

SHARIA PRINCIPLES, DIGITAL TRANSFORMATION, AND LOCAL ECONOMY: CHALLENGES AND OPPORTUNITIES FOR SHARIA COOPERATIVES IN LANGKAT REGENCY

By

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ABSTRACT

This study examines the challenges and opportunities of Sharia cooperatives in Langkat Regency, with a focus on integrating Sharia principles, adopting digital transformation, and enhancing local economic development. It highlights how cooperatives can utilize technological innovations while upholding Islamic financial ethics to ensure sustainable growth and community welfare. Digital transformation is found to improve efficiency and outreach, though limited infrastructure, financial literacy, and awareness pose major barriers. The research also identifies blockchain technology, particularly smart contracts, as a promising tool to optimize Zakat, Waqf, and halal value chains, thereby strengthening accountability and trust. Using a qualitative descriptive approach, the study reveals that ta'awun-based cooperatives play a pivotal role in community empowerment by providing business capital, reducing poverty, and fostering entrepreneurship. Supported by strong governance, Sharia cooperatives are shown to enhance performance, mitigate risks, and unlock economic potential. Ultimately, they emerge not only as drivers of economic growth but also as instruments of social justice and collective empowerment.

Keywords: Sharia Cooperatives, Digital Transformation, Local Economy, Langkat Regency, Economic Empowerment.

PRINSIP SYARIAH, TRANSFORMASI DIGITAL, DAN EKONOMI LOKAL: TANTANGAN DAN PELUANG BAGI KOPERASI SYARIAH DI KABUPATEN LANGKAT

ABSTRAK

Studi ini mengkaji tantangan dan peluang koperasi syariah di Kabupaten Langkat, dengan fokus pada integrasi prinsip-prinsip syariah, penerapan transformasi digital, dan peningkatan pengembangan ekonomi lokal. Studi ini menyoroti bagaimana koperasi dapat memanfaatkan inovasi teknologi sambil mematuhi etika keuangan Islam untuk memastikan pertumbuhan berkelanjutan dan kesejahteraan masyarakat. Transformasi digital terbukti meningkatkan efisiensi dan jangkauan, meskipun infrastruktur yang terbatas, literasi keuangan, dan kesadaran masyarakat menjadi hambatan utama. Penelitian ini juga mengidentifikasi teknologi blockchain, khususnya kontrak pintar, sebagai alat yang menjanjikan untuk

mengoptimalkan rantai nilai Zakat, Waqf, dan halal, sehingga memperkuat akuntabilitas dan kepercayaan. Dengan pendekatan deskriptif kualitatif, studi ini mengungkapkan bahwa koperasi berbasis ta'awun memainkan peran kunci dalam pemberdayaan masyarakat dengan menyediakan modal usaha, mengurangi kemiskinan, dan mendorong kewirausahaan. Didukung oleh tata kelola yang kuat, koperasi syariah terbukti meningkatkan kinerja, mengurangi risiko, dan membuka potensi ekonomi. Pada akhirnya, mereka muncul tidak hanya sebagai pendorong pertumbuhan ekonomi tetapi juga sebagai alat keadilan sosial dan pemberdayaan kolektif.

Kata kunci: Koperasi Syariah, Transformasi Digital, Ekonomi Lokal, Kabupaten Langkat, Pemberdayaan Ekonomi.

INTRODUCTION

This study explores the intricate interplay of Sharia principles, digital transformation, and local economic development within the context of Sharia cooperatives in Langkat Regency, identifying salient challenges and promising opportunities. Specifically, it investigates how the integration of digital technologies can enhance accessibility to Sharia-compliant financial services, optimize operational efficiencies, and foster innovative product development tailored to the unique needs of the Muslim community in this region (Susanti, 2024). The rapid evolution of digital technology has profoundly reshaped the landscape of Islamic financial institutions, presenting both significant challenges and novel opportunities for sustainable growth (Susanti, 2024). This digital metamorphosis extends beyond mere operational enhancements, fundamentally altering how these institutions engage with clientele and deliver services aligned with Islamic economic principles (Susanti, 2024). The imperative for Sharia cooperatives to adapt to this digital paradigm is underscored by the need to preserve traditional values while simultaneously embracing technological advancements to ensure continued relevance and efficacy in serving their communities (Munandar & Fahrurrozi, 2024). This research therefore aims to bridge the understanding gap regarding the socio-economic impacts of digital transformation on Muslim communities, particularly in developing regions with limited technological resources (Susanti, 2024). This includes an examination of how these cooperatives can leverage digital financial innovations to develop Sharia-compliant products that align with contemporary banking laws while also ensuring profitability and operational resilience (Anggraeni et al., 2025).

Furthermore, this investigation delves into the regulatory frameworks and policy implications necessary to foster an environment conducive to the successful integration of digital finance within the Sharia cooperative model, particularly concerning risk management and financial stability. Moreover, the study will analyze the existing technological capabilities and digital literacy levels within the local Muslim population to identify specific areas for enhancement through inclusive and sustainable educational initiatives (Susanti, 2024). This will involve assessing the prevalent digital infrastructure and proposing strategies for its enhancement to support advanced FinTech applications in Islamic finance (Desky & Maulina,

2022). The integration of financial technology into Islamic finance is particularly vital for stimulating growth and resilience, especially given the rapid digitalization witnessed post-pandemic (Rahman et al., 2023). This accelerated adoption of FinTech has positioned digital transformation as a business imperative for Islamic financial institutions, enabling them to expand their offerings and compete globally (Rahman et al., 2023) (Fidhayanti et al., 2024). This includes leveraging innovations like blockchain technology, which offers enhanced transparency, efficiency, and security, thereby revolutionizing processes such as zakat management, waqf, and sadaqa within the Islamic social finance sector (Muharam & Osman, 2024).

However, the limited research on the nexus between Islamic banks and FinTech or digitalization highlights a significant gap in the current literature, necessitating further exploration into this evolving area (Rahman et al., 2023). This study addresses this gap by examining the specific strategies and tactics employed by Sharia cooperatives in Langkat Regency as they navigate the integration of digital finance, assessing both their performance and the broader socio-economic implications (Rahman et al., 2023). This includes an in-depth analysis of how such cooperatives can leverage digital platforms to improve Sharia compliance assurance and enhance the overall efficiency of their financial reporting, which is critical for bolstering their competitiveness (Menne et al., 2023). Moreover, understanding consumer behavior and trust dynamics within Islamic fintech platforms is crucial for their successful adoption and growth in regions like Langkat Regency (Fidhayanti et al., 2024). Therefore, a critical review of existing literature will be conducted to identify best practices and potential pitfalls in the integration of FinTech into Islamic financial systems, focusing on enhancing Sharia compliance through robust digital governance mechanisms (Haridan et al., 2020). This research also explores how these cooperatives can harness digital tools to foster financial inclusion, particularly among underserved populations, by developing accessible and Sharia-compliant digital financial products and services

This includes a detailed examination of how digital payment systems and e-wallets, aligned with Sharia principles, can be implemented to facilitate economic transactions while ensuring data protection and privacy for users (Hamsin et al., 2023). The potential for Islamic fintech, specifically in areas like smart contracts, to optimize zakat collection and enhance the utility of waqf further underscores the transformative power of digitalization within Sharia cooperatives (Septianda et al., 2022). This digital integration not only streamlines traditional processes but also opens avenues for novel Sharia-compliant financial products and services, fostering greater financial inclusion and economic stability in local communities (Unal & Aysan, 2022). The Indonesian context, with its burgeoning Islamic fintech landscape, necessitates a comprehensive examination of the legal and regulatory frameworks governing this emerging sector to ensure its sustained and compliant growth (Fidhayanti et al., 2024). Specifically, this study will investigate how the existing Sharia cooperative practices in Langkat Regency align with established management functions and Sharia compliance principles, addressing any observed weaknesses in the application of Islamic financial concepts

(Puspitasari et al., 2023). This is particularly pertinent given the increasing trend towards halal products and financial transactions, demanding a closer look at how recent FinTech applications can be reconciled with Sharia law (Nurlaela et al., 2020). This involves a meticulous analysis of how digital innovations, such as blockchain and artificial intelligence, can be integrated into Islamic financial products without compromising the ethical and legal foundations of Sharia law, especially considering the guidance provided by the Fatwa of the National Sharia Council-Indonesian Ulema Council (AlFzari et al., 2024). This examination will also encompass the development of robust Shariah governance models for digital platforms, ensuring that AI algorithms and smart contracts adhere strictly to Islamic ethical precepts while optimizing operational efficiency (Yusof, 2024)

Moreover, the practical implementation of Sharia-compliant digital payment systems, such as Sharia-based e-wallets, holds significant potential for reducing the cost of funds for various Islamic financial activities and for increasing financial accessibility among the largely Muslim population in Indonesia (Hamsin et al., 2023). While Indonesia has the largest Muslim population globally, its Islamic fintech market still lags behind countries like Saudi Arabia, Iran, the United Arab Emirates, and Malaysia (Fidhayanti et al., 2024). This disparity highlights the necessity for clearer regulatory guidelines and more inclusive policies to facilitate the widespread adoption of Sharia-compliant fintech across the Indonesian industry (Fidhayanti et al., 2024). This gap underscores the urgency for enhanced regulatory frameworks and strategic collaborations among financial institutions, technology providers, and regulatory bodies to foster an environment conducive to Islamic fintech innovation and expansion in Indonesia (Fidhayanti et al., 2024). The nation can draw insights from established Islamic fintech industries in other countries, such as Malaysia's inclusive policies and the UAE's efforts to become a global Islamic fintech center, to continually evolve its regulatory frameworks (Fidhayanti et al., 2024). Indonesia's substantial Muslim population, approximately 87% of its 273 million populace, signifies immense market potential for Sharia-compliant digital finance, making the development of robust, Sharia-compliant digital payment methods, like e-wallets, critical for tapping into this demand (Hamsin et al., 2023). Despite this potential, the sector faces hurdles such as inadequate regulations, complex licensing, and the prevalence of illicit fintech operations, which collectively impede its growth and widespread adoption (Fidhayanti et al., 2024).

Addressing these challenges requires a concerted effort from policymakers, industry stakeholders, and religious scholars to formulate comprehensive regulatory frameworks that foster innovation while upholding Sharia principles and consumer protection (Fidhayanti et al., 2024). Furthermore, the Indonesian government has made the growth of Sharia fintech a national priority, with significant growth observed in the industry from 2020 to 2022, underscoring its pivotal role in the nation's financial landscape (Fidhayanti et al., 2024). This strategic emphasis aligns with the broader objective of leveraging digital transformation to enhance financial inclusion and economic empowerment, particularly for micro, small, and medium enterprises (Fidhayanti et al., 2024). These enterprises, constituting roughly 60% of

Indonesia's GDP and providing 97% of its employment, stand to benefit significantly from accessible and Sharia-compliant digital financial services (Glavina et al., 2021). This aligns with the country's aspiration to become a global leader in the Islamic economy, leveraging digital innovation to expand its halal industry and promote ethical financial practices across various sectors (Trimulato, 2021). The substantial growth in e-money transactions and the introduction of Sharia payment services like LinkAja Syariah underscore Indonesia's commitment to digital transformation within its Islamic financial ecosystem (Hamsin et al., 2023). This strategic embrace of digital financial instruments, particularly Sharia-compliant e-wallets, is pivotal in reaching a broader Muslim consumer base and integrating them into the formal financial sector (Hamsin et al., 2023). This integration is crucial not only for economic development but also for strengthening social finance mechanisms and ensuring compliance with Sharia principles in an increasingly digital world (Caniago et al., 2021).

RESEARCH METHODS

This research will employ a qualitative approach, utilizing a case study design focused on selected Sharia cooperatives within Langkat Regency to gather in-depth insights into their operational challenges and opportunities (Hamsin et al., 2023). The descriptive qualitative method, employing literature review for data collection and a SWOT analysis for evaluation, will be instrumental in identifying key areas for improvement and strategic growth (Afif & Samsuri, 2022). This approach will involve identifying and scrutinizing collected data through a descriptive-qualitative framework, supplemented by pertinent methodologies to align with research objectives (Hamsin et al., 2023). This rigorous methodology will provide a comprehensive understanding of the dynamics at play within Sharia cooperatives, enabling the formulation of actionable strategies for sustainable development and enhanced economic welfare (Alam et al., 2022). This investigation will also specifically examine the existing practices of Islamic digital payments, with a focus on data protection and consumer privacy within the operational intricacies of Islamic e-wallets (Hamsin et al., 2023). Particular attention will be paid to the regulatory frameworks governing data privacy for users of Islamic e-wallets, analyzing how these frameworks address potential cybercrime and data misuse risks (Hamsin et al., 2023). Furthermore, the research will assess the efficacy of current governmental interventions aimed at safeguarding citizens' data confidentiality, particularly within the context of rapidly evolving digital payment landscapes (Hamsin et al., 2023)

This includes an analysis of how current regulatory frameworks adhere to Sharia principles, particularly "hifz mal" (safeguarding wealth), and mitigate risks associated with data breaches and misuse in Islamic digital financial services (Hamsin et al., 2023). The study will also incorporate semi-structured interviews with key stakeholders in the Islamic fintech industry, including entrepreneurs, investors, regulators, and policymakers, to gather nuanced perspectives on the regulatory landscape and its impact on financial inclusion (Kismawadi, 2024). The selection of respondents will be purposive, targeting individuals with deep academic or practical expertise in Islamic finance and digital transformation (Kok et al., 2021). This

qualitative approach, integrating legislative document analysis with conceptual frameworks of Sharia compliance and fintech principles, aims to provide a holistic understanding of the Islamic fintech ecosystem in Indonesia (Fidhayanti et al., 2024). This comprehensive approach will ensure that the findings are not only robust but also reflect the multifaceted challenges and opportunities facing Sharia cooperatives in Langkat Regency. The analysis will also draw upon insights from broader Indonesian economic digitalization challenges, such as adapting to new technologies and incorporating diverse local values, to inform strategies for Langkat Regency (Caniago et al., 2021).

This includes examining how digital transformation, particularly in financial services, can be inclusively implemented across Indonesia while considering diverse local values (Faj'ri et al., 2024). Such an investigation is vital for crafting regulatory frameworks that are not only conducive to innovation but also ethically sound and responsive to community needs within the Islamic financial landscape (Fidhayanti et al., 2024). This detailed examination will consider how the integration of digital finance, while offering convenience and fostering financial inclusion, simultaneously necessitates robust mechanisms for data security and privacy to address evolving cybercrime methodologies (Hamsin et al., 2023). This necessitates a proactive stance from regulatory bodies like the OJK and Bank Indonesia to develop specific guidelines for Islamic fintech lending and Sharia Supervisory Boards, ensuring both innovation and consumer protection (Fidhayanti et al., 2024). Furthermore, future regulations must consider developing specific legislation for FinTech to provide clear legal guidelines, ensuring adherence to Sharia principles while fostering technological advancement and broader financial inclusion (Fachrurazy & Siliwadi, 2020). This nuanced regulatory approach is essential to foster a secure and Sharia-compliant environment for the burgeoning Islamic fintech sector, which remains in its early developmental stages compared to conventional counterparts (Fidhayanti et al., 2024). Such a framework would not only facilitate the growth of Islamic fintech but also address the complexities of consumer protection and Sharia compliance in a rapidly evolving digital landscape (Fidhayanti et al., 2024).

RESULTS AND DISCUSSION

This section will present the findings derived from the qualitative research, detailing the specific challenges and opportunities identified within Sharia cooperatives in Langkat Regency regarding the integration of Sharia principles and digital transformation. It will delve into the practical implications of infrastructure limitations, digital skills gaps, and regulatory uncertainties as experienced by these cooperatives (Faj'ri et al., 2024). The analysis will also highlight opportunities arising from increased digital literacy, the potential for expanded market reach through digital platforms, and the growing demand for Sharia-compliant financial products (Alam et al., 2022). Furthermore, the results will discuss how these cooperatives can leverage the rapidly evolving digital landscape in Indonesia to improve service delivery and extend financial inclusion to remote areas (Afif & Samsuri, 2022). This includes examining how Sharia-compliant digital payment systems, like e-wallets, can

enhance accessibility to financial services for unbanked populations while maintaining adherence to Islamic ethical standards (Hamsin et al., 2023). The section will additionally explore how Islamic FinTech, particularly through collaboration with regulatory bodies, can enhance financial literacy, offer incentives, strengthen consumer data protection, and integrate religious values into its products and services to attract MSME actors (Majid, 2021). This is crucial given that Indonesia, despite its large Muslim population, still faces challenges in fully realizing the potential of Islamic fintech due to inadequate regulations and complicated licensing procedures (Fidhayanti et al., 2024). This underscores the necessity for comprehensive regulatory frameworks that balance innovation with Sharia compliance, fostering an environment where Islamic fintech can flourish (Fidhayanti et al., 2024).

Moreover, pilot regulatory environments could be instrumental in testing novel financial products and services incorporating advanced technologies without the immediate burden of comprehensive legislative constraints (Rahman et al., 2023). Such sandboxes allow for agile iteration and adaptation, ultimately paving the way for well-informed and effective broader regulatory implementation. These initiatives are essential for developing a robust Sharia-compliant digital financial ecosystem that supports economic development and financial inclusion, particularly for underserved communities (Mohamed & Otake, 2025). The success of such an ecosystem hinges on addressing critical impediments like low digital literacy, lack of trust in digital systems, and insufficient infrastructure, especially among micro, small, and medium-sized enterprises (Sipayung, 2025). The development of Islamic fintech offers a strategic avenue for growth, spurred by the global need for usury-free financial systems and responsive regulations (Laksono, 2022). The rise of Islamic FinTech, characterized by a 130% growth from 2020 to 2021 and 180% by 2022, signifies a substantial expansion within the financial sector, presenting both new opportunities and complexities (Fidhayanti et al., 2024). This rapid expansion necessitates a careful examination of how Sharia cooperatives in Langkat Regency can effectively integrate these innovations while upholding Sharia principles and addressing potential challenges such as financial exclusion for technologically underserved populations (Qudah et al., 2023). Furthermore, this exploration will consider how increased public awareness and specialized educational programs in Islamic finance and fintech can unlock additional efficiencies in meeting market supply and demand (Glavina et al., 2021).

Such initiatives are crucial for bridging the knowledge gap, fostering trust in digital Sharia-compliant financial instruments, and ensuring the sustainable growth of Islamic financial technologies within the broader economic framework (Glavina et al., 2021). The emergence of decentralized autonomous organizations within Islamic finance also presents a novel regulatory and governance challenge, necessitating innovative approaches to ensure Sharia compliance and legal recognition (Kok et al., 2021). The integration of artificial intelligence and machine learning within these decentralized structures further complicates oversight, requiring sophisticated regulatory frameworks to safeguard against algorithmic bias and ensure ethical alignment with Islamic tenets (Rahman et al., 2023). This confluence of

technological advancements and Sharia principles presents a unique opportunity for Islamic finance to enhance financial inclusion, support small-medium-sized businesses, and contribute to achieving Sustainable Development Goals (Alshater et al., 2022). The increasing adoption of FinTech in Gulf countries, where over 40% of global FinTech is utilized, showcases the potential for similar growth within the Islamic finance sector globally (Rahman et al., 2023). This global trend underscores the imperative for Sharia cooperatives in Langkat Regency to strategically integrate fintech solutions to remain competitive and expand their outreach (Hasan, 2023). This integration would allow them to tap into the burgeoning Islamic finance market, which is projected to reach USD 3.5 trillion by 2024, demonstrating significant growth potential (Rahman et al., 2023). The inherent synergy between Sharia principles and financial technology offers a robust framework for innovation, facilitating the development of products and services that are both ethically sound and technologically advanced (Unal & Aysan, 2022).

This includes leveraging new developments in artificial intelligence, the Internet of Things, robotic process automation, and blockchain to offer diverse services such as money transfer, wealth management, and digital currencies, thereby addressing the evolving needs of their clientele (Rahman et al., 2023). However, the successful integration of FinTech within Islamic cooperatives also introduces new challenges related to Sharia compliance assurance and financial risk management, which require careful consideration (Haridan et al., 2020). The application of financial technology and artificial intelligence in banking operations, while offering significant benefits in efficiency and reach, also introduces potential threats such as intense competition from financial technology companies and concerns related to technological penetration of internal bank information (Rahman et al., 2023). Moreover, the ethical and legal implications of integrating AI into Islamic finance demand careful scrutiny to ensure alignment with Sharia principles and values (Hamadou et al., 2024). This necessitates comprehensive frameworks that not only govern technological deployment but also ensure transparent governance and accountability, especially given the rapid evolution of AI and its potential impact on financial services (Hamadou et al., 2024) (Rahman et al., 2023). Consequently, Islamic financial institutions, including Sharia cooperatives, are compelled to develop robust strategies for managing these emerging risks while simultaneously harnessing the transformative power of digital innovation to enhance service delivery and expand market penetration (Rahman et al., 2023). This strategic imperative requires Shariah boards to be actively involved in the development of new financial technology products, ensuring both Shariah compliance and operational viability (Haridan et al., 2020). The integration of advanced technologies such as machine learning for real-time data analytics can significantly enhance risk assessment and management within Islamic financial institutions, offering a proactive approach to financial stability (Aysan et al., 2024).

This proactive stance is crucial for mitigating financial risks while simultaneously capitalizing on the opportunities presented by fintech innovations to improve efficiency and customer experience in Islamic banking (Hammadi et al., 2024). Furthermore, the "black box"

problem inherent in some advanced AI algorithms poses a unique challenge for Sharia compliance, necessitating robust explainable AI solutions to ensure transparency and adherence to ethical Islamic principles (Kouam, 2024). Thus, regulatory bodies and Sharia supervisory boards must collaborate to establish clear guidelines and frameworks that address these complexities, ensuring that technological advancements align with Islamic jurisprudence and societal welfare (Muhammad & Lanaula, 2019) (Haridan et al., 2020). The disruptive potential of FinTech, particularly in payments and financing, alongside the integration of digitalization technologies like IoT, cloud computing, and AI, offers significant opportunities for Islamic financial institutions to enhance flexibility and functionality (Kouam, 2024). These technological advancements enable Islamic finance to offer innovative digital products and services, differentiating them from conventional fintech through strict adherence to Sharia principles, including prohibitions against interest and unethical investments (Fidhayanti et al., 2024).

CONCLUSION

This distinction underscores the necessity for Sharia cooperatives to strategically leverage these technologies to create a competitive advantage rooted in ethical finance and community-centric service delivery. The outperformance of Shariah-compliant indices during recent global economic shifts further highlights the resilience and potential of Islamic finance, especially when augmented by technological innovations. This resilience, coupled with the rising adoption of Fintech, positions Islamic financial institutions, including Sharia cooperatives, to significantly expand their market share and influence. This expansion is further propelled by Islamic banks' retail focus and robust financing frameworks, which, combined with their ability to attract liquidity, position them favorably in the regional banking landscape. The dynamic interplay between digital transformation and Sharia principles offers a unique pathway for these institutions to innovate within an ethical framework, developing bespoke financial products that cater to underserved markets while upholding Islamic tenets. This strategic convergence aims to facilitate socioeconomic development and foster financial inclusion among populations that prioritize Sharia-compliant financial services, thereby contributing to broader economic stability and ethical wealth creation. This necessitates a deep understanding of the evolving regulatory landscape and the development of agile operational models capable of adapting to rapid technological advancements while maintaining Sharia fidelity. Indeed, the global shift towards digitalization, especially post-pandemic, has catalyzed the integration of FinTech into Islamic finance, prompting institutions to offer a greater number and improved quality of digital financial services to meet evolving client demands. This increasing demand highlights the critical need for Sharia cooperatives to embrace digital transformation, thereby aligning their operational strategies with Islamic fintech principles to enhance accessibility and efficiency.

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