation (Laila et al., 2023). Rather, trust must be transformed into commitment through ongoing interaction and institutional responsiveness. This finding enriches Commitment-Trust Theory by explaining how digital technologies facilitate the transition from trust formation to long-term commitment in waqf relationships.

The study further contributes to the fintech governance literature. Existing fintech research primarily focuses on technological adoption, transaction efficiency, and financial inclusion (Nofianti et al., 2024). However, the findings reveal that successful fintech implementation in productive waqf management depends on the integration of technological infrastructure, governance mechanisms, and compliance systems (Firdaus et al., 2022). The results demonstrate that fintech governance extends beyond digital payment facilities to include accountability frameworks, transaction verification procedures, donor data protection, transparency mechanisms, and institutional oversight (Hakim & Nawawi, 2024). Therefore, this study proposes that fintech governance in Islamic social finance should be understood as a multidimensional governance system rather than merely a technological innovation process.

In addition, the findings contribute to the literature on productive waqf management (Gultom & Mihajat, 2024). Previous studies generally discuss waqf digitalization, crowdfunding, governance, or Sharia compliance as separate issues. The present study demonstrates that sustainable productive waqf management emerges from the interaction of these dimensions rather than from any single factor. The proposed Integrative Sharia Fintech Model explains how Digital Technology Infrastructure, Waqf Governance and Institutional Management, and Sharia-Regulatory Compliance operate synergistically to enhance transparency, accountability, participation, efficiency, and sustainability. This finding provides a more comprehensive explanation of productive waqf management than existing models that focus primarily on fundraising effectiveness or governance performance.

Taken together, these findings suggest that the digital transformation of waqf institutions should not be viewed solely as technological modernization. Instead, fintech serves as a strategic mechanism that strengthens institutional governance, reinforces trust and commitment, and creates a sustainable ecosystem for productive waqf management. Accordingly, the Integrative Sharia Fintech Model developed in this study offers both a theoretical extension to existing literature and a practical framework for waqf institutions seeking to implement sustainable digital transformation strategies.

4.2. Governance Implications of Fintech-Based Productive Waqf

Beyond its role as a fundraising and relationship-building mechanism, the findings demonstrate that fintech has important governance implications for productive waqf management (Rofiq et al., 2025). The empirical evidence indicates that digital platforms such as Wakaf.org contribute to greater transparency, accountability, stakeholder participation, and institutional legitimacy by transforming how information is generated, disclosed, and monitored within waqf institutions.

The findings reveal that fintech enhances transparency by enabling real-time access to fundraising information, donation records, program updates, and reporting mechanisms. Unlike conventional waqf management systems, where information is often available only

through periodic reports, digital platforms allow stakeholders to monitor fundraising performance and program implementation continuously (Ascarya et al., 2020). This reduces information asymmetry between waqf managers (nadzir) and wakif, thereby strengthening public confidence in institutional operations. Transparency is therefore not merely an administrative practice but becomes embedded within the digital infrastructure itself.

The findings also demonstrate that fintech strengthens accountability mechanisms. Features such as transaction verification, digital documentation, automated recording systems, and donor confirmation procedures create auditable transaction trails that improve financial oversight. Every donation can be tracked, verified, and reconciled through the digital system, reducing the risk of reporting errors and increasing institutional responsibility (Faujiah, 2025). In this context, fintech functions as a governance instrument that supports accountability through systematic documentation and monitoring processes.

Another important governance implication concerns stakeholder participation. The digitalization of waqf management enables donors to move beyond their traditional role as passive contributors (Riduwan & Aristyanto, 2025). Through access to project updates, fundraising dashboards, and digital communication channels, wakif are able to monitor institutional performance and remain actively engaged in productive waqf programs (Wijaya, 2023). This finding suggests that fintech contributes to participatory governance by facilitating continuous interaction between waqf institutions and stakeholders.

Furthermore, the findings highlight the role of fintech in strengthening institutional legitimacy. The integration of legal compliance, Sharia supervision, privacy protection policies, and digital governance procedures increases stakeholder confidence that waqf funds are managed according to regulatory and ethical standards. Institutional legitimacy is particularly important in productive waqf management because public trust depends not only on religious commitment but also on the perceived integrity and professionalism of the managing institution (Maulida & Laila, 2024).

These findings contribute to the emerging literature on fintech governance by demonstrating that digital technologies should not be viewed solely as operational tools. Rather, fintech constitutes a governance infrastructure that supports transparency, accountability, participation, and institutional legitimacy. The proposed Integrative Sharia Fintech Model therefore extends existing governance perspectives by illustrating how technological infrastructure, governance mechanisms, and Sharia-regulatory compliance operate together to create a more transparent and accountable productive waqf ecosystem.

From a public governance perspective, the study suggests that waqf institutions can strengthen their governance capacity through the strategic integration of fintech. Digital transformation enables institutions not only to increase fundraising efficiency but also to improve public oversight, stakeholder engagement, and institutional accountability.

Consequently, fintech should be understood as a mechanism for governance innovation that contributes to the sustainability and credibility of Islamic social finance institutions.

5. Conclusion

This study examined the digital transformation of productive waqf management at LMI Surabaya and developed an Integrative Sharia Fintech Model based on empirical evidence. The findings indicate that fintech integration has transformed productive waqf management from a conventional system into a more transparent, accountable, and participatory digital ecosystem. The proposed model consists of three interconnected dimensions: Digital Technology Infrastructure, Waqf Governance and Institutional Management, and Sharia-Regulatory Compliance. The interaction among these dimensions enhances fundraising accessibility, operational efficiency, stakeholder engagement, institutional legitimacy, and the sustainability of productive waqf assets. The study contributes to the literature by extending Relationship Marketing Theory, Commitment-Trust Theory, fintech governance, and productive waqf management literature through an integrated framework that explains how digital technology, governance mechanisms, and compliance systems operate synergistically within productive waqf institutions.

From a practical perspective, the proposed model provides guidance for waqf institutions seeking to strengthen transparency, accountability, stakeholder trust, and sustainable waqf management through digital transformation. Nevertheless, this study is limited to a single qualitative case study of LMI Surabaya, which may restrict the generalizability of the findings. Future research may validate the proposed model using quantitative approaches, conduct comparative studies across different waqf institutions, or examine its applicability in other Islamic social finance organizations and national contexts.

6. Declaration

6.1. Ethical Considerations

“This manuscript adheres to the journal's publication ethics”.

6.2. Use of Artificial Intelligence (AI)

“The author declares that no generative artificial intelligence (AI) tools were used in the preparation, analysis, or writing of this manuscript.”

6.3. Conflict of Interest

“The authors declare no conflict of interest”.

6.4. Funding

“This research received no financial support”.

6.5 Data Availability Statement

“The data that support the findings of this study are available from the corresponding author upon reasonable request”.

7. References

Journal Article with DOI

- Allsop, D. B., Chelladurai, J. M., Kimball, E. R., Marks, L. D., & Hendricks, J. J. (2022). "Qualitative Methods with Nvivo Software: A Practical Guide for Analyzing Qualitative Data". *Jurnal Psych*, 4(2): 142–159. doi: 10.3390/psych4020013
- Ascarya, Sukmana, R., & Hosen, M. N. (2020). "Integrated social and productive awqaf in Indonesia". *Awqaf-Led Islamic Social Finance* 10(2): 245–259. doi: 10.4324/9780429356575-23
- Banna, H., Kabir Hassan, M., & Rashid, M. (2021). "Fintech-based financial inclusion and bank risk-taking: Evidence from OIC countries". *Journal of International Financial Markets, Institutions and Money* 12(1): 75. doi:10.1016/j.intfin.2021.101447
- Darmansyah, Fianto, B. A., Hendratmi, A., & Aziz, P. F. (2021). "Factors determining behavioral intentions to use Islamic financial technology: Three competing models". *Journal of Islamic Marketing* 12(4): 794–812. doi: 10.1108/JIMA-12-2019-0252
- Faccia, A., & Petratos, P. (2021). "Blockchain, enterprise resource planning (ERP) and accounting information systems (AIS): Research on e-procurement and system integration". *Applied Sciences (Switzerland)*, 11(15): 1115. doi: 10.3390/app11156792
- Firdaus, M. I., Pradhana, T. A., & Anhar, Z. Y. (2022). "Distribution of Cash Waqf with Debt and Receivable Mechanisms Perspective of Islamic Law and Positive Law". In *Al-Insyiroh: Jurnal Studi Keislaman* 8(2): 37–56. doi: 10.35309/alinsyiroh.v8i2.5682
- Gultom, M. S., & Mihajat, M. I. S. (2024). "Cash Waqf Linked Deposit: A Proposed Waqf Model for Education Program and Poverty Alleviation in Indonesia. In *Contributions to Management Science* 32(9): 313–325. doi: 10.1007/978-3-031-61778-2_17
- Hakim, L., & Nawawi, K. (2024). "Finding Solutions to Productive Waqf Management Problems: A Case in Indonesia". *International Journal of Waqf* 4(1). doi: 10.58968/ijw.v4i1.508
- Laila, N., Ratnasari, R. T., Ismail, S., Mohd Hidzir, P. A., & Mahphoth, M. H. (2023). "The intention of small and medium enterprises' owners to participate in waqf: the case of Malaysia and Indonesia". *International Journal of Islamic and Middle Eastern Finance and Management* 16(3): 429–447. doi: 10.1108/IMEFM-01-2022-0014
- Manser Payne, E. H., Dahl, A. J., & Peltier, J. (2021). "Digital servitization value co-creation framework for AI services: a research agenda for digital transformation in financial service ecosystems". *Journal of Research in Interactive Marketing*, 15(2): 200–222. doi: 10.1108/JRIM-12-2020-0252
- Maulida, S., & Laila, N. (2024). "Measuring the Productivity of Indonesia Waqf Institution (2015-2021): A Malmquist Index". *International Journal of Waqf* 3(1): 89. doi: 10.58968/ijw.v3i1.348
- Nofianti, L., Mukhlisin, M., & Irfan, A. (2024). "Cash waqf innovation in Islamic financial institutions and its governance issues, case studies: Indonesia, Malaysia, Türkiye". *Journal of Islamic Accounting and Business Research* 13(2): 12-13. doi:

10.1108/JIABR-12-2023-0420

- Nugroho, L., Doktoralina, C. M., Indriawati, F., Safira, S., & Yahaya, S. (2020). "Microeconomics and tawhid string relation concept (TSR). *International Journal of Economics and Business Administration* 8 (3): 293–306. doi: 10.35808/ijeba/516
- Rofiq, M. A., Fathoni, J., & Barnamij, N. (2025). "Optimizing Zakat and Waqf through Digital Innovation in the Framework of Maqashid Syariah: A Solution for Poverty Alleviation in Indonesia". *Dialektika: Jurnal Ekonomi Dan Ilmu Sosial* 10(2): 360–368. doi: 10.36636/dialektika.v10i2.6939
- Siddik, A. B., Rahman, M. N., & Yong, L. (2023). "Do fintech adoption and Financial Literacy Improve Corporate Sustainability Performance? The Mediating Role of Access to Finance. *Journal of Cleaner Production* 42(1): 20-23. doi: 10.1016/j.jclepro.2023.137658
- Soni, G., Kumar, S., Mahto, R. V., Mangla, S. K., Mittal, M. L., & Lim, W. M. (2022). "A decision-making framework for Industry 4.0 technology implementation: The case of FinTech and sustainable supply chain finance for SMEs". *Technological Forecasting and Social Change* 21(1): 180. doi: 10.1016/j.techfore.2022.121686
- Suhairi, Abror, K., Alimuddin, A., & Wahab, O. H. (2021). "Waqf Regulation: Potential and Social Problems of Mosque-Based Productive Waqf Management". *Jambe Law Journal* 4(1): 69–92. doi: 10.22437/jlj.4.1.69-92
- Tewksbury, R. (2012). "Qualitative methodology. In *Routledge Handbook of Deviant Behavior* 18(1): 75–81. doi: 10.4324/9780429479380-42
- Udeagha, M. C., & Muchapondwa, E. (2023). "Striving for the United Nations (UN) sustainable development goals (SDGs) in BRICS economies: The role of green finance, fintech, and natural resource rent". *Sustainable Development* 31(5): 3657–3672. doi.org/10.1002/sd.2618
- Umam, K., Fedro, A., Isro'i, M. I., & Ekayani, M. (2024). "Striking the balance: Fiqh Bi'ah and Productive Waqf Forests (PWFs) for sustainable forest management in Indonesia". *Journal of Islamic Accounting and Business Research* 8(2): 20-24. doi: 10.1108/JIABR-03-2024-0090
- Wijaya, R. P. (2023). Cash Waqf Linked Dinfra (Cwl-Fra) "As Waqf Innovation Model Integrated With Infrastructure Instrument for National Economic Recovery and Sustainability". *Malaysian Journal of Syariah and Law* 11(2): 330–343. doi: 10.33102/mjssl.vol11no2.422

Journal Article (No DOI)

- Faujiah, A. (2025). "Analysis of Waqf Management in The Context of Islamic Finance: A Case Study on Cash Waqf in Indonesia". *Sanjana (Jurnal Perbankan Syariah Dan Ekonomi Syariah)* 07(02) 135–149.
- Kartikawati, D. (2024). "Webtoons , a Digital Platform , to Teach Writing Descriptive Text". *Innovative: Journal Of Social Science Research* 12(4): 2911–2916.

Riduwan, & Aristyanto, E. (2025). "Digital Transformation of Waqf Management: Innovation Pathways and Policy Directions in Muslim-Majority Developing Countries". *Muslim Heritage* 10(2): 307–324.