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Synergizing Zakat, Waqf, and Islamic Fintech: A Qualitative Exploration of Women's Financial Inclusion in Indonesia

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Abstract. This study explores how the integration of Islamic fintech with zakat and waqf initiatives advances financial inclusion and women's economic empowerment in Indonesia. Using a qualitative, descriptive–exploratory design, in-depth interviews were conducted with twelve informants comprising women micro-entrepreneurs, Islamic fintech practitioners, and zakat and waqf institution officers in Yogyakarta. Thematic analysis revealed that Islamic fintech serves as an accessible and trustworthy channel for Sharia-compliant financing, enhancing women's participation in the formal economy while aligning with religious values. The synergy of fintech and Islamic social-finance instruments—particularly zakat and waqf—was found to foster transparency, accountability, and community trust, transforming social assistance into productive, empowerment-oriented initiatives. Nevertheless, challenges such as limited digital literacy, gendered social norms, and a lack of understanding of Islamic financial principles continue to constrain adoption. The findings extend maqāṣid al-Shariah and financial-inclusion frameworks by demonstrating that meaningful inclusion requires both ethical legitimacy and digital capability. Policy implications highlight the need for coordinated regulation between OJK, BWI, and BAZNAS, gender-sensitive fintech design, and targeted literacy programs. The study contributes original qualitative evidence of how faith-based digital finance can reduce inequality, promote social justice, and redefine inclusion as a moral, social, and economic process within the Indonesian Islamic finance ecosystem.

Keywords: Islamic Fintech, Zakat, Waqf, Women's Empowerment, Financial Inclusion, Indonesia

1 Intoduction

In the era of rapid technological advancement and evolving financial ecosystems, inclusive access to financial services remains a cornerstone of sustainable development. Globally, digital financial inclusion is increasingly recognized as imperative for economic empowerment, poverty alleviation, and social stability (Demirg"uç-Kunt et al., 2022). Within this context, the Islamic finance industry has emerged as a pivotal mechanism for offering ethical, value-based financial services that align with the principles of risk-sharing, asset-backed financing, and socio-economic justice (Iqbal & Mirakhor, 2023). Indonesia home to the world's largest Muslim-majority population represents a particularly significant locus for advancing inclusive Islamic finance. According to Otoritas Jasa Keuangan (OJK), by 2023 the assets of the Islamic financial services industry in Indonesia reached IDR 2,582.25 trillion, a year-on-year growth of 9.04 % (OJK, 2023). Simultaneously, national literature reports the Islamic financial inclusion rate remains at a modest 12.88 %, while Islamic financial literacy is around 39.11 % (Hidayat, 2023). These figures exemplify a profound paradox: while structural capacity and asset growth demonstrate momentum, penetration and usage within underserved segments including micro- and small-scale entrepreneurs, especially women remain limited.

The interplay between digital finance, Islamic financial instruments, and women's economic participation in Indonesia is understudied, even though each domain individually garners considerable policy and academic attention. Digital financial technologies (fintech) hold considerable promise for bridging service gaps in remote or underserved regions by lowering transaction costs and reducing traditional collateral constraints (Atina & Shofawati, 2024). Within the Islamic finance sphere, the strategic convergence of Sharia-compliance and digital platforms coined "Islamic fintech" is posited as an innovation capable of propelling inclusive growth aligned with the United Nations' Sustainable Development Goals (SDGs) (Suswanto et al., 2025). Yet the literature points to persisting obstacles: regulatory ambiguity, consumer trust deficits, low Islamic finance literacy, and gendered barriers to access (Afif & Samsuri, 2022; Amsari & Anggara, 2023).

The under-utilization of Islamic fintech by micro-enterprises particularly women-owned micro-businesses is especially salient in Indonesia. While general financial inclusion has improved (Sahputri, 2024), gender-

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disaggregated studies reveal that female-headed households have disproportionate vulnerabilities to exclusion, particularly due to digital divides and limited formal financial access (Ekaputri et al., 2025). Moreover, although research on Islamic fintech adoption is growing, much of it emphasizes macro-level quantitative adoption factors (e.g., TAM models) and neglects nuanced qualitative insights into how women-led microenterprises experience, interpret, and leverage Islamic digital finance. For instance, a systematic review by Suswanto et al. (2025) underscores that trust, Sharia-orientation, and technological readiness are critical for adoption but women-owned microbusinesses in traditional or informal sectors have been sparsely represented in those studies.

This research addresses this gap by focusing explicitly on women-owned micro-enterprises in Indonesia and their lived experiences with Islamic fintech services in the context of ZISWAF (zakat, infaq, sadaqah, waqf) fintech synergies. It explores how these digital Islamic financial mechanisms shape behavior, access to capital, and business outcomes. By doing so, the study extends existing scholarship of Islamic finance and fintech in three ways: first, by centering gendered perspectives and micro-level agency in financial inclusion; second, by interrogating how Islamic fintech functions not merely as a product but as a socio-financial empowerment ecosystem; and third, by elucidating how synergy amongst zakat-waqf-fintech modalities interacts with women's entrepreneurship in Indonesia's underserved regions.

The significance of this inquiry is both theoretical and practical. Theoretically, the study enriches the disciplines of Islamic finance, behavioral financial research, and fintech adoption by integrating qualitative evidence from the "bottom of the pyramid" segments women micro-entrepreneurs operating in rural or semi-urban Indonesian contexts. Practically, the findings have policy relevance for multiple stakeholders: regulators (OJK, KNEKS), fintech providers, zakat/waqf organisations, and women's economic empowerment programmes. Better reflecting women's financial behaviour, cultural norms, and digital literacy realities can inform more effective design of Islamic fintech products and inclusive financial frameworks. For Indonesian policy, the nexus of gender-inclusion, Sharia-compliant finance and digital innovation represents a strategic lever to reduce economic inequality and enhance the productivity of the micro-business sector.

Therefore, the purpose of this study is to explore how women micro-entrepreneurs in Indonesia experience, interpret, and mobilise Islamic fintech and ZISWAF-fintech synergies in their business activities. The study investigates (1) drivers and barriers to adoption of Islamic fintech among women-led micro-businesses; (2) how such adoption influences financial behaviour, capital access, and business performance; and (3) how ZISWAF-fintech integration shapes the empowerment trajectories of women entrepreneurs in underserved regions.

2 LITERATURE REVIEW

2.1 Conceptual Background

2.1.1 Islamic Social Finance: Zakat, Waqf and Social Instruments

Islamic social finance serves as a critical pillar within the Islamic economic system, specifically through redistributive mechanisms such as zakat and waqf. Productive zakat and cash waqf have been recognized for their substantial potential in supporting income-generating activities and the socio-economic empowerment of low-income and marginalized groups (Cizakca, 2019; Haneef et al., 2015). The transformative application of waqf, especially in its cash form, allows accumulated social capital to be invested and the returns directed toward sustainable community and micro-entrepreneur development (Cizakca, 2019).

Digital innovation, particularly through Islamic financial technology (fintech), has enhanced the outreach and transparency of zakat and waqf distribution, allowing for greater accountability and improved support for financial inclusion objectives (Alshater et al., 2022; World Bank, 2021a). As Islamic fintech platforms proliferate, they enable broader segments of the population including women micro-entrepreneurs to access Shariah-compliant products and resources, with positive implications for poverty alleviation and economic empowerment (Haneef et al., 2015; Puspita & Kassim, 2024).

Waqf has also undergone a conceptual transformation from a purely charitable endowment toward a productive social asset. In its modern or "cash waqf" form, it is increasingly viewed as an investment mechanism whose returns can finance welfare programs, education, healthcare, and micro-enterprises (Cizakca, 2019; Haneef et al., 2015). This transformation aligns with broader goals of sustainable development and inclusive growth in Muslim-majority economies.

Parallel to these institutional innovations, the rise of Islamic financial technology (Islamic FinTech or FinTech Syariah) has accelerated the digitalization of social finance systems. Islamic fintech platforms utilize blockchain, crowdfunding, and mobile payment technologies to enhance transparency, traceability, and accountability in ZISWAF management while expanding outreach to underserved populations (Alshater et al., 2022; Aydin, 2023). This digital integration supports the agenda of Islamic financial inclusion, which extends beyond conventional inclusion metrics by emphasizing access to, usage of, and satisfaction with Shariah-compliant financial services (Puspita & Kassim, 2024b; World Bank, 2021b).

Women's economic empowerment constitutes a significant dimension of this development. Within the micro-enterprise domain, empowerment is commonly reflected through increased access to financial resources, participation in decision-making, and improved business outcomes (Kabeer, 2005; Rahman & Dean, 2013). Engagement with Islamic fintech-enabled ZISWAF ecosystems can thus provide women micro-entrepreneurs with capital support, digital financial literacy, and enhanced participation in the formal economy ultimately fostering both economic inclusivity and gender equity within Islamic finance frameworks.

2.1.2 Digital Financial Inclusion and Islamic FinTech

Digital financial services (DFS) have been widely acknowledged as a catalyst for financial inclusion, promoting access to financial services among previously underserved populations (Tay et al., 2022). By leveraging digital technology, DFS can reduce transaction costs, broaden the outreach of financial institutions, and enhance the efficiency of Islamic financial product distribution (Demirg"uç-Kunt et al., 2022). The role of DFS as a driver of inclusion has become increasingly significant in parallel with the development of Islamic fintech ecosystems, especially in countries with large Muslim populations such as Indonesia.

In Islamic banking and finance research, the adoption of fintech is becoming an increasingly prominent focus, although significant gaps still exist in the existing literature. For example, the bibliometric review by Alshater et al. (2022) on Islamic fintech publications from 2017 to 2022 revealed an acceleration in scholarly output and product innovation. However, the authors note that topics such as women's inclusion, micro-enterprise development, and behavioral perspectives have yet to be explored in depth (Alshater et al., 2022).

In Indonesia, a growing body of literature explores the adoption of Islamic fintech in the context of financial inclusion, fueled by an urgent need for inclusive solutions within the Muslim community (Suswanto et al., 2025). Local research demonstrates that the presence of Islamic fintech helps break down access barriers to conventional financial services, particularly for vulnerable groups such as micro-entrepreneurs and women (Maulina et al., 2023). The support of regulations and industry collaboration further accelerates the acceptance of Islamic financial technology in various segments of society.

Furthermore, the integration of waqf concepts and financial technology—such as e-waqf—represents a rapidly emerging domain within Islamic social finance discourses (Sylvia et al., 2025). E-waqf has the potential to expand public participation in waqf management while increasing transparency and accountability in productive waqf distribution. These innovations indicate the opportunity for synergy between Islamic social finance principles and digitalization to promote equitable welfare distribution.

This conceptual foundation provides a significant starting point to further explore how Islamic social finance, digital inclusion, and women's entrepreneurship intersect—particularly in Indonesia's underserved micro-enterprise sector. Further research is required to understand mechanisms, challenges, and strategic opportunities for strengthening the Islamic fintech ecosystem to maximize its inclusive role both in economic sectors and social empowerment (Hudaefi et al., 2020). Thus, expanding the literature in this field not only enriches theory but also contributes to the development of inclusive financial policies and practices grounded in Sharia principles.

2.2 Theoretical Framework

Several theoretical lenses provide insight into how these phenomena interlink:

1. Maqāṣid al-Shariah
   The maqāṣid (objectives) of Shariah commonly described as the protection of religion (dīn), life (nafs), lineage (‘aṣabiyyah), intellect (‘aql) and wealth (māl) (Kamali, 2008) offer a normative foundation for Islamic finance. In the micro-enterprise and inclusion context, Shariah-compliance in fintech and social finance can be understood as aligning financial products with socio-economic justice and human welfare goals.
2. Financial Inclusion Theory
   Financial inclusion theory underscores that access, usage, and impact of financial services matter for economic empowerment (Sarma, 2012). The ‘usage’ dimension emphasises that simply having access does not guarantee improved welfare; actual utilisation and meaningful usage are critical (Geraldes et al., 2022).
3. Technology Acceptance Model (TAM) / Digital Adoption Frameworks
   Technology adoption paradigms such as TAM explain how perceived usefulness and ease of use influence technology uptake (Davis, 1989). In fintech and Islamic fintech research, such models have been used to assess user acceptance (e.g., Suswanto et al., 2025).
4. Social Capital / Empowerment Theory
   For women micro-entrepreneurs, empowerment theory highlights how access to resources, decision-making power, and supportive networks enhance outcomes. Social capital theory emphasises that connections, trust,

and networks facilitate resource access (Putnam, 2000). When applied to women entrepreneurs in Islamic finance, trust in Shariah compliance and peer/community networks matter greatly (Afif & Samsuri, 2022).
These theoretical lenses are inter-linked: Islamic fintech adoption (TAM) influences inclusion (financial inclusion theory), which through social capital and empowerment mechanisms leads to improved business outcomes, all within a normative framework of maqāṣid al-Shariah.

2.3 Empirical Studies

2.3.1 Financial Inclusion, Women and Islamic Finance

Empirical studies on inclusive finance consistently demonstrate a positive relationship between access to finance and women's empowerment, particularly in developing economies where gender gaps in financial inclusion persist (Aslan, 2022). For example, Aslan (2022) found that barriers to formal financial services restrict women's economic opportunities, but dedicated financial inclusion policies can support economic independence and greater participation in household and business decision-making. The literature further emphasizes that access to formal financial services strengthens women's asset ownership, entrepreneurial activity, and overall socio-economic empowerment (Ray et al., 2024).

In the Indonesian context, empirical illustrations are provided by Rozalinda (2024), whose research documents the significant impact of Islamic bank interventions particularly BTPN Syariah on women-led micro-industries. Initiatives such as accessible financing and targeted empowerment programs have improved the savings culture among micro-entrepreneurs, while also contributing to increased income and business resilience. These findings highlight that Islamic banking innovation is not only able to enhance financial inclusion, but also fosters self-reliance and improved welfare among women entrepreneurs.

Within the realm of Islamic financial inclusion, Azqia, Ali, and Nurhasanah (2024) analyzed the Islamic Financial Inclusion Index (ISFI) across Indonesian provinces and identified a positive correlation with women's quality of life. Their findings show that provinces with higher ISFI scores tend to display superior outcomes in women's well-being, reflecting the broad influence of Islamic financial accessibility on socio-economic indicators. However, these studies often rely on secondary sources and quantitative cross-sectional designs, which may limit understanding of specific behavioral patterns, digital finance adoption, and the nuanced experiences of women entrepreneurs working in informal or digitally driven contexts. This demonstrates the need for future research that employs qualitative or mixed methods to uncover the complex dynamics of women's financial inclusion in an evolving digital landscape.

2.3.2 Islamic FinTech Adoption and Inclusion

Alshater et al. (2022) provide a comprehensive review of the Islamic fintech literature, noting that recent years have seen increasing scholarly attention to themes such as peer-to-peer lending, e-waqf, and mobile Islamic banking. However, they observe that most published studies remain conceptual or rely primarily on quantitative methods, with relatively few works employing qualitative approaches that capture the actual experiences and behaviors of end users. This methodological gap has important implications, as qualitative research can reveal nuanced barriers and opportunities in digital adoption that standardized surveys may overlook.

In the Indonesian context, a systematic review by Suswanto et al. (2025) highlights that, despite Indonesia's impressive position in global Islamic finance rankings, the empirical literature on Islamic fintech adoption by micro-enterprises is still nascent. Studies investigating the intersection of fintech and women are even scarcer, though this focus is critical given the significant digital gender gap in the region. For instance, Khairisma et al. (2025) examined the role of Islamic fintech in sustainable finance in Aceh, treating women's empowerment as a moderating variable. Their empirical findings indicate that women's empowerment did not significantly moderate the relationship between fintech usage and sustainable finance, underlining the complex, context-dependent nature of digital financial inclusion for women. This points to significant gaps not just in technology adoption, but also in understanding everyday challenges, aspirations, and behavioral motivators for women entrepreneurs engaging with Islamic fintech.

2.3.3 Zakat, Waqf, IMFIs and Digital Integration

Research on Islamic social finance—covering zakat, waqf, and Islamic microfinance institutions (IMFIs)—shows greater scholarly attention to digitalization, but identifies ongoing thematic and methodological weaknesses. Suhardi's (2025) bibliometric study, for example, found that topics such as digital literacy, fintech integration, and the role of gender are still underrepresented in the mainstream Islamic financial inclusion discourse.

Muhammedi (2024) presented qualitative findings from fieldwork on Micro Waqf Banks in Indonesia, showing that women micro-entrepreneurs often use waqf-based funding to support household income and avoid predatory lending, but the study remained largely descriptive and lacked deep behavioral analysis. Similarly, Maulina, Dhewanto, and Faturohman (2025) reported that while research on waqf innovation is expanding, especially regarding products and processes, innovations in positioning and paradigms—particularly the integration of waqf with technology and women's entrepreneurship—are rarely addressed.

A review by Amelia Tri Puspita and Mohd Kassim (2024) on Islamic financial inclusion highlighted persistent gaps in the scholarly literature. They noted that important variables such as digital adoption, women's agency, and social networks remain insufficiently addressed in current research. This shortfall suggests that scholars should pursue more empirical, interdisciplinary, and multi-method investigations in order to capture the complex realities of Islamic financial inclusion. Such approaches are crucial to deepening understanding and filling research gaps that currently limit the field's impact and policy relevance.

2.4 Theoretical Framework

From the empirical review, several patterns emerge:

- Quantitative studies dominate; qualitative and micro-level investigations (especially of women entrepreneurs interacting with Islamic fintech and ZISWAF synergies) are scarce.
- Integration of Islamic social finance (zakat, waqf) with fintech platforms remains underexplored in the women micro-entrepreneur context.
- While women's inclusion is frequently mentioned, detailed behavioural insights on how women micro-entrepreneurs adopt, interpret, and utilise Islamic fintech (and associated ZISWAF mechanisms) are limited.
- Trust, literacy (digital and Islamic), cultural/gender norms, and community networks are known enablers/barriers, yet empirical studies seldom explore these in depth or triangulate them in the Indonesian sub-national context.

This study therefore fills the gap by providing rich qualitative insights into how women micro-entrepreneurs in underserved Indonesian regions experience the convergence of Islamic fintech, ZISWAF instruments, and micro-enterprise development.

2.5 Emerging Conceptual Framework

The conceptual framework of this study consists of four main components:

- Inputs refer to women's access to Islamic fintech services and ZISWAF–fintech schemes that provide Sharia-compliant resources for their micro-businesses.
- Mediating factors include digital and Islamic financial literacy, trust in Sharia-compliant institutions, social capital, and gender norms that shape how these services are actually used.
- Outcomes cover more inclusive and disciplined financial behaviour, improved micro-enterprise performance, and stronger economic and decision-making empowerment for women.
- Contextual moderators relate to the type of enterprise, local digital infrastructure, product design, and socio-demographic characteristics that influence the strength of these effects.

When women micro-entrepreneurs engage with Islamic fintech solutions and ZISWAF (zakat, infaq, sadaqah, waqf) mechanisms, their adoption and effective usage are shaped by a complex interplay of factors such as financial and digital literacy, trust in Shariah compliance, social capital, and prevailing gender or cultural norms. These mediating factors can either facilitate or hinder the utilization of innovative financial services, depending on the level of support, education, and inclusivity available within both the technology platforms and the surrounding community environment. As a result, fostering women's participation and empowerment through Islamic fintech requires not only accessible products but also targeted interventions that address knowledge gaps, build social trust, and actively consider the sociocultural context in which women entrepreneurs operate.

Successful engagement with these digital and Islamic financial services is expected to yield significant outcomes, including improved financial behaviors such as increased capital access, better savings practices, and a broader use of digital services. Enhanced business performance, reflected in greater turnover and business growth, may also follow as financial constraints are eased and opportunities for scaling up are realized. More fundamentally, these mechanisms can contribute to empowerment in the form of increased decision-making autonomy and agency for women entrepreneurs—especially when contextual moderators such as micro-enterprise type, local digital infrastructure, product design, and the entrepreneur's age or education level are favorable. This conceptual framework thus situates the present study within the intersecting domains of Islamic finance, digital inclusion, gendered entrepreneurship, and behavioral financial research, enabling a nuanced exploration of how and why these processes and relationships take shape within Indonesia's micro-enterprise landscape.

2.6 Research Questions

In line with the foregoing review and the emerging conceptual framework, this study addresses the following research questions:

RQ1. How do women micro-entrepreneurs in Indonesia experience and make sense of Islamic fintech and ZISWAF–fintech synergies in their business activities?

RQ2. How do digital and Islamic finance literacy, trust in Sharia compliance, social capital, and gendered social norms mediate the adoption and usage of Islamic fintech and ZISWAF mechanisms among women micro-entrepreneurs?

RQ3. In what ways does engagement with Islamic fintech and ZISWAF–fintech synergies shape women micro-entrepreneurs' financial behaviours, business performance, and empowerment trajectories in the Indonesian context?

3 METHODOLOGY

3.1 Research Design

This study employed a qualitative research design using in-depth, semi-structured interviews as the primary data collection method. The qualitative approach was selected to enable a rich, contextualized understanding of participants' lived experiences, social realities, and perceptions regarding Islamic fintech and its integration with zakat, waqf, and other Islamic social-finance mechanisms. As Creswell and Poth (2018) note, qualitative inquiry is particularly appropriate when the goal is to interpret meanings that individuals ascribe to social or human problems, rather than to quantify variables.

The design followed a phenomenological and descriptive-exploratory orientation. The phenomenological dimension sought to uncover participants' subjective meanings and interpretations of their experiences with Islamic fintech and social-finance programs, while the descriptive-exploratory nature allowed the study to document and analyze variations across different micro-enterprise contexts. This design was considered most suitable for addressing the research objective: to explore how women micro-entrepreneurs and stakeholders perceive, adopt, and experience Islamic fintech within the ecosystem of ZISWAF-based empowerment initiatives.

Given the emerging and under-explored nature of Islamic fintech adoption among women micro-entrepreneurs in Indonesia, a flexible qualitative framework provided the necessary depth to examine both individual experiences and institutional dynamics. The study thereby contributes to an interpretive understanding of socio-religious and financial inclusion phenomena that cannot be adequately captured through quantitative surveys or secondary data alone.

3.2 Research Setting and Context

The research was conducted in several regions of the Special Region of Yogyakarta (DIY), Indonesia, a province known for its vibrant micro-enterprise ecosystem, active Islamic social-finance institutions, and increasing digital-finance penetration. The province also represents a microcosm of broader national patterns—combining urban centers with semi-rural areas where access to formal Islamic finance remains uneven.

Fieldwork took place between March and August 2025, coinciding with several ongoing Islamic social-finance and fintech initiatives, including zakat distribution programs by Badan Amil Zakat Nasional (BAZNAS) DIY, productive waqf projects facilitated by Badan Wakaf Indonesia (BWI), and digital-financing collaborations involving Islamic fintech platforms (such as Qazwa and Mumtaaz). The socio-economic context was shaped by post-pandemic recovery efforts, heightened attention to women's entrepreneurship, and increasing government emphasis on inclusive digital transformation under Indonesia's Sharia Economic Masterplan (MAKSI) 2019–2024.

The local religious environment, characterized by strong Islamic community organizations and pesantren-based networks, influenced participants' understanding of Sharia compliance and financial trust. These contextual factors made Yogyakarta an ideal site for exploring the intersection between Islamic fintech, social finance, and women's empowerment at the micro-enterprise level.

3.3 Research Setting and Context

Participants were selected using purposive and snowball sampling strategies to capture diverse yet information-rich perspectives. The inclusion criteria were as follows:

- Women micro-entrepreneurs engaged in productive businesses (e.g., food stalls, laundry, tailoring, snack production).

- Active involvement in or beneficiary of Islamic social-finance or fintech programs (e.g., zakat, waqf, or Islamic P2P financing).
- Residency within the Yogyakarta region and at least one year of business operation.

In addition to primary participants, several key informants were included to provide institutional perspectives—namely, representatives from Islamic fintech companies, zakat/waqf institutions, and local Islamic financial cooperatives.

A total of twelve (12) informants participated, consisting of:

- Five (5) women micro-entrepreneurs who had used Islamic fintech platforms;
- Three (3) beneficiaries of zakat or waqf productive-financing programs;
- Two (2) representatives from Islamic fintech companies or aggregator platforms;
- Two (2) officers from BAZNAS and local waqf institutions.

This number was deemed sufficient for qualitative depth and thematic saturation (Guest et al., 2006). Participants were coded anonymously (e.g., R1–R5 for micro-entrepreneurs, F1–F2 for fintech representatives, Z1–Z2 for zakat/waqf officers) to maintain confidentiality.

The sample was intentionally designed to reflect diverse socio-economic and geographic conditions (urban and semi-rural), educational backgrounds, and digital literacy levels. Such heterogeneity enhanced the transferability of findings by ensuring that themes represented a range of experiences within the Islamic fintech ecosystem.

3.4 Data Collection Procedure

Data were collected through semi-structured, in-depth interviews conducted between March and August 2025. Each interview lasted between 45 and 90 minutes, depending on participants' availability and depth of responses. Interviews were conducted primarily in Bahasa Indonesia and Javanese, then translated into English during transcription and analysis.

Participants were first approached through referrals from Islamic social-finance institutions, local business associations, and fintech partners. Invitations were delivered via WhatsApp and formal letters of introduction approved by the research team's university ethics board. Participants were briefed on the study's objectives, voluntary nature, and confidentiality protocols prior to consent.

The interview guide covered five thematic domains:

Personal and business background;

- Awareness and understanding of Islamic fintech or social-finance mechanisms;
- Motivations, trust, and religious considerations influencing participation;
- Experiences with digital financial platforms (benefits and challenges); and
- Perceived impacts on business performance and empowerment.

Interviews were audio-recorded with participants' permission and supplemented by field notes and brief observational memos documenting non-verbal cues, contextual details, and environmental factors.

Ethical safeguards were rigorously observed. Each participant signed an informed consent form, participation was voluntary, and participants could withdraw at any stage without consequence. Pseudonyms and coded identifiers were used to ensure anonymity, and recordings were securely stored in password-protected drives accessible only to the research team.

3.5 Data Analysis

Data analysis followed thematic analysis as described by Braun and Clarke (2019), using an iterative, six-step process to identify and interpret key patterns. This method was chosen for its flexibility and suitability for exploring complex, experience-based phenomena.

- Step 1: Familiarization.
  Interview recordings were transcribed verbatim. Transcripts were read repeatedly to achieve immersion and initial understanding.
- Step 2: Generating Initial Codes.
  Each transcript was coded manually using a hybrid approach that combined inductive (data-driven) and deductive (concept-driven) techniques. Initial codes were generated to capture both manifest and latent meanings.
- Step 3: Searching for Themes.
  Codes were clustered into broader categories reflecting recurring ideas—such as "trust in Sharia compliance," "digital literacy barriers," "peer influence," and "empowerment outcomes."
- Step 4: Reviewing Themes.

Themes were refined through iterative reading, ensuring coherence within themes and distinction across them. Triangulation with field notes and institutional data enhanced validity.

- Step 5: Defining and Naming Themes.
  Themes were clearly defined and named based on the core narrative each represented. Representative quotations were selected to illustrate participants' voices.
- Step 6: Producing the Report.
  Findings were synthesized into coherent thematic narratives, supported by participants' quotations and interpreted in light of relevant theoretical frameworks (e.g., Maqāṣid al-Shariah, social-capital theory).

Data were analyzed manually and cross-checked using NVivo 12 software to ensure coding consistency and systematic management of textual data.

3.6 Data Analysis

Following Lincoln and Guba's (1985) criteria, four strategies were implemented to ensure credibility, dependability, confirmability, and transferability:

- Credibility
  Established through prolonged engagement, triangulation of data sources (micro-entrepreneurs, fintech providers, zakat/waqf officers), and member checking—participants reviewed summaries of their interviews for validation.
- Dependability
  A detailed audit trail of coding decisions, reflective memos, and methodological notes was maintained.
- Confirmability
  Researcher reflexivity was emphasized; potential biases were acknowledged through reflective journaling.
- Transferability
  Rich, contextual descriptions enable readers to assess the applicability of findings to other settings with similar socio-cultural and institutional characteristics.

Peer debriefing sessions with Islamic finance scholars and qualitative research experts further enhanced the analytical rigor.

3.7 Research Ethics

This study strictly adhered to established international standards for research ethics in the social sciences, ensuring that ethical guidelines were followed throughout the research process. Ethical clearance for the study was obtained from the Ethics Committee of the Faculty of Islamic Economics and Business at Universitas Islam Negeri Salatiga, demonstrating compliance with institutional and national research regulations (World Medical Association, 2013).

Participants were fully informed about the study's purpose, procedures, and data management protocols through detailed information sheets provided before data collection. Participation was voluntary, and informed consent was obtained both verbally and in writing to guarantee autonomy and free choice. Confidentiality was rigorously maintained by anonymizing participants' identities and affiliations, while audio recordings and transcripts were securely encrypted and stored on university-approved servers.

No monetary incentives were offered to avoid coercion or undue influence, though modest refreshments were provided as a courtesy gesture to participants. The study's findings were reported exclusively in aggregate form to prevent any potential identification of individual respondents or institutions. These practices reflect the ethical principles of respect for persons, beneficence, and justice as outlined in the Declaration of Helsinki and supported by national ethical guidelines for research (World Medical Association, 2013).

4 FINDINGS

4.1 Profile of Informants and Lexical Landscape

The empirical material of this study is drawn from in-depth interviews with women micro-entrepreneurs and key stakeholders in Islamic social finance and Islamic fintech. The women participants operate home-based and small-scale businesses in sectors such as food stalls, mobile snack sales, laundry services, and online clothing shops. They are complemented by informants from zakat and waqf institutions, sharia-based fintech providers, and community facilitators who interact with these women through programme design, digital platforms, or local training initiatives. Together, these perspectives provide a rich view of how Islamic digital finance is encountered, interpreted, and negotiated in everyday business and household life.

Table 1. Profile of Study Informants

Code	Role / Position	Main Business / Institution Type	Involvement with Islamic Fintech / ZISWAF
R1	Woman micro-entrepreneur	Home-based food production	Uses Islamic fintech for working capital and payments
R2	Woman micro-entrepreneur	Mobile snack and beverage seller	Receives productive zakat; uses digital payment apps
R3	Woman micro-entrepreneur	Small grocery / warung	Uses Islamic paylater; participates in zakat programs
R4	Woman micro-entrepreneur	Laundry and ironing services	Uses e-wallets; beneficiary of productive waqf scheme
R5	Woman micro-entrepreneur	Online clothing and accessories shop	Sells via marketplace; explores Islamic fintech offers
R6	Woman micro-entrepreneur	Traditional snack production (offline & online)	Receives mentoring from Islamic social finance program
Z1	Zakat institution officer	Provincial zakat agency	Manages productive zakat and digital zakat channels
Z2	Waqf institution officer	Micro waqf / nadzir organisation	Develops productive waqf projects with MSMEs
F1	Islamic fintech representative	Sharia-compliant P2P lending platform	Designs MSME financing products
F2	Islamic fintech representative	Aggregator / payment gateway for Islamic finance	Integrates zakat and waqf payments into apps
C1	Community / MSME association facilitator	Local women's business network	Organises training on digital and Islamic finance
C2	Community / religious leader	Mosque-based women study circle (*majelis taklim*)	Promotes digital zakat and ethical financial behaviour

Source: Fieldwork and in-depth interviews, 2025.

Table 1 summarises the profile of the informants and shows that most women combine their entrepreneurial activities with substantial domestic and caregiving responsibilities. Several rely on spouses, children, or extended family members to support bookkeeping, deliveries, or digital tasks such as managing online orders and applications. Institutional actors, in turn, describe their roles in offering zakat-based capital assistance, micro-waqf schemes, and sharia-compliant fintech products designed for micro-enterprises. This configuration ensures that the findings reflect both user-side experiences and provider-side constraints.

To complement the thematic analysis, a simple word-frequency analysis was conducted on the full set of interview transcripts. The distribution of the 20 most frequent words is presented in Table 2.

Table 2. Summary of Major Themes from Thematic Analysis

No.	Theme	Short Description	Illustrative Focus in the Data
1	Everyday financial vulnerability and responsibility	Women juggle fragile cash flows with household obligations	School fees, health costs, supplier payments, fear of riba
2	Islamic fintech and social finance as support system	Digital tools complement zakat/waqf programs for MSME support	Use of e-wallets, Islamic paylater, digital zakat and waqf apps
3	Trust, religious legitimacy, and peer influence	Adoption shaped by shariah trust and social endorsements	Endorsement by mosque, zakat bodies, friends, WhatsApp groups
4	Barriers and governance challenges	Literacy gaps and institutional frictions limit potential	Confusing contracts, digital gaps, fragmented ZISWAF coordination

Source: Authors' thematic analysis based on interview transcripts (2025).

Table 2 indicates that *fintech* and *syariah* are by far the most salient terms in the narratives, followed by *ibu* (mother), *informan*, *aplikasi*, *usaha*, and *peneliti*. The prominence of *perempuan*, *zakat*, *digital*, *keuangan* (finance), *modal* (capital), *keluarga* (family), and *membantu* (to help) further highlights the intertwined nature of faith, gender, technology, and economic responsibility in the way participants frame their experiences. Rather than being dominated by purely technical vocabulary, the transcripts are saturated with words that signal relational roles (mother, family), moral frames (sharia, zakat), and practical concerns (business, capital, help).

A subsequent step grouped these high-frequency words into broader conceptual categories aligned with the study's focus. As shown in Table 3, the words cluster into five main groups: fintech and technology, actors and gender roles, Islamic and social finance, business and economic context, and general intensity markers.

Table 3. Conceptual grouping of the 20 most frequent words in the interview transcripts

No.	Category	Words (Indonesian original)
1	Fintech and technology	*fintech, aplikasi, digital, pakai, menggunakan, lewat*

2	Actors and gender roles	*ibu, perempuan, keluarga, informan, peneliti*
3	Islamic and social finance	*syariah, zakat, keuangan*
4	Business and economic context	*usaha, modal, membantu*
5	General intensity / frequency markers	*banyak, sangat*

This conceptual grouping suggests that roughly one-third of all occurrences fall under fintech and technology, while another quarter relates to actors and gender roles. Islamic and social finance terms also account for a substantial share of the vocabulary. These patterns reinforce the interpretation that the interviews revolve around women's efforts to navigate digital platforms and sharia-compliant instruments in the context of micro-enterprise activities and family obligations. The presence of general intensity markers indicates that participants often emphasise repetition, magnitude, and process when describing their financial journeys.

To provide a more intuitive visual overview, the relative prominence of the most frequent words can also be displayed in a bar chart (Figure 1), which complements the tables by highlighting proportional differences between terms.

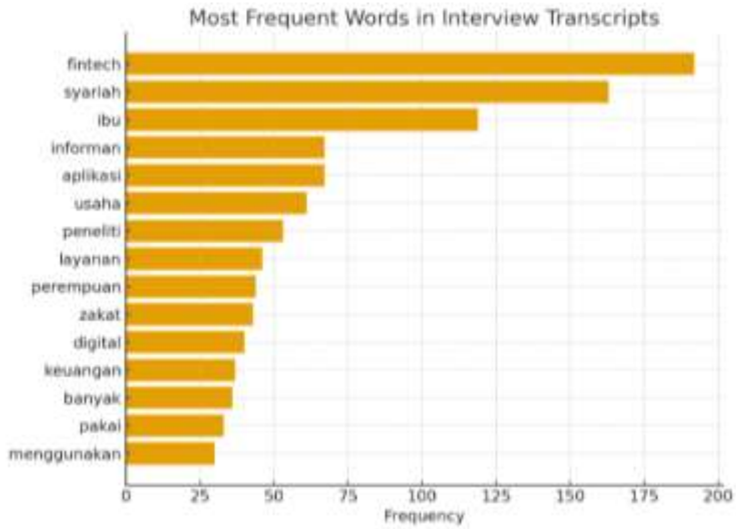

Fig. 1. Most Frequent Words in Interview Transcripts

Figure 1 visually confirms the dominance of *fintech* and *syariah*, followed by words associated with women, applications, business, and zakat. Taken together, the tables and the chart offer a transparent bridge between the raw textual data and the thematic findings elaborated in the following subsections.

4.2 Thematic Findings

Building on this descriptive overview, the qualitative coding process produced four interrelated themes that structure the participants' narratives:

- everyday financial vulnerability and responsibility,
- Islamic fintech and social finance as an emerging support system,
- trust, sharia legitimacy, and peer influence, and
- barriers, risks, and governance concerns.

4.2.1 Everyday financial vulnerability and responsibility

Across cases, women describe juggling thin profit margins, volatile daily income, and non-negotiable household expenses such as school fees, rent, and health costs. Many rely on small amounts of rotating capital and must decide each day how much stock to purchase, how much cash to keep on hand, and how much can be allocated to savings or debt repayment. Financial shocks—illness, broken equipment, or sudden education-related payments—are experienced as particularly stressful because they easily disrupt both household and business cash flows.

At the same time, the interviews show that these women carry a strong sense of moral responsibility. Several participants emphasise their role as mothers who must ensure that children's education continues, food remains available, and family dignity is maintained. In this context, decisions about borrowing, spending, and investing are not framed solely as individual choices but as obligations embedded in family and community expectations.

4.2.2 *Islamic fintech and social finance as an emerging support system*

The second theme captures how Islamic fintech and Islamic social finance programmes are perceived as potential support mechanisms for navigating this vulnerability. Participants report frequent use of e-wallets and mobile banking applications for everyday transactions, including paying suppliers, topping up phone credit, and receiving customer payments. Some women have also explored sharia-compliant financing, either through Islamic cooperatives or Islamic peer-to-peer platforms, although actual uptake of digital credit remains selective and cautious.

Zakat and micro-waqf programmes appear in the narratives as complementary, sometimes crucial, sources of initial or supplementary capital. Several women recount receiving productive zakat in the form of equipment or inventory support, which reduced their dependence on high-cost informal loans. Others mention training sessions organised by zakat institutions or mosque-based groups that introduce basic business planning and digital skills. When these initiatives are combined with accessible fintech tools, participants describe feeling helped and more confident in managing both their businesses and their household finances.

4.2.3 *Trust, sharia legitimacy, and peer influence*

A third theme concerns the role of trust and religious legitimacy in shaping adoption of digital financial services. For many participants, the presence of a sharia label is not merely a marketing detail but a moral filter that determines whether a product is considered acceptable. Women repeatedly express reluctance to engage with conventional online lending because of fears about interest, penalties, and unclear contracts. In contrast, platforms associated with recognised Islamic banks, reputable Islamic microfinance institutions, or zakat and waqf organisations are more readily trusted, especially when recommended by religious leaders, family members, or friends.

Peer influence also plays a significant role. Informants often learn about new applications from children, neighbours, or fellow members of religious study circles and women's business groups. Positive experiences shared in messaging groups, community meetings, or training sessions help to normalise the use of digital wallets and sharia-compliant financing. Conversely, stories about problematic online loans or hidden fees circulate just as quickly and reinforce caution. In this way, social networks function as channels through which both trust and distrust are collectively negotiated.

4.2.4 *Barriers, risks, and governance concerns*

Despite their potential, digital and Islamic financial tools are not experienced as unambiguously beneficial. Participants identify a range of barriers that limit their ability to fully leverage these instruments. Technologically, many rely on low-specification smartphones with limited storage and unstable internet connections, making it difficult to keep multiple apps updated or to complete online registration processes. Some women are uncomfortable navigating interfaces filled with technical terms or foreign-language prompts, and they worry about pressing the wrong button and incurring unintended charges.

From a governance perspective, several informants describe confusion about the structure of fees, the meaning of contracts, and the mechanisms for complaint or dispute resolution. While some appreciate efforts by providers to explain contracts in simple language, others feel that explanations are still rushed or overly technical. There is also a perception that zakat, waqf, and fintech programmes do not always communicate effectively with one another, resulting in fragmented information and duplicated data collection. These barriers and concerns temper the otherwise positive narratives surrounding Islamic fintech and social finance, and they point to important conditions that must be met for such innovations to be genuinely inclusive.

5 DISCUSSION

The separated presentation of findings allows this section to focus explicitly on how the empirical themes speak to, confirm, and extend existing scholarship on financial inclusion, Islamic social finance, and women's economic empowerment in Indonesia. Overall, the study suggests that sharia-oriented digital finance and ZISWAF instruments form an emerging but uneven support ecosystem for women micro-entrepreneurs who operate at the intersection of household responsibility, moral economy, and precarious markets.

5.1 Women's Financial Vulnerability as Moral and Relational Responsibility

The first theme shows that financial vulnerability for women micro-entrepreneurs is not only a matter of low income or volatile cash flow, but also of dense moral and relational obligations. Participants describe themselves as responsible for meeting basic household needs, sustaining children's education, and preserving family dignity, even when daily income from very small businesses is uncertain. In this sense, financial decisions are framed less as individual optimisation and more as negotiated responses to overlapping duties toward family, religion, and community (Collins et al., 2009; Kabeer, 2005).

This pattern resonates with the idea that in low-income contexts, economic agency is embedded in social roles and care work rather than separated from them. For the women in this study, choices about borrowing, saving, and investing are filtered through questions such as whether a particular source of funds feels religiously lawful, whether repayment schedules can be honoured without neglecting household needs, and whether accepting help from an institution might be perceived as shameful or honourable. The findings therefore extend conventional narratives of "financial inclusion" by foregrounding how inclusion is interpreted through gendered moral responsibilities, not only through access to accounts or credit (World Bank, 2022).

From the perspective of Islamic economic ethics, this lived experience also illustrates how the protection of wealth, family, and dignity is pursued in conditions of structural constraint. Women's everyday financial strategies stretching small capital, rotating stock quickly, avoiding what they perceive as riba-based loans, and accepting productive zakat when available can be read as practical attempts to align survival with faith-based ideals. The study thus highlights the need to interpret women's financial behaviour not as "reluctance" or "irrationality," but as careful navigation of religiously and socially meaningful boundaries (Hassan, 2014).

5.2 Islamic Fintech and Social Finance as a Layered Support Ecology

The second theme indicates that Islamic fintech and Islamic social finance initiatives are emerging as a layered support ecology rather than a single, unified solution. Digital wallets and mobile banking applications are used routinely for small transactions, bill payments, and receiving customer transfers. At the same time, zakat and micro-waqf programmes provide grants, equipment, or very soft financing that ease the pressure on working capital. In some cases, sharia-compliant microfinance or peer-to-peer platforms are explored as a way to expand or stabilise the business (Hassan, 2014).

This layered ecology has several implications. First, it shows that women micro-entrepreneurs do not encounter "fintech" in an abstract sense; they engage with specific combinations of tools that become meaningful only when integrated into real business routines. A digital wallet remains irrelevant if suppliers still demand cash or if customers resist transfer payments; conversely, the same wallet becomes essential when it reduces travel time, enables remote transactions, or simplifies bill payments (World Bank, 2022). Likewise, zakat or waqf capital is most helpful when coupled with light-touch guidance and digital channels that make follow-up easier.

Second, the findings suggest that Islamic fintech and social finance can support resilience not only by injecting funds but also by reducing the cognitive and logistical burdens associated with money management. When applications help women track inflows and outflows, separate business and household money, or send reminders for instalments, they function as simple financial management tools. When zakat and waqf programmes link support to mentoring and digital skill-building, they help women reframe themselves from passive recipients into active economic agents. The study therefore reinforces the view that technology and Islamic social finance are most empowering when designed as complementary, mutually reinforcing layers rather than as isolated products (Collins et al., 2009; Hassan, 2014).

5.3 Trust, Sharia Legitimacy, and Social Capital in Digital Adoption

The third theme underlines that decisions to adopt or reject digital financial services are heavily mediated by trust, religious legitimacy, and social networks. Participants repeatedly contrast their anxiety about conventional online lending perceived as risky, opaque, and morally doubtful with their greater comfort using platforms and institutions that carry a clear sharia branding and are endorsed by religious leaders, local facilitators, or peers (Hassan, 2014).

Trust, in this context, operates through several channels. Institutional trust is built when providers clearly explain contracts, avoid hidden fees, respond to complaints, and show visible alignment with Islamic norms. Interpersonal trust flows through recommendations and stories shared in family groups, neighbourhood gatherings, women's business associations, and religious study circles. Digital trust emerges gradually as women accumulate positive experiences successful transfers, timely disbursements, or helpful customer service without encountering fraud or unexpected penalties (World Bank, 2022).

These dynamics highlight how social capital and religiosity interact in the digital sphere. Women are more willing to experiment with new applications when they feel that "someone like me" has already navigated them successfully and when they believe that the product's structure respects Islamic principles. Conversely, negative experiences or rumours especially about aggressive collection practices or unclear interest charges spread quickly and fuel caution toward the entire category of digital credit. The study thus refines generic models of technology adoption by showing that for low-income Muslim women, perceived sharia compliance and peer-endorsed safety are as important as functionality or convenience (Hassan, 2014; Kabeer, 2005).

5.4 Barriers, Risks, and Governance Gaps

The fourth theme reminds us that Islamic fintech and social finance are far from frictionless. Technological and governance-related barriers remain significant. On the technological side, low-end smartphones, limited data, unstable connectivity, and unfamiliar user interfaces constrain women's ability to fully utilise multiple applications. Some participants express confusion about digital menus, fear of pressing the wrong button, and discomfort with verification procedures that require uploading identity documents or taking live photos. These frictions mean that even when services are formally "available," they are not necessarily accessible in practice (World Bank, 2022).

On the governance side, participants highlight concerns about unclear fee structures, complex contracts, and limited recourse mechanisms. While many appreciate efforts to simplify contracts or to explain them verbally, others feel that the explanations are rushed or that the power imbalance between provider and client remains too strong for genuine negotiation. There is also a perception that zakat, waqf, and fintech actors often operate in silos, resulting in fragmented data collection and a lack of continuity in support (Hassan, 2014).

These barriers underline a key tension: digitalisation can increase efficiency and scale, but it can also reproduce or even deepen existing vulnerabilities if not accompanied by strong consumer protection, transparent communication, and cross-institutional coordination. For women whose businesses and households operate on very thin margins, small misunderstandings or unexpected costs can quickly erode trust. The study therefore cautions against celebrating Islamic fintech as an automatic solution to exclusion; instead, it shows that inclusive outcomes depend on careful attention to the micro-level details of governance and user experience (World Bank, 2022).

5.5 Synthesis: Rethinking Inclusive Islamic Digital Finance from the Margin

Taken together, the four themes invite a rethinking of how inclusive Islamic digital finance is conceptualised and implemented. The findings suggest that the primary unit of analysis should not be the product or platform alone, but the lived financial trajectories of women micro-entrepreneurs who occupy multiple roles as income earners, caregivers, moral agents, and community members. From this vantage point, several broader insights emerge (Collins et al., 2009; Kabeer, 2005).

First, the study shows that Islamic fintech, zakat, and waqf can indeed act as instruments of empowerment and resilience, but only when they are responsive to the specific temporalities, cash-flow patterns, and relational obligations that shape women's economic lives. Products that ignore these realities by imposing rigid repayment schedules, complex user interfaces, or purely individualistic eligibility criteria are likely to be underutilised or perceived as risky, regardless of their formal sharia compliance (World Bank, 2022).

Second, the analysis underscores the importance of designing Islamic digital finance through the lens of dignity and relational justice. For many participants, feeling respected, listened to, and treated fairly is as important as receiving funds. Initiatives that involve women in programme design, build on existing social networks, and recognise their dual roles in business and household management are better positioned to create durable change than those that merely "push" digital tools from above (Kabeer, 2005).

Third, the findings point toward the value of an integrated ecosystem approach. Rather than treating zakat, waqf, microfinance, and fintech as separate sectors, the experiences of the informants demonstrate how support becomes truly effective when these instruments are aligned and sequenced: grants and productive zakat to kick-start or stabilise businesses, user-friendly digital tools to manage day-to-day transactions, and sharia-compliant financing or micro-waqf schemes to enable gradual growth (Hassan, 2014).

Finally, by centring the voices of women at the intersection of Islamic social finance and digital innovation, this study contributes to an emerging strand of scholarship that views financial inclusion not as a technical endpoint but as an ongoing process of negotiating risk, meaning, and moral aspiration. The discussion suggests that future research and policy need to move beyond aggregate indicators and engage more seriously with the granular ways in which inclusive Islamic finance is lived, contested, and co-created from below (Kabeer, 2005; World Bank, 2022).

6 CONCLUSION AND RECOMMENDATIONS

6.1 Overview of the Study

This study set out to examine how the intersection of Islamic fintech, zakat, and waqf initiatives contributes to women's economic empowerment and financial inclusion in Indonesia's microenterprise sector. Employing a qualitative, descriptive exploratory approach grounded in in-depth interviews, the research explored the lived experiences of women micro-entrepreneurs, fintech practitioners, and zakat and waqf institution officers. The analysis illuminated how digital Islamic financial innovations when integrated with social-finance instruments reshape access to capital, reinforce religious trust, and foster economic resilience within vulnerable communities.

The study's design was grounded in the interpretive tradition of qualitative inquiry, enabling an understanding of the nuanced interactions between technology, religiosity, and socio-economic behavior. The findings affirm that the integration of Islamic fintech and social finance is not only a matter of technological progress but also an ethical and social transformation within Indonesia's evolving Shariah-based financial ecosystem.

6.2 Key Findings Summary

The study's findings underscore that Islamic fintech provides an accessible, trust-based, and value-driven platform for women micro-entrepreneurs, many of whom previously faced structural and cultural barriers to formal financial services. Through the digitalization of zakat and waqf mechanisms, financial inclusion expanded in both reach and depth, facilitating transparent distribution of resources and fostering community trust. Participants viewed Shariah compliance not merely as a regulatory feature but as a source of moral reassurance and social legitimacy in managing their finances.

At the same time, the study revealed persistent challenges, including limited digital literacy, low understanding of Islamic financial products, and sociocultural constraints that restrict women's agency in financial decision-making. These barriers underscore that technological access alone does not guarantee inclusion; empowerment requires the alignment of digital innovation with religious literacy, community support, and institutional responsiveness.

The synergy between Islamic fintech and ZISWAF mechanisms demonstrates a multidimensional pathway toward reducing inequality and enhancing economic justice, one that combines ethical finance, technology, and community participation. By aligning sharia-compliant digital innovations with redistributive instruments such as zakat, infaq, sadaqah, and waqf, this synergy can channel resources more efficiently to vulnerable groups while simultaneously strengthening social solidarity and institutional trust.

6.3 Theoretical Implications

Theoretically, this study contributes to the literature on Islamic finance and financial inclusion by deepening the understanding of how faith-based financial behavior and digital transformation interact. Three specific contributions can be identified.

First, by applying the maqāṣid al-Shariah framework, the study situates Islamic fintech as a moral economic instrument that aligns with the preservation of wealth *(ḥifẓ al-māl)*, sustenance *(ḥifẓ al-nafs)*, and social solidarity. This reframes Islamic fintech not only as a digital innovation but as a vehicle for achieving Shariah's higher objectives in socioeconomic welfare.

Second, it extends financial inclusion theory by illustrating that inclusion in Islamic contexts cannot be divorced from ethical legitimacy. Access and usage are mediated by trust in Shariah compliance and collective moral assurance. The concept of "meaningful inclusion," therefore, encompasses not just accessibility and affordability, but also halal assurance and community validation.

Third, the findings advance the understanding of social capital and empowerment theory by demonstrating that community networks, religious affiliations, and peer support play a critical role in women's adoption of digital financial services. The role of trust rooted in social and spiritual ties emerges as the connective tissue linking technological adoption, financial participation, and empowerment outcomes.

In doing so, the study bridges existing gaps between behavioral finance, digital inclusion, and Islamic economic ethics, which are often discussed separately in the literature. It offers a multidimensional framework that explains how financial empowerment operates in Muslim-majority contexts by simultaneously accounting for psychological factors, technological access, and faith-based moral considerations.

6.4 Practical and Policy Recommendations

Drawing on the study's findings, several practical and policy-oriented recommendations are proposed at three levels: policy, institutional, and community.

1. Policy-Level Recommendations

- Strengthen regulatory coordination among OJK, BWI, and BAZNAS to institutionalize the digital integration of zakat and waqf with Islamic fintech. A unified framework for ZISWAF–fintech collaboration would ensure accountability, enhance efficiency, and prevent misuse of social funds.
- Mainstream gender-responsive Shariah financial inclusion policies that prioritize women micro-entrepreneurs as key economic actors. Incentivizing fintech providers to design gender-sensitive digital tools can address structural barriers to participation.
- Expand nationwide programs for digital and Islamic financial literacy through coordinated efforts between the Komite Nasional Ekonomi dan Keuangan Syariah (KNEKS), universities, and local governments. Integrating Shariah education with digital skill-building ensures that users not only access fintech platforms but also understand the ethical principles underlying them.

2. Institutional-Level Recommendations
    - Encourage blended Islamic finance models that combine commercial fintech mechanisms (e.g., peer-to-peer lending) with social finance resources (e.g., zakat or productive waqf). This blended model can provide micro-entrepreneurs with accessible financing while maintaining affordability and social impact.
    - Enhance transparency and trust mechanisms within Islamic fintech platforms by developing Shariah certification systems, public dashboards, and transparent fund-tracking tools. Such measures would strengthen user confidence and align with global trends in ethical finance (World Bank, 2021b).
    - Promote intr-institutional collaboration among Islamic banks, fintech start-ups, and micro-waqf banks to expand outreach in semi-rural areas. Collaborative data sharing and joint programs could reduce costs, mitigate duplication, and enhance operational efficiency.
3. Community-Level Recommendations
    - Train female digital agents and community mentors to assist women micro-entrepreneurs in navigating fintech platforms, applying for funding, and managing their finances responsibly.
    - Establish peer-based learning forums within local cooperatives, majelis taklim, and entrepreneurship groups to strengthen social capital and digital literacy through experiential sharing.
    - Integrate faith-based motivation with entrepreneurship programs, reinforcing the understanding that ethical business practices and economic productivity are both acts of worship aligned with Shariah objectives.

These recommendations collectively advocate a holistic approach—where digital innovation, ethical finance, and social empowerment operate synergistically within Indonesia's Islamic economic vision.

6.5 Limitations and Future Research

The study acknowledges several limitations that open pathways for future exploration. The analysis was limited to a single province (Yogyakarta), which, although diverse, may not fully represent the heterogeneity of Indonesia's Islamic fintech landscape. The qualitative design, while offering depth, limits the generalizability of findings across demographic or regional contexts. Additionally, the study focused primarily on women micro-entrepreneurs; broader comparative analyses involving male entrepreneurs, fintech investors, and regulatory actors could provide a more comprehensive understanding of systemic dynamics.

Future research should adopt mixed-method or longitudinal designs to measure the long-term economic and social impacts of ZISWAF–fintech integration. Expanding the scope to other regions and comparing Islamic fintech models across Southeast Asia could provide valuable insights into how different cultural and institutional ecosystems shape adoption and effectiveness. Studies employing behavioral or experimental approaches could also illuminate causal relationships between religious trust, digital literacy, and financial outcomes.

6.6 Closing Reflection

The findings of this study reaffirm that the future of Islamic finance lies not merely in technological sophistication but in its enduring commitment to justice, inclusion, and compassion. The integration of fintech with zakat and waqf demonstrates that financial innovation can be both digitally advanced and ethically grounded serving as an instrument of empowerment rather than exclusion.

For women micro-entrepreneurs, Islamic fintech represents more than access to funding; it signifies recognition, dignity, and participation in a moral economy that values fairness and solidarity. In this light, Indonesia's experience offers a compelling blueprint for other Muslim-majority nations seeking to harmonize digital transformation with Islamic economic values.

Ultimately, achieving financial inclusion through Islamic fintech is not only an economic endeavor but also a moral and spiritual mission. By aligning technological progress with the higher objectives of Shariah, Islamic finance can realize its true potential as a catalyst for equitable growth, communal welfare, and sustainable prosperity.

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