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INTEGRATING DIGITAL SERVICES IN ISLAMIC SOCIAL FINANCE: A SERVICE-DOMINANT FRAMEWORK

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ABSTRACT - This study develops a conceptual framework for integrating digital services within Islamic Social Finance (ISF), emphasizing a service-oriented approach to address limited strategic guidance for ISF institutions. It investigates how digitalization can enhance service design and implementation by examining ISF's unique characteristics and applying Service-Dominant Logic (SDL). Based on a literature review and qualitative analysis, the research highlights digitalization's potential to expand ISF services, improve stakeholder engagement, and optimize value creation. The proposed framework structures service systems around al-Maqāṣid (primary objectives), tailored to stakeholder needs. It advocates a shift from product-centric to beneficiary-centered service models, fostering engagement and collaboration among stakeholders. This approach aligns with Islamic principles while facilitating sustainable and effective service ecosystems. The study concludes that adopting a beneficiary-centered, digitally-enabled perspective significantly improves ISF service quality and accessibility. This framework provides a foundation for ISF institutions to transition towards more dynamic, innovative, and collaborative service models.
Keywords: Islamic Social Finance, Digital Services, Service-Dominant Logic, Beneficiary-Centered Approach, Value Creation

ABSTRAK - Integrasi Layanan Digital dalam Keuangan Sosial Syariah: Kerangka Kerja berbasis Service-Dominant Logic. *Penelitian ini mengembangkan kerangka konseptual dengan mengeksplorasi integrasi layanan digital dalam Keuangan Sosial Syariah (KSS) yang menekankan pada pendekatan berorientasi layanan guna mengatasi keterbatasan panduan strategis bagi institusi KSS. Makalah ini mengkaji bagaimana digitalisasi dapat meningkatkan desain dan implementasi layanan dengan penelaahan karakteristik unik dari KSS dan penerapan Service-Dominant Logic (SDL). Dengan mendasari pada tinjauan literatur dan analisis kualitatif, penelitian ini menyoroti potensi digitalisasi untuk memperluas layanan KSS, meningkatkan keterlibatan pemangku kepentingan, dan mengoptimalkan penciptaan nilai. Kerangka kerja yang diusulkan menunjukkan bagaimana sistem layanan dapat disusun berdasarkan al-Maqāṣid (tujuan utama), yang disesuaikan dengan kebutuhan pemangku kepentingan. Kerangka ini mendorong pergeseran dari model produk-sentris ke layanan yang berpusat pada penerima manfaat, membina keterlibatan dan kolaborasi antar pemangku kepentingan. Pendekatan ini selaras dengan prinsip-prinsip Islam sekaligus memfasilitasi ekosistem layanan yang berkelanjutan dan efektif. Studi menyimpulkan bahwa adopsi perspektif yang berpusat pada penerima manfaat dan didukung secara digital secara signifikan meningkatkan kualitas dan aksesibilitas layanan KSS. Kerangka kerja ini memberikan landasan bagi institusi KSI untuk bertransisi menuju model layanan yang lebih dinamis, inovatif, dan kolaboratif.*
Kata kunci: *Keuangan Sosial Syariah, Layanan Digital, Service-Dominant Logic, Pendekatan Berpusat pada Penerima Manfaat, Penciptaan Nilai*

INTRODUCTION

Islamic Social Finance (ISF) institutions have undergone significant evolution, traversing stages of financial repression, financial development, and financialization (Wulaningtyas et al., 2018). In recent years, the rapid advancement of digital technologies and intensifying competitive pressures have necessitated that ISF institutions modernize their operational frameworks. Failure to adapt risks marginalization in favor of more agile competitors capable of spearheading market innovations (Widiastuti et al., 2022). These dynamics underscore the imperative for a systematic approach to addressing deficiencies in current service systems.

Digital transformation and shifting beneficiary expectations have catalyzed the development of innovative business models in Islamic social finance, thereby transforming traditional perceptions of value (Widiastuti et al., 2022). ISF institutions are increasingly recognized not merely as isolated service providers, but as integrated systems that synergize diverse stakeholders, technologies, functions, and data to forge coherent value creation networks. The incorporation of network-based services—including dedicated applications, connected services, and autonomous platforms—has revolutionized the delivery of ISF services (Beik & Arsyianti, 2021; Nuriyah & Fakhri, 2022). This paradigm shift highlights the evolving role of donors, who are redefined as active value co-creators and central beneficiaries of service innovations (Beik & Arsyianti, 2021; Rahman et al., 2023). Moreover, advances in technology facilitate new insights into the utilization and accessibility of ISF services, as platforms generate and analyze vast quantities of data (Tahiri Jouti, 2019).

The impact of ISF is increasingly evident in its contribution to promoting economic equity and prosperity, with organizations such as Baznas, Rumah Zakat, and Dompet Dhuafa in Indonesia exemplifying these roles (Ascarya, 2022). Similar institutions worldwide extend their offerings beyond conventional financial products by providing integrated solutions and digital services that fortify their competitive positions (Adinugraha et al., 2023). The transformation of ISF institutions into comprehensive solution providers represents an evolution toward interactional value creation processes. These changes are also reflected in efforts to deliver use-based value and ancillary benefits—including smart mobility and enhanced security—thereby reinforcing the distinctiveness of ISF products, such as profit-sharing and

socially responsible investing, especially in the aftermath of the global financial crisis (Kuanova et al., 2021). The strong interconnection between participatory finance and elevated ethical standards within the Islamic moral economy further advocates for the holistic financial practices characteristic of Islamic finance (Ismail & Aisyah, 2022). Disseminating positive empirical evidence and experiences can enhance public trust and reinforce the social and economic efficiency of ISF (Ali, 2017).

Despite these advancements, significant challenges persist within ISF institutions. Historically, innovation in this sector has concentrated on Islamic values, quality, and service attributes (El-Gama, 2006; Hasan, 2023). However, the competencies required to deliver services within contemporary value networks exceed those traditionally possessed by ISF institutions (Ahmed & Mohieldin, 2019; Khan, 2013). Early initiatives to differentiate these institutions through digital service offerings have largely fallen short, with many organizations continuing to operate as product-centric entities predominantly focused on fundraising (Mohd Zain & Engku Ali, 2017; Syed Azman & Engku Ali, 2019). As service innovation continues to be driven by newcomers in the market, established ISF institutions face an imperative to redesign their core business models (Schoon, 2015).

In response to these challenges, this study employs a Design Science Research (DSR) methodology to develop a robust conceptual framework tailored for ISF service systems. DSR facilitates an iterative process of problem identification, solution design, and empirical validation, thereby addressing both theoretical and practical gaps. Anchoring the research in DSR principles allows for the alignment of ISF operations with modern technological expectations while remaining consistent with Islamic values. The proposed framework is intended to enable ISF institutions to integrate digital services in a manner that prioritizes beneficiary-centric value creation through iterative development and stakeholder collaboration (Visser, 2019).

The prevailing literature on servitization and its influence on ISF business models typically targets isolated segments and insufficiently considers the unique aspects of Islamic finance (Syed Azman & Engku Ali, 2019). ISF institutions frequently struggle to devise integrated solutions owing to challenges in developing and executing effective service business models (Akhter et al., 2023; Kuanova et al., 2021). Furthermore, there is a notable gap in understanding how beneficiaries and other key stakeholders can be

meaningfully integrated into the digital value creation process to support co-created service offerings (Rahman et al., 2023).

Against this backdrop, the central research question of this study is: How can ISF institutions be supported in conceptualizing their service systems while considering relevant stakeholders? To address this question, we conducted a systematic literature review to identify key concepts, categorizing them through an adapted Business Model Canvas (BMC) framework (Muttaqin et al., 2023; Osterwalder & Pigneur, 2010; Prasetyo et al., 2019) and modeling the relationships among them. The initial framework was subsequently evaluated through guideline-supported interviews with ISF representatives, business model researchers, and external ISF experts, followed by refinement based on insights gleaned from a workshop addressing practical case problems (Gaiardelli & Songini, 2020).

LITERATURE REVIEW

Islamic Social Finance

Islamic Social Finance (ISF) is fundamentally grounded in Sharia principles, emphasizing socio-economic justice, equity, and community well-being (falah) Its core objective is to facilitate financial activities that strictly adhere to Islamic values, prohibiting interest (riba) and excessive uncertainty (gharar), while promoting risk-sharing and ethical investments through instruments like mushārakah (partnership), qarḍ hasan (benevolent loan), zakāt (obligatory charity), waqf (endowment), and takāful (Islamic insurance) (‘Āshūr, 1984; Hassan et al., 2023; Sariah et al., 2022; 2022 ,شايشي). These instruments are designed not merely as financial tools but as mechanisms for achieving broader societal goals, aligning financial practice with the higher objectives of Islamic law *(Maqāṣid al-Shariah)*.

Historically, ISF business models have prioritized Sharia compliance and social development sustainability However, the contemporary operating environment, marked by rapid digitalization and heightened stakeholder expectations for seamless, integrated services, poses significant challenges to these traditional frameworks (Widiastuti et al., 2022). There is a growing imperative for ISF institutions to evolve beyond conventional operations towards more dynamic, digitally-enabled service delivery models (Adinugraha et al., 2023).

Service Systems, Value Creation, and Service-Dominant Logic

The transition towards enhanced service delivery necessitates viewing ISF institutions not just as financial intermediaries but as complex service systems. A service system can be understood as a dynamic configuration of resources (people, technology, organizations, shared information) connected by value propositions, interacting to create value (Vargo & Lusch, 2019). This perspective aligns with Service-Dominant (S-D) logic, which posits that service—the application of specialized competences (knowledge and skills) for the benefit of another entity—is the fundamental basis of exchange (Vargo & Lusch, 2019). Crucially, S-D logic reframes value as being co-created through interactions among multiple actors, including the beneficiary, rather than being solely embedded in output (goods or traditional financial products) by the provider (Ullah et al., 2023). Adopting an S-D logic perspective encourages ISF institutions to shift from a product-centric view towards a beneficiary-centric model, conceptualizing beneficiaries and donors not as passive recipients or mere contributors, but as active participants and resource integrators in the value creation process (Kuanova et al., 2021; Rahman et al., 2023). This collaborative approach resonates well with the communal and ethical underpinnings of ISF Business Models in ISF (Sari et al, 2024).

The practical realization of service provision and innovation within ISF typically occurs through business models, which articulate the rationale of how an organization creates, delivers, and captures value (Osterwalder & Pigneur, 2010). The concept has evolved significantly, encompassing various dimensions and frameworks (Ancillai et al., 2023; Kraus et al., 2020; Morris et al., 2006). Within ISF, specific business models have been developed, particularly for microfinance and waqf, aiming to meet beneficiary needs while ensuring Sharia compliance (Hagawe et al., 2023; Mafaza et al., 2020; Mawardi et al., 2017). However, existing literature suggests that many ISF institutions struggle to design and implement effective service business models that fully leverage digital potential or embrace value co-creation principles (Akhter et al., 2023; Kuanova et al., 2021). Current business model conceptions often remain focused on the organizational perspective (Wirtz, 2020) and may inadequately represent the complexities of multi-actor service networks and the integration of tangible and intangible resource flows inherent in ISF (Lee et al., 2021; Ramdani et al., 2019). Many institutions appear locked into traditional, often product-centric or fundraising-focused models, hindering their ability to offer

integrated, digitally-enhanced solutions (Mohd Zain & Engku Ali, 2017; Syed Azman & Engku Ali, 2019).

Theoretical Framework for ISF Service Systems

While S-D logic offers a valuable theoretical lens for reorienting ISF towards service and value co-creation, and business model frameworks provide tools for operationalization, a significant gap persists in the literature. There is a lack of specific, actionable guidance and conceptual frameworks tailored to help ISF institutions design and implement integrated, digitally-enabled service systems (Syed Azman & Engku Ali, 2019). Existing service system concepts often lack usability and a clear design orientation suitable for practical application within the unique ISF context (Burkhart et al., 2011; Olofsson & Farr, 2006). Furthermore, research needs to delve deeper into the ontological aspects of ISF service systems, including the specific intentions, interactions, and relational dynamics among diverse stakeholders (beneficiaries, donors, regulators, technology providers) within these digitally mediated networks (Ismail & Aisyah, 2022; Kuanova et al., 2021; Rizal & Marliyah, 2023). Current approaches often fail to adequately consider the specific constraints, ethical imperatives (Maqāṣid al-Shariah), and stakeholder configurations characteristic of ISF, Therefore, this study addresses the need for a theoretically grounded conceptual framework, informed by S-D logic and business model principles, specifically designed to support ISF institutions in conceptualizing and structuring their transition towards more effective, beneficiary-centric, and digitally integrated service systems.

Table 1. Representation of Logic and Co-Creation Practices

Islamic Social Finance Instruments	Logic Representation	Value Relationship	Perspective	Co-creation Practice
Zakat	Obligatory charity, fixed amount, social welfare	Alleviates poverty, supports social justice	Philanthropy, social inclusion	Community engagement, institutional support
Sadaqah	Voluntary charity, flexible amount, social welfare	Supports social justice, promotes community development	Philanthropy, social inclusion	Community engagement, individual initiative
Infaq	Voluntary donation, flexible amount, social welfare	Supports social justice, promotes community development	Philanthropy, social inclusion	Community engagement, individual initiative

Islamic Social Finance Instruments	Logic Representation	Value Relationship	Perspective	Co-creation Practice
Qard Hasan	Interest-free loan, financial inclusion, social welfare	Supports financial inclusion, promotes economic justice	Philanthropy, social inclusion	Community engagement, institutional support
Wakaf	Endowment, long-term investment, social welfare	Enhances socio-economic development, promotes community well-being	Philanthropy, social inclusion	Institutional support, community involvement
Takaful	Cooperative insurance, risk management, social welfare	Provides financial protection, promotes social solidarity	Philanthropy, social inclusion	Community engagement, cooperative participation
Islamic Microfinance	Financial services, poverty alleviation, social welfare	Supports entrepreneurship, promotes financial inclusion	Philanthropy, social inclusion	Community engagement, institutional support

(Source: Author, Processed, 2024)

METHODOLOGY

This study employed a Design Science Research (DSR) methodology to systematically address the research problem and construct a theoretically sound yet practically viable conceptual framework for Islamic Social Finance (ISF) service systems. The DSR paradigm is particularly suited for research aiming to design and evaluate innovative artifacts—such as frameworks or models—that solve complex, real-world problems while contributing to academic knowledge (Hevner et al., 2004). The methodology encompasses iterative cycles of problem identification, artifact development, empirical validation, and refinement, ensuring a rigorous yet contextually relevant research process.

Phase 1: Problem Identification and Literature Review

The research commenced with a systematic literature review to explore existing knowledge and identify key constructs related to ISF and service systems. This phase aimed to uncover critical dimensions and challenges inherent in ISF operations, especially in the context of digital transformation. Keywords such as "Islamic social finance," "zakat digitalization," "service systems," "Service-Dominant Logic (SDL)," and "value co-creation" were used across multiple academic databases including Scopus, Web of Science, and Google Scholar.

The search strategy followed guidelines by Saunders et al. (2019) and included multiple rounds of refinement to ensure breadth and depth of coverage.

The insights from the literature were synthesized thematically and mapped against SDL and Islamic ethical principles, leading to the preliminary development of the conceptual framework. This initial version aimed to integrate foundational service elements (e.g., actors, resources, value propositions) with Islamic values such as trust (amanah), justice (‘adl), and mutual benefit (maslahah).

Phase 2: Expert Interviews for Validation and Refinement

To validate and further refine the emerging framework, a series of semi-structured interviews was conducted. A total of five informants participated: three internal stakeholders from two ISF institutions (one zakat-focused, one waqf-based) and two external experts specializing in financial consultancy and IT systems relevant to the nonprofit sector. Selection followed purposive sampling to ensure participants possessed substantial domain knowledge and practical experience.

The interviews were guided by a structured protocol derived from the preliminary framework, designed to elicit feedback on framework dimensions, identify potential gaps, and uncover context-specific nuances. Interviews were recorded, transcribed verbatim, and subjected to thematic analysis using open coding techniques. This process yielded three prominent themes:

1. Stakeholder Engagement and Trust. Emphasizing the importance of building trust through transparent and responsive beneficiary engagement. One participant noted, “Our current system feels disconnected from real-time user feedback, limiting its effectiveness.”
2. Challenges in Digital Transformation. Including infrastructural and human resource constraints. Another remarked, “While transitioning to digital platforms, we lack adequate IT infrastructure to support scaling.”
3. Beneficiary-Centered Design. Highlighting the need to prioritize usability and accessibility in digital interfaces for diverse user groups.

These themes directly informed revisions to the framework, resulting in enhancements such as integrated feedback loops under ‘Interaction Points’ and a new ‘Infrastructure Enablers’ component under ‘Key Resources.’

Phase 3: Case Workshop and Iterative Refinement

A validation workshop was then conducted with a zakat institution actively transitioning to a digital service delivery model. This case-based intervention involved presenting the updated framework and facilitating a collaborative exercise in which participants applied the framework to analyze and redesign aspects of their service system. The workshop served dual purposes: (1) to evaluate the framework's real-world applicability, and (2) to gather stakeholder feedback for further refinement.

Participants engaged in structured group discussions and mapping exercises, which revealed additional practical considerations, particularly around system integration and multi-platform service delivery. Iterative refinements were made accordingly, with particular attention to ensuring the framework's usability, adaptability, and alignment with Shariah-compliant service principles.

RESULTS AND DISCUSSION

Framework Construction

To conceptualize Islamic Social Finance (ISF) service systems, this study develops a comprehensive framework that supports both analytical clarity and practical communication. The framework integrates service system thinking with business model logic, recognizing the co-creation of value between providers and beneficiaries (Moro et al., 2022; Pfeiffer et al., 2017). Specifically, the widely used Business Model Canvas (BMC) is adapted to reflect the structure and dynamics of ISF service ecosystems.

The BMC is selected for its generalizability and capacity to illustrate value creation processes, especially in centrally coordinated service models. It comprises nine building blocks, categorized into four overarching domains: beneficiaries (channels, customer relationships, beneficiary segments), infrastructure (key resources, key activities, key partnerships), offerings (value proposition), and finance (revenue streams, cost structure) (Widmer et al., 2018). Within this structure, beneficiaries are placed at the center, in line with Service-Dominant Logic (SDL), which posits that value is co-created through interactions between actors (Reim et al., 2021; Wirtz, 2020).

Using abstraction and reinterpretation of these elements in the ISF context, the study proposes a framework (Table 2) grounded in Islamic philanthropic instruments—such as zakat, waqf, infaq, sadaqah, takaful, and qard hasan—and supported by digital infrastructure. This operational perspective aligns with existing models for evaluating service systems from a managerial standpoint, emphasizing performance, interaction, and user-centered design.

Table 2. Construct Mapping of BMC Elements for ISF Service Systems

BMC Category	Building Block	ISF Construct	Description	Key References
Beneficiary	Channels	Zakat, Waqf, Infaq, Sadaqah, Takaful, Qard Hasan, Islamic Microfinance	Digital platforms for collection and distribution of Islamic social finance instruments.	Aisyah & Muiz (2022); Beik & Arsyianti (2021); Bin-Nashwan, Ismaiel, et al. (2023); Nuriyah & Fakhri (2022)
	Relation-ships	Beneficiary Engagement and Trust	Building trust and maintaining responsive, transparent engagement with service recipients.	Javed et al. (2016); Shahid et al. (2022)
	Beneficiary Segments	Vulnerable Communities, Low-Income Households, Entrepreneurs	Target segments include economically disadvantaged and underserved communities.	Oseni et al. (2012); Shahid et al. (2022)
Infra-structure	Key Resources	Digital Infrastructure, IT Systems, Human Resources	Technological and human resource capacities required for managing digital ISF services.	Maulina et al. (2023); Umar & Danlami (2022); Beik & Arsyianti (2021)
	Key Activities	Outreach, Service Delivery, Monitoring & Evaluation	Operational activities essential to the effective execution of ISF services.	Oseni & Hassan (2015); Shahid et al. (2022)
	Key Partners	NGOs, Government Agencies, Fintech Platforms	Strategic alliances and networks that support service operations and scaling.	Ullah et al. (2023); Shahid et al. (2022)
Offering	Value Proposition	Social Impact, Financial Inclusion, Community Participation	ISF services aim to deliver socio-economic value through financial access and empowerment.	Adinugraha et al. (2023); Ahmad et al. (2023); Apriantoro et al. (2023); Mahadi et al. (2021); Syed Azman & Ali (2019)
Finance	Revenue Streams	Donations, Grants, Investment Income	Funding sources include philanthropic donations, institutional grants, and returns on waqf or other Islamic financial instruments.	Shabbir et al. (2020)
	Cost Structure	Operational Costs, Technology, Marketing	Expenses incurred in maintaining platforms, staff, infrastructure, and promotional efforts.	Lisnaeni et al. (2024); Shabbir et al. (2020)

The constructs are derived from a synthesis of literature in Islamic social finance and service design frameworks. They are adapted from Osterwalder &

Pigneur (2010) and contextualized by Oseni et al. (2012, 2020) and Shahid et al. (2022).

Each building block is contextualized to reflect the realities of ISF:

1. Beneficiaries are defined as individuals or entities receiving social financial services. Their role is fundamental to the value creation process, as services are defined and shaped by their needs and experiences (Javed et al., 2016).
2. Channels represent the digital and physical platforms used to engage donors and deliver services, serving as touchpoints for interaction and feedback (Shahid et al., 2022).
3. Key resources include digital systems, human capital, and IT infrastructure, which support service provision (Maulina et al., 2023; Umar & Danlami, 2022).
4. Value propositions emphasize social impact, financial inclusion, and community participation, particularly through digital service delivery (Adinugraha et al., 2023; Ahmad et al., 2023).
5. Revenue streams and cost structures are contextual outcomes, influenced by organizational strategies and resource configurations (Osterwalder & Pigneur, 2010; Oseni et al., 2012).

This framework reflects a stakeholder-centric view, where all participants—including beneficiaries, donors, service providers, and partners—are co-creators of value. It highlights ISF service systems as collective investments in technology, human capital, and social outcomes (Shahid et al., 2022; Ullah et al., 2023). While cost and revenue elements are retained in the model, they are treated as emergent, organization-specific outcomes rather than fixed design components. Their formulation depends on prior elements such as value proposition and resource allocation (Javed et al., 2016; Oseni & Hassan, 2015).

Validation Through Literature Review

To support the development of the conceptual framework, a structured literature review was conducted following the guidelines of Ashimova (2020) and Bai (2021). The aim was to identify and validate key service system (SS) dimensions within the context of Islamic Social Finance (ISF), particularly in relation to digital service transformation. The review was carried out between March and May 2024, covering five leading databases—Taylor & Francis, ScienceDirect, Springer Link, Scopus, and EBSCO (Business Source

Complete)—with a focus on peer-reviewed publications in information systems and related fields.

An initial search strategy employed Boolean operators to combine Islamic finance terms with service-related keywords: ("Zakat" OR "Wakaf" OR "Infaq" OR "Sadaqah" OR "Qard Hasan" OR "Takaful" OR "Islamic Microfinance" OR "Islamic Social Finance") AND ("Service Systems" OR "Information System" OR "Digital Service").

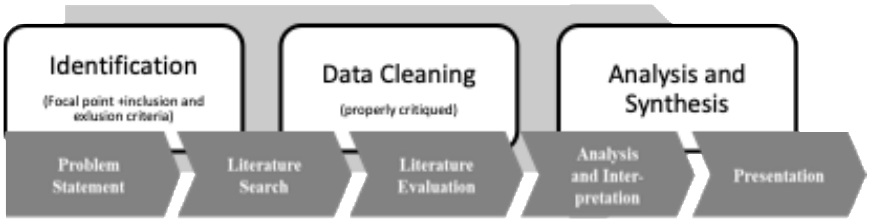

Figure 1. Literature Review Process

This yielded a total of 8,159 scholarly sources published between 2014 and 2024. The filtering process, illustrated in Figure 1, followed a four-stage refinement: removal of duplicates (Gate I), keyword/title screening (Gate II), abstract review (Gate III), and full-text scanning (Gate IV), resulting in 9 highly relevant articles for in-depth analysis (Figure 2).

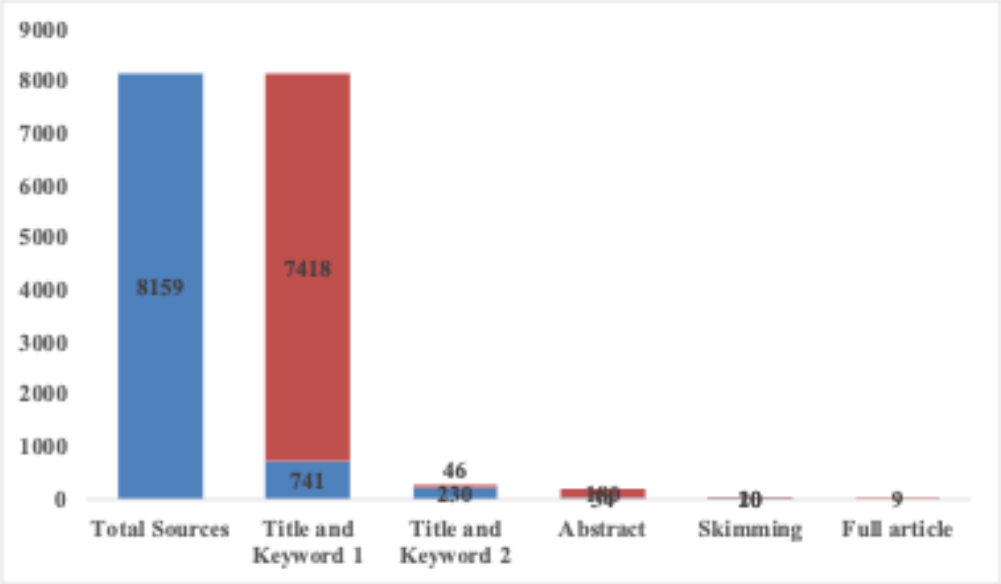

Figure 2. Article Selection Process

Expressions aligned with the proposed service constructs—such as service value, infrastructure, interaction points, stakeholders, engagement, and objectives—were extracted and iteratively categorized (Creswell, 2009; Saunders et al., 2019; Yin, 2018).

Sample analytical excerpts are presented in Table 3. Guided by the approach of Miles and Huberman (2014), similar concepts (e.g., zakat, waqf, sadaqah) were grouped under unified constructs (i.e., ISF instruments), and dimensions were refined through discussion and abstraction.

Table 3. Example Citations from Literature Analysis

Author(s)/Elements	**Khan & Akhter (2017)**	**Rabbani et al. (2021)**
Article Objective	To examine the relationship between service quality and client satisfaction in Islamic and conventional microfinance institutions, and assess the moderating effect of Shariah perception.	To explore how Shariah-compliant financial services address economic challenges during the COVID-19 pandemic
Service Systems	Islamic & conventional microfinance institutions	Islamic & conventional microfinance institutions
Service Value	Higher service quality improves client satisfaction	Higher service quality improves client satisfaction
Providers and Beneficiaries	Clients of microfinance institutions	Providers: ISF institutions; Beneficiaries: affected individuals & businesses
Key Stakeholders	Policymakers, providers	Islamic finance institutions, government, public
Service Network Infrastructure	Not specified	Not specified
Service Objective	Enhance satisfaction via quality and Shariah alignment	Alleviate financial burdens using Shariah-based tools
Engagement of Providers and Beneficiaries	Clients are main beneficiaries; providers and policymakers co-create value	Providers offer financial support; beneficiaries receive aid
Points of Interaction	Service quality, Shariah perception, satisfaction	Financial transactions through ISF instruments

A mutually exclusive and collectively exhaustive (MECE) classification scheme was derived, as outlined in Table 4. To ensure philosophical alignment, the analysis was cross-validated using the dual lenses of *Maqāṣid al-Sharī'ah* (objectives of Islamic law) and *Wasāil* (means/tools). This dual approach

ensured that each service system dimension not only contributed to effective system design but also upheld Islamic ethical and social objectives.

Table 4. Intersection of *Maqāṣid* and *Wasāil* Approaches

Category	**Sub-Category**	**Dimension**	**Maqāṣid/ Wasāil**
Service Network Infrastructure	Efficiency	Financial institutions, information systems, digital platforms	Wasāil
	Sustainability		
	Transparency		
	Technology Adoption		
Key Stakeholders	Efficiency	Policymakers, financial providers, government	Wasāil
	Sustainability		
	Transparency		
Points of Interaction	Efficiency	Online platforms, mobile applications, information systems	Wasāil
	Trust		
	Transparency		
	Technology Adoption		
Service Value	Satisfaction	Service quality (al-ihsan), client satisfaction (al-amanah), financial support (wasāil maliyah)	Maqāṣid (Al-Iḥsān, al-Amānah), Wasāil
Service Objective	Satisfaction	Enhancing client satisfaction (al-amanah and al-‘adl), financial support (wasāil maliyah), technology adoption (ibda’)	Maqāṣid (Al-Iḥsān, al-Amānah, al-‘adl), Wasāil
	Sustainability		
	Technology Adoption		
	Financial Support		
Engagement of Providers and Beneficiaries	Satisfaction	Service provision, support reception	Wasāil
	Trust		
	Financial Support		
Providers and Beneficiaries	Trust	Clients, financial institutions, individuals and businesses affected by the pandemic/hardship	Wasāil
	Financial Support		

Among the core Maqāṣid values abstracted were:

1. Al-Amānah (trust): representing user satisfaction and data integrity in digital service provision.

2. Al-'Adl (justice): reflected in equitable access and fair governance.
3. Al-Iḥsān (excellence): encouraging continuous improvement, innovation, and ethical commitment in digital transformation.

As emphasized by al-Qarāfī (1998):

> "Whenever the objective (*Maqṣad*) is undermined, the relevance of the means (*Wasīlah*) also diminishes."

In this light, the integration of *Maqāṣid* and *Wasāil* is not only a normative imperative but also a practical necessity in designing ISF digital systems that are ethically grounded and socially responsive.

Furthermore, Table 4 provides an overview of how these Islamic values intersect with each SS dimension. For example, engagement, interaction points, and infrastructure are assessed not only in terms of efficiency and technological adequacy but also through the lens of transparency, trust, and sustainability, reflecting both strategic and spiritual goals.

While efforts were made to ensure comprehensiveness, consistent with the caution from Saunders et al. (2019), absolute coverage of all ISF service dimensions remains challenging due to the evolving nature of the field. Nonetheless, this review offers a robust foundation for validating the proposed framework and informing future empirical refinement.

Construct Relationships and System Dynamics

Following the identification of core constructs and dimensions, their interrelations were modeled using a UML class diagram to represent the conceptual structure of Islamic Social Finance (ISF) service systems in the context of digital transformation (Figure 3).

The diagram illustrates the systemic relationship among key constructs—infrastructure, stakeholders, points of interaction, service value, service objectives, engagement of providers and beneficiaries, revenue streams, and cost structure. The diagram illustrates the systemic interplay among key components—infrastructure, stakeholders, points of interaction, service value, service objectives, engagement of providers and beneficiaries, revenue streams, and cost structure in digitally-enabled ISF systems.

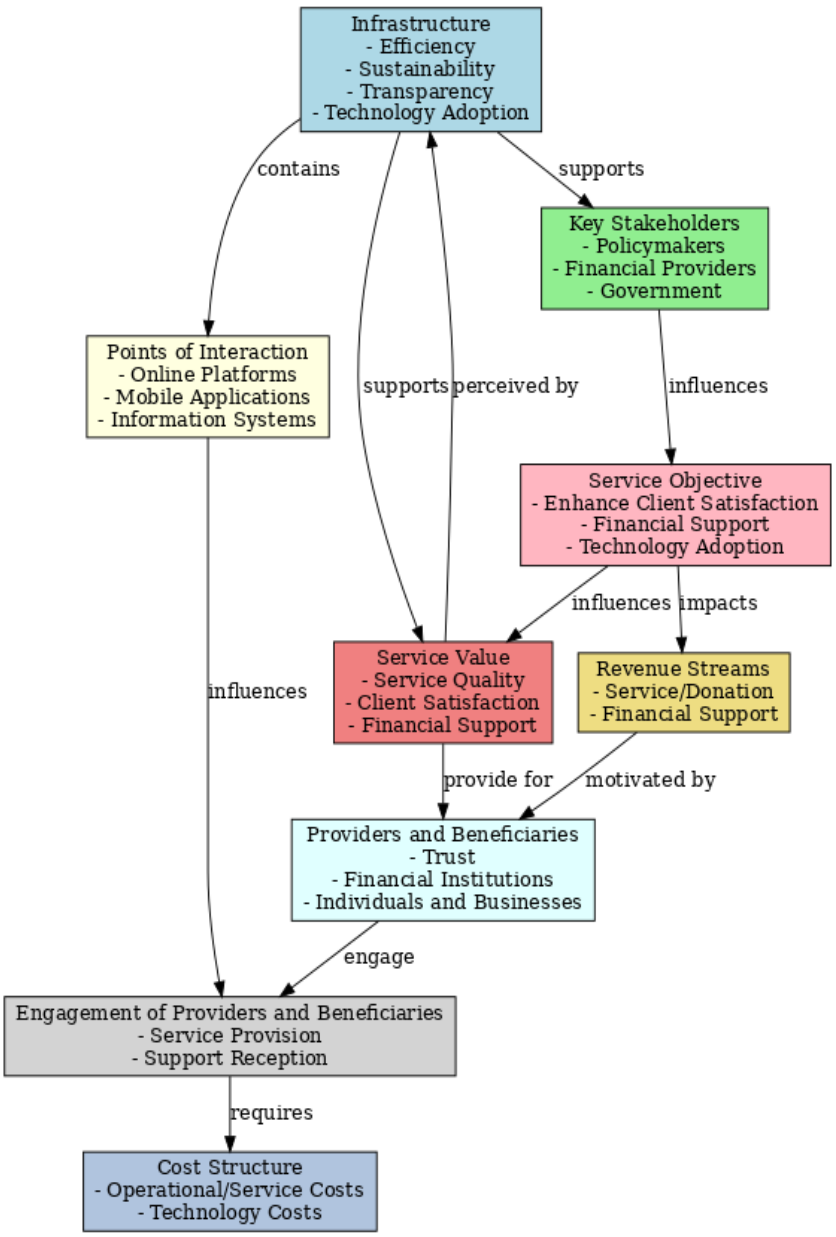

Figure 3. Construct Relationships within Digital ISF Systems

Infrastructure, comprising efficiency, sustainability, transparency, and technology adoption, forms the foundational layer of the system and facilitates stakeholder operations. These stakeholders—such as policymakers, financial institutions, and government entities—are supported by infrastructure and in turn influence interaction points, including online platforms, mobile applications, and information systems (Rabbani et al., 2021; Khan & Akhter, 2017).

These interaction points are key mechanisms for delivering services and cultivating trust, efficiency, and transparency. They also directly affect the perception of service value, which includes service quality, client satisfaction, and financial support. As argued by Khan and Akhter (2017), higher service quality—especially when aligned with Shariah principles—significantly enhances client satisfaction, a core component of perceived value.

Service value informs and shapes the system's objectives, such as enhancing satisfaction, increasing financial support, and encouraging the adoption of technology. These objectives, in turn, influence the engagement of providers and beneficiaries, including ISF institutions and individuals or businesses impacted by crises (Rabbani et al., 2021). Such engagement sustains revenue streams (e.g., donations and Shariah-compliant financial tools) and influences the cost structure, which includes both operational and technology-related costs.

Ultimately, these interrelated constructs form a dynamic feedback loop that supports system sustainability and trust—key principles in Islamic finance—and ensures the ethical and efficient provision of digital ISF services (Sundaramoorthy, 2022).

Conceptual Framework Development

Drawing upon the identified constructs, their dimensions, and the UML-based system model, a conceptual reference framework for Islamic Social Finance (ISF) service delivery was developed and iteratively refined (see Figure 4). The framework synthesizes theoretical insights with empirical validation through internal discussions and phased evaluations, organizing the core elements of the ISF ecosystem around service delivery dynamics.

At the core of the framework are beneficiaries, positioned as the central entity in the ISF service system. Surrounding this nucleus are layered constructs such as service value, service objectives, technology adoption, and interaction points (e.g., mobile apps, online platforms, and information systems). These layers reflect a systemic understanding of value co-creation among actors, including donors, financial institutions, and technology providers (Khan & Akhter, 2017; Rabbani et al., 2021). The framework emphasizes that value creation within ISF is inherently collaborative and digitally mediated. Constructs are operationalized through key dimensions, such as service quality, financial support, trust, transparency, and efficiency, as detailed in Table 4.

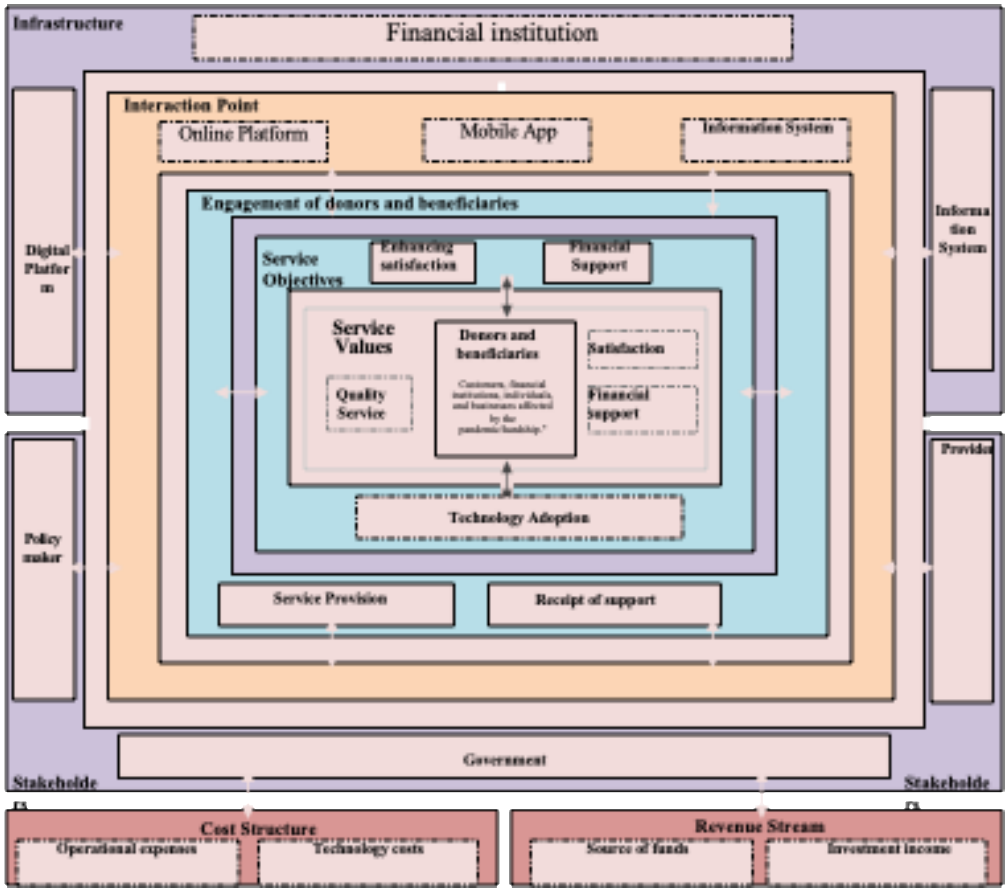

Figure 4. Conceptual Framework of the KSI Service System

As an illustrative use case, consider a renewable energy project supported through a waqf mechanism. Beneficiaries not only receive energy access but may also invest in and derive returns from the project, fostering both social and financial impact. Technologies such as AI and the Internet of Things (IoT) enable efficient resource use and provide real-time data transparency. Beneficiaries interact through integrated digital platforms, while underlying infrastructure—supported by cloud computing and telecommunications—ensures seamless operation. Stakeholders, including ISF institutions, technology providers, and policymakers, collaborate to deliver services sustainably. Financial viability is maintained through hybrid models such as subscription fees and investment commissions, which offset operational and technology-related costs.

This integrated system architecture reflects the evolving nature of digital ISF ecosystems, aligning with service-dominant logic and emphasizing scalability, inclusivity, and sustainability (Recker, 2013; Sundaramoorthy, 2022).

Evaluation

The evaluation of the conceptual reference framework followed a structured five-phase approach as outlined in Table 5.5, based on the evaluation model developed by Venable et al. (2016). This strategy was selected due to its focus on mitigating human-centered risks and enhancing effectiveness in design science research. Given that the primary concerns in this research involved usability and user integration, a naturalistic evaluation methodology was employed to ensure the framework's practical relevance and robustness in real-world contexts (Hevner et al., 2004; Sein et al., 2011).

Table 5. Five-Phase Evaluation Strategy

Phase	Description
Analysis	Focused on managing human-related risks through five structured evaluation sessions using interviews and case studies (Venable et al., 2016; Peffers et al., 2007).
Specification	Evaluated the framework based on criteria such as completeness, accuracy, speed, and compliance (Peffers et al., 2007; Hevner et al., 2004).
Selection	Relevance and suitability were assessed through discussions with KSI institutions, domain experts, and researchers (Venable et al., 2016).
Perspective	Applied ranking protocols and in-depth interviews to contextualize findings across key cases and conditions (Yin, 2009; Mingers, 2014).
Harmonization	Ensured alignment among components through consultations with ISF practitioners, technical experts, and digital consultants (Andoh-Quainoo, 2022).

(Source: Adapted from Venable et al., 2016; Peffers et al., 2007; and related sources)

To establish validity, the framework was assessed on three key dimensions: completeness, accuracy, and usability (Johannesson & Perjons, 2021). Completeness was verified by evaluating whether any constructs, dimensions, or relationships were omitted, and whether participants could comprehend and interpret the framework's components. Usability was determined by evaluating whether the framework supported conceptual planning in ISF service design (Akoka et al., 2017).

The evaluation engaged two domain experts and senior researchers specializing in ISF and digital transformation. Five semi-structured interviews were

conducted, followed by thematic analysis and iterative refinements. Additionally, the framework was tested in practical workshops involving real-world service challenges, further validating its relevance and application potential.

Expert Interviews and Evaluation Outcomes

To validate and refine the proposed conceptual framework, five semi-structured interviews were conducted with stakeholders from the Islamic Social Finance (ISF) ecosystem. Participants included three employees from two ISF institutions, each with varied responsibilities, as well as two external experts—one with substantial experience in IT consulting for financial institutions and another with a research focus on business model innovation.

Prior to the interviews, participants were provided with an overview of the study's objectives, interview guidelines, and a preliminary version of the conceptual framework. All participants confirmed their review of these materials in advance. The interviews were conducted via telephone, recorded, transcribed, and analyzed using a qualitative content analysis approach following Mayring's (2022) two-step reduction method. This involved categorizing responses according to predefined evaluation criteria: completeness, integration, adaptation, usefulness, and operationalization. Key findings and corresponding adjustments to the framework are presented in Table 6.

Table 6. Interview Findings

Criteria	Summary of Interview Findings
Completeness	Participants generally considered the framework conceptually sound but noted areas for enhancement. Suggestions included the explicit integration of Islamic values (e.g., *al-amanah*, *al-ihsan*), inclusion of stakeholder feedback loops, better representation of AI-driven innovation dimensions, and clearer articulation of donor-beneficiary interaction models (Hevner et al., 2004; Venable et al., 2016).
Integration	Respondents highlighted the need for illustrative use cases (e.g., waqf energy projects, zakat platforms) to contextualize abstract concepts. Challenges related to integrating physical and digital service systems—particularly around legacy infrastructure—were also noted (Von Brocke, 2020).
Adaptation	The framework was deemed adaptable across institutional contexts. However, emphasis was placed on the need for training modules for non-technical stakeholders, development of human resource capabilities, and the inclusion of risk management strategies to handle disruptions during digital transitions (Akoka et al., 2017).

Criteria	Summary of Interview Findings
Usefulness	The framework was rated as strategically useful but in need of enhancements for short-term implementation. Respondents recommended embedding tools for measuring user satisfaction, onboarding processes, and digital security features (Johannesson & Perjons, 2021).
Operationalization	While generally considered operational, suggestions included refining user engagement strategies, developing a system for prioritizing implementation tasks, and conducting iterative interface testing to align with user needs (Powers et al., 2012).

(Source: Compiled by authors; based on Mayring, 2022)

The interviews provided rich, multifaceted insights that informed targeted refinements to the conceptual framework. Key themes emerged, including the inclusion of Islamic principles to enhance the value proposition by integrating ethical dimensions such as trust *(al-amanah)* and excellence *(al-ihsan)* into the framework's foundational assumptions (Kamri et al., 2014). Practical applicability was strengthened by incorporating context-specific use cases and examples to bridge the gap between conceptual elements and real-world applications. Innovation and infrastructure were addressed by extending the framework's adaptability and scalability, considering digital maturity levels, legacy system constraints, and AI capabilities (Rahmati, & Ibrahim, 2022).

Stakeholder engagement was refined by improving collaboration mechanisms and feedback loops, particularly involving donors and beneficiaries, to enhance design realism. Additionally, risk and performance metrics were introduced, incorporating KPIs and risk mitigation strategies into operational tasks to support sustainability in service innovation. These themes align with patterns observed in other digital service transformation projects (Andoh-Quainoo, 2022; Powers et al., 2012), justifying their incorporation into the final version of the artifact.

Case Workshop Evaluation

In addition to expert interviews, an 80-minute case workshop was conducted with a doctoral researcher specializing in Islamic Social Finance (ISF) initiatives across Southeast Asia and the Middle East. This participant, hereafter referred to as the expert, collaborated with the research team to evaluate the applicability of the conceptual framework using a real-world zakat institution as a reference case (Huitema, 2010). The case organization predominantly operates through physical offices to manage and distribute ISF but is currently challenged by the transition to digital service delivery.

The workshop began with a presentation of the conceptual reference framework, including its components, objectives, and practical illustrations. This included specific examples of how digital platforms could support beneficiaries in locating appropriate services. The expert was guided through the framework to assess its relevance and adaptability to both the operational and strategic challenges of digital transformation within the institution. Findings from the session are summarized in Table 7 and categorized into three dimensions: general evaluation, usability, and adaptation.

Table 7. Workshop Evaluation: Summary of Key Findings

Category	Findings
General	The framework effectively organized and visualized relationships between service components. It clarified service object roles within the ISF delivery process and emphasized a user-centered approach. The structure allowed for clear separation of components, with flexibility for further exploration through complementary methods.
Usability	The artifact facilitated critical, structured discussions and supported in-depth reasoning on service design. The Key Service Interaction (KSI) model enabled the expert to articulate specific and detailed outcomes, enhancing precision over generalized approaches.
Adaptation	Incorporating a categorization mechanism within the framework supported the generation of more contextually relevant and actionable ideas, tailored to the digital transition of the case institution.

(Source: Compiled by authors)

During the workshop, the participant and facilitators co-developed hypotheses aimed at expanding the institution's digital presence and integrating physical and online service delivery. The iterative exploration of each framework component fostered a clearer understanding of how to design user-facing digital services while maintaining alignment with institutional values. Categorization techniques proved especially effective in shaping dimensions that guide digital platform development. Moreover, the session highlighted the need to explicitly model donor–beneficiary engagement and the interaction points that influence participation and satisfaction.

The workshop findings underscore the framework's capacity to support the digital evolution of ISF organizations through structured reflection and co-creative exploration (Hevner et al., 2004; Johannesson & Perjons, 2021). These insights informed final refinements to the artifact.

Discussion and Implications

This study advances the application of Service-Dominant Logic (SDL) by situating Islamic Social Finance (ISF) within a service system framework. SDL emphasizes value co-creation through the active participation of stakeholders (Vargo & Lusch, 2008), yet prior literature often lacks practical guidance on how organizations can adopt this perspective strategically, functionally, and tactically—particularly within the domain of ISF.

While ISF holds transformative potential for socioeconomic upliftment, especially through instruments like zakat, waqf, and microfinance, much of the existing research tends to treat ISF as a transactional rather than relational system (Ismail & Aisyah, 2022; Rabbani, 2022). Moreover, the unique religio-ethical foundations of ISF—such as alignment with al-Maqāṣid ash-Sharīʿah—have often been underexplored in digital service contexts (Kuanova et al., 2021).

This research addresses these gaps by proposing a conceptual reference framework that integrates SDL with business model theory, customized for ISF service systems. The framework aligns ISF services with the principles of value co-creation, stakeholder engagement, and digital innovation (Fehrer et al., 2018; Vargo et al., 2020). Specifically, it centralizes beneficiary needs and views them not merely as recipients, but as co-creators of value within a dynamic service network (Edvardsson et al., 2011).

Importantly, the framework conceptualizes ISF service systems as working systems, guided by benefit-centric design and informed by dimensions specific to Islamic finance ethics and goals (Dirie et al., 2023). These systems account for stakeholder interdependencies and promote collaborative service delivery, addressing the growing call for frameworks that bridge theory and practice in Islamic finance (Javed et al., 2016).

Digitalization and Service Access

Digital transformation plays a pivotal role in scaling ISF services, enabling greater outreach and improved interaction through platforms, apps, and integrated information systems (Beik & Arsyianti, 2021). As service systems increasingly rely on ICT infrastructure, the proposed framework shows how interaction points can be intentionally designed to enhance accessibility, usability, and relational continuity (Polese et al., 2021).

Additionally, the emphasis on al-Maqāṣid from the beginning of service design reflects the necessity of aligning institutional goals with both spiritual and social value creation. Beneficiary-centered approaches are key here, demanding a comprehensive understanding of stakeholder contexts, aspirations, and constraints.

Stakeholder-Centered Innovation

Value creation in ISF cannot be detached from the notion of mutuality. The framework reinforces that each stakeholder—whether donor, institution, or recipient—functions simultaneously as a value contributor and beneficiary (Adams, 2017). This dual role fosters a network-based view of service ecosystems, advancing beyond conventional donor-recipient dichotomies.

Moreover, the involvement of beneficiaries during service design and development phases exemplifies the participatory ethos central to SDL and provides an ISF-specific interpretation of collaborative innovation (Edvardsson et al., 2011).

Managerial Implications

For ISF institutions, transitioning from a product-centered to a service-oriented logic poses significant managerial challenges. This shift requires new skill sets, cultural changes, and a rethinking of performance metrics (Smith, 2020). The integration of information systems not only enhances communication but also serves as a strategic differentiator by offering multiple digital touchpoints that support long-term relationship management.

Our framework thus serves as a practical guide for ISF institutions seeking to design, implement, and evaluate digital services more systematically. It assists in structuring analytical thinking, reducing redundancy, and enhancing stakeholder alignment (Eggert et al., 2019).

Toward an ISF-Specific Framework

Generic tools like the Business Model Canvas often fail to capture the specificities of ISF contexts. Our framework adapts and extends these models, incorporating religious objectives and categorizing ISF service dimensions in a way that allows for targeted strategic action (Choi et al., 2020). By highlighting previously neglected areas such as donor engagement and interaction point

design, this model paves the way for more inclusive and effective ISF service ecosystems.

Nevertheless, digital transformation is not without risk. Institutions may face technological limitations, staff capacity gaps, and strategic misalignment when venturing into unfamiliar digital terrain. These challenges must be mitigated through capacity building, partnerships, and gradual digital onboarding strategies.

CONCLUSION

This study developed and validated a conceptual framework for Islamic Social Finance (ISF) service systems grounded in Service-Dominant Logic (SDL), stakeholder theory, and Islamic ethical principles. The framework classifies service systems from a business model perspective, emphasizing beneficiary centrality, co-creation of value, and alignment with al-Maqāṣid ash-Sharīʿah. Through expert interviews and a real-world case workshop, the framework demonstrated its utility in guiding the early ideation and design of ISF digital services. It facilitates service system development by structuring key components such as stakeholder engagement, interaction points, and value propositions in a way that enhances service effectiveness and institutional responsiveness.

The proposed framework contributes methodologically and practically to the field of ISF by offering a standardized yet adaptable model that bridges the gap between traditional service models and digitally enabled service ecosystems. It encourages ISF institutions to adopt a beneficiary-centered approach that integrates digital technologies with religious values, thereby fostering both trust and user satisfaction. The framework also supports interoperability and system integration, offering a foundational structure for ethically aligned service innovation in shared digital environments. As such, it serves as both a planning tool and a communication device for institutions navigating complex stakeholder relationships and evolving technological demands.

While the framework was validated through expert consultation and a single case workshop, its broader applicability remains to be tested. Future research should examine its relevance across diverse ISF contexts and geographies, particularly in multi-institutional collaborations and large-scale digital implementations. Additionally, longitudinal studies could investigate how the framework influences service performance, stakeholder engagement, and user

satisfaction over time. Further exploration into integrating advanced technologies—such as AI and blockchain—within this framework could also offer valuable insights into scaling ethical and efficient ISF services in a digitally connected world.

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