Analysis of Quality and Implementation of Sharia Financial Services Based on Financial Technology in Indonesia

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ABSTRACT: Technology development is increasing, marked by the increasing internet use in society. In addition, with technological advances, now many people shop for their needs through marketplaces. This study aims to describe the implementation of Fintech in Indonesia as a process of facing the digital era and quickly capturing opportunities in developing product market share. The type of research that researchers use is field research with qualitative descriptive methods. This research shows that technology services can make it easier for customers to carry out various transactions. It is proven by the number of users of the data Sharia service feature who activate the service. From several acknowledgments of customers who use the data Sharia peer-to-peer lending feature, they feel accommodating with it without the sin of usury—the implementation of Sharia financial services carried out by corporate follows Islamic principles and achieves to make it easier for customers.

KEYWORDS: Financial Technology, Service Quality, Service Implementation.

INTRODUCTION
In this modern era, it is essential to understand the meaning of technological advancements (Hall et al., 2022). Currently, humans can only improve their well-being by utilizing technological developments. Technological advancements have also made humans heavily dependent on technology (El Saddik, 2018). Therefore, humans must master various technologies available today (Klus & Müller, 2021). The technological development influences the way of life in multiple fields, particularly the economy (Söderholm, 2020). Currently, we are in a situation where "the world is at the fingertips of humans." We can access anything we want through the smartphone, from entertainment to buying and sending money transactions (Jain et al., 2020).

Information technology (IT) in Indonesia is rapidly growing within organizations. At the national level, Indonesia aims to become Southeast Asia's most prominent digital economy, with a market value of US$130 billion in 2020 (Ramli, 2020). The International Data Corporation (IDC) Indonesia reports that spending on Information and Communication Technology (ICT) in Indonesia is projected to increase by 16 percent from Rp. 339 trillion (US$25.4 billion) in 2017 to Rp. 394 trillion (US$29.5 billion) in 2020. Specifically for IT spending, the increase is estimated to be 24.2 percent from Rp. 128 trillion (US$9.6 billion) in 2017 to Rp. 159 trillion (US$11.9 billion) in 2020. The IDC report also shows a trend of increasing IT investments in cutting-edge technologies such as cloud, data analytics, and data center management (Ali, 2020, p.2).

IDC announced the top 10 IT trends impacting local digital transformation in Indonesia from 2018 onwards. This prediction focuses on four technology pillars: cloud, mobility, social, and data analytics. Most of these top ten technology trends fall into the category of Indonesia's IT 4.0, which is predicted to occur shortly, specifically in 2021. The growth of industries in Indonesia will be further driven by digital business processes, which are expected to contribute 40% to Indonesia's GDP in 2021. These digital business processes involve Industry 4.0 technologies such as cloud computing, artificial intelligence, data analytics, and blockchain (Ali, 2020).

In the future, computers will dominate human jobs and surpass human computing abilities, such as remotely controlling electronic devices using the internet, and the Internet of Things (IoT) enables users to manage and optimize internet-connected electronics and electrical equipment (Sunyaev & Sunyaev, 2020). In simple terms, the Internet of Things (IoT) is a system of interconnected devices/operations encompassing all network elements such as hardware, software, network connectivity, and other electronic/computer components required, ultimately making them responsive by supporting data exchange and collection (Ahmad & Siddiqui, 2022). If we delve deeper into IoT, it goes beyond the concept of developing the overall architectural background that
Blockchain can be considered a qualitative leap in distributed database technology studied since the 1970s, consisting of a shared transaction database used by different users (Garrard & Fielke, 2020). Generally, Distributed Ledger Technologies (DLTs) are designed to handle distributed data in a distributed form, and blockchain represents one possible DLT to do so (Farahani et al., 2021). Blockchain enables sharing a read, validated, and stored transaction ledger in blocks (Komalavalli et al., 2020). Systems based on blockchain technology work in a distributed manner, involving many agents or participants who must be independent of each other and can use peer-to-peer (P2P) communication to organize themselves into network collectives (Tushar et al., 2021). Unlike the old client-server architecture, P2P network nodes do not always have specific roles or a fixed hierarchy (Reina et al., 2013). Functions may not exist or change over time depending on the actual operations behind the communication, i.e., blockchain transactions (R. Gupta et al., 2022). Adopting P2P as an adequate communication paradigm supports the goal of sharing and distributing resources (Zhang et al., 2018).

Sharia-based peer-to-peer lending fintech provides financial services based on Sharia principles, which connect lenders and borrowers to conduct financing contracts through electronic systems using the internet (Baihaqi, 2018). Artificial intelligence (AI), also known as machine intelligence, is essentially a "machine" capable of performing various tasks that are considered to require human intelligence when operated by humans. For example, AI can understand human language commands, recognize faces, drive vehicles, and even use production machines in a company (Disemadi, 2021).

Financial Technology, also known as fintech, is a new model of financial services developed through information technology innovation (Puschmann, 2017). Fintech in Indonesia has several types, including payment media, investment, financial planning, lending, financial comparison websites, financial research, and others (Suryono et al., 2020). Users can make various payments on payment websites using payment-based applications, such as bill payments, purchases, and transfers (Świecka et al., 2021). The development of each company in the present era is always supported by technology (Hajli, 2014). In this case, Islamic financial institutions or Islamic banking are supported by fintech to optimize their operations (Alshater et al., 2022). In the modern era, where technology plays a significant role in everyday life, optimizing and efficiently running a company is crucial to reaching a vast market share (Chaffey & Smith, 2022). According to the Association of Internet Service Providers in Indonesia (APJII) data for 2019-2022, the number of Internet users in Indonesia reached 196.71 million out of a total population of 266.91 million. Fintech financing has grown by 70.36% to Rp 26.10 trillion until August 2021.

Despite the extensive discussion on the importance and impact of technological advancements, there needs to be more research regarding the specific challenges and implications of these advancements in Indonesia. While there is information on the growth of information technology and the increasing adoption of fintech in the country, there needs to be more comprehensive research that explores the unique challenges Indonesian businesses and individuals face in embracing and leveraging these technologies. Further investigation is required to understand the specific barriers, opportunities, and strategies for successfully implementing and utilizing technology in the Indonesian context.

The novelty of this research lies in its focus on the Indonesian context and the exploration of the challenges and implications of technological advancements in the country. By filling the research gap, this study can provide valuable insights into the specific factors influencing the adoption and use of technology in Indonesia and the potential impact on various sectors, including the economy, finance, and society. The study can contribute to developing tailored strategies and policies to promote the effective use of technology in the Indonesian context, leading to enhanced economic growth, digital transformation, and improved well-being for individuals and businesses in the country.

The research aims to provide a comprehensive understanding of the implementation of Fintech in Indonesia and its significance in navigating the digital era and capitalizing on market share opportunities. It also seeks to explore the perspectives of the community, particularly the customers of Syariah enterprises, regarding the efficiency and practicality of utilizing Fintech services. Additionally, the study delves into the mechanisms and application of Sharia principles in the business operations of Syariah enterprises. By addressing these aspects, the research aims to shed light on the implications and potential benefits of Fintech adoption in a Sharia-compliant financial institution.

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LITERATURE REVIEW

Technology Acceptance Model (TAM) Theory: This theory explains individuals' responses to technological advancements. According to Davis (1986), based on the TAM theory, behavioral intention is influenced by a person's attitude toward using information technology. The theory aims to determine the determinants of technology acceptance in society (Di & Tengah, 2020).

Theory of Consumer Choice and Demand: This economic theory revolves around consumer choices (Au & Kauffman, 2008). Consumers can choose their preferences and select the most beneficial alternative. In this digital era, technology caters to users, especially in the financial and financing sectors. Consumers choose based on satisfaction, ease of use and access, and the benefits obtained. It aligns with Davis' (1989) research on user behavior and acceptance of information technology based on usefulness and ease of use, known as the technology acceptance model (TAM).

Islamic Financial Services: Services can be interpreted as actions that provide everything that other people need in the form of services and services (Sundmaeker et al., 2010). In contrast, Islamic financial services are all financial services to other people guided by Islamic principles (Bashir et al., 2021). The main principle that forms the basis for the operation of Islamic financial services is freedom from maisir, gharar, and riba (Musjtari et al., 2022).

Quality: Quality is a measure or indicator of the excellence or superiority of a product or service (DesFitrina et al., 2019). Operationally, quality defines as something that meets or exceeds customer expectations (William et al., 2016). Essentially, quality is customer satisfaction. Another definition expressed by Juran and Gryna is "fitness for use." For consumers, quality means ease of obtaining a product, safety, comfort in usage, and meeting preferences (Juran & Gryna, 1980, pp. 1-2).

Service: In the service industry, services are shaped like facilities that can be used to answer all questions regarding information, which can be in the form of telephone or letters (Weinstein & Barden, 2017). Another definition, according to Almatrooshi et al. (2016), service is the action or deeds of a person or an organization to provide satisfaction to customers, fellow employees, and leaders.

Financial Technology (Fintech): The Financial Stability Board (FSB) defines fintech as technological innovations that result in new business models, applications, processes, or products with material effects related to the provision of financial services. Fintech Weekly explains that fintech is a business form that provides financial services using modern software and technology. Its goal is to facilitate public access to financial products and simplifying transaction processes (Mârâcine et al., 2020).

METHODOLOGY

Research Method and Objects

The research methodology employed is field research using a qualitative descriptive approach. This method involves collecting data directly from the field and generating descriptive written data based on the experiences and perspectives of the research participants. The study focuses on PT. Duha Madani Syariah as a company licensed by the Financial Services Authority (OJK) to provide financial services based on Sharia principles. The research includes participants such as Kusmiyadi (finance & accounting manager), Ika (customer service staff), Tri Kusumawati (HRD), and three customers of PT. Duha Islamic Madani.

Data analysis technique

In the research process, data collection involved interviews and gathering various documents aligned with the research problem. The collected data was then subjected to data reduction, which involved refining, categorizing, directing, and discarding unnecessary information to organize the data and draw conclusions. This data reduction process was guided by the framework proposed by Miles and Huberman (2007, p.16). The organized data was then presented, identifying meaningful patterns and enabling the drawing of conclusions and formulation of actionable insights. The data presentation aimed to facilitate identifying key findings and implications based on the research findings (Miles & Huberman, 2007, p.84). The concluding phase involved the synthesis of findings, patterns, questions, configurations, and propositions, leading to the formulation of conclusive statements. These conclusions were verified throughout the research to ensure their accuracy and validity (Miles & Huberman, 2007, p.18).
FINDINGS AND DISCUSSION

Analysis of Islamic Financial Service Quality Based on Financial Technology

In providing financing to customers, hopes that the financing that has been provided can run smoothly following the terms agreed in the agreement and that the customer pays in full at maturity. However, no matter how clever a financing analyst is in analyzing every financing application, there is a possibility that problematic financing will have consequences within a certain period. The financing cannot be billed, causing losses that Duha Sharia must bear (see Figure 1).

![Figure 1. Graph of Financing Distribution to recipients of financing in 2022](image)

Based on the graph above, it can be concluded that data on the distribution of financing or use of Duha Sharia services fluctuates and continues to increase from January 2022 to August 2022. It means that many customers use peer-to-peer lending services at Duha Sharia.

Implementation of Islamic Financial Services Based on Financial Technology

Service is an important thing for PT. Duha Madani Syariah provides satisfaction to customers following Islamic provisions and the realization of hasanah in every customer activity when using Duha Syariah services. In the millennial era, PT. Duha Madani Syariah continues to advance to keep up with the mobility experienced by the community in all its activities; therefore, PT. Duha Madani Syariah provides peer-to-peer lending services through the Duha Syariah application to facilitate all customer transactions without queuing at the branch office. Duha Madani Syariah is the main facility in every transaction between lenders and beneficiaries. The procedure for buying goods using Duha Syariah installments is by visiting the marketplace platform and partners who have worked with Duha Syariah, namely Bhineka, Halalpedia, and Ralali. Then select the item the customer wants and choose the payment method with Duha Sharia installments. After that, the customer can sign the contract electronically, and the contract goods are sent to the customer's address. If the customer wants to shop elsewhere, the customer can contact Duha Syariah. To purchase goods/services that can be financed at least Rp. 100,000. The procedure for buying Umrah travel packages, halal tours, education, and other services by visiting platforms or marketplaces that work with Duha Syariah. Then select the Umrah travel package, halal tour, or the desired service. Choose the payment method with Duha Sharia installments. When purchasing this package, there is a down payment (urban), after which the customer signs the contract electronically. Umrah or tour departure according to schedule or receive a service package selected according to the provisions.

Financing Mechanism and Implementation of PSAK No.107 and PSAK No.102

**Financing mechanism**

Based on an interview with Ms. Tri, the HRD of Duha Sharia, the mechanism for the financing approval process is as follows (see Figure 2):
1) Register through the online application. The application can be downloaded via Play Store or App Store.
2) Submission of complete customer documents
3) The process of analysis or selection by the credit analyst section
4) If the document complies with the provisions, the final process is the approval process by the directors.

Implementation of PSAK No. 102 regarding Murabahah accounting

Researchers see the benefits obtained by PT. Duha Madani Syariah is based on PSAK No.102; profit is recognized when the goods are delivered, which is at most one year in the financial statements of PT. Duha Madani Syariah, Murabahah profits are recognized as income, which is obtained from deferred payments that do not exceed the agreed timeframe. In PSAK No. 102, if the seller cannot reach the remaining payment from the buyer, it will be recognized as a beneficent fund at the PT. Duha Madani Syariah financial institution, customers who cannot make deferred payments cannot be recognized as beneficent funds. However, customers still make payments in the amount of the earned value without any profit. In the financial institution PT. Duha Madani Syariah, if in buying and selling Murabahah get a discount from the supplier, the price given to the customer is the actual price after the discount because the discount is the customer's right. Furthermore, if the discount occurs after the contract, the distribution of the discount is carried out based on the agreement in the contract. It is under Fatwa No. 16/DSN-MUI/IX/2000, dated 16 September 2000, concerning discounts in Murabahah.

Implementation of PSAK No. 107 concerning Ijarah accounting

Based on PSAK No. 107, Ijarah on assets is a lease to exchange benefits and umrah without transfer of asset ownership with no ‘we’d (promise from one party to another to do something) to transfer the ownership of the major owner to the lessee (musta’ jir) at any given moment. Mu‘ jir can ask Mustajir to submit collateral to avoid the risk of loss. In the financial institution, PT. Duha Madani Syariah does not require collateral; it just requires several documents regarding the customer's data at the beginning of the contract to avoid risk. Based on PSAK No. 107, Mu‘ jir recognizes Ijarah assets when the Ijarah assets are acquired at acquisition cost, and the costs incurred due to the Ijarah contract are recognized at the cost of acquiring the object. The cost of acquiring an Ijarah object can be in the form of fixed and intangible assets. The costs incurred by PT. Duha Madani Syariah, if assets are depreciated, amortization is recorded as depreciation expense on Ijarah assets. Depreciation of Ijarah objects can be in the form of fixed assets and intangible assets. The recording was carried out following PSAK No.107.

CONCLUSION

Based on the Quality Analysis and Sharia Financial Services research using the Financial Technology Method at PT. Duha Madani Syariah, several conclusions can be drawn. Firstly, the utilization of technology in their service offerings, such as the peer-to-peer lending feature, has greatly facilitated customers in conducting transactions without the involvement of usury—secondly, PT. Duha Madani Syariah has successfully implemented Sharia financial services in line with Islamic principles, aiming to provide convenience and benefits to customers. Thirdly, their financing processes, including murabahah and Ijarah, adhere to applicable regulations such as PSAK 102 and PSAK 107. Overall, the research highlights the positive impact of technology in enhancing the quality and accessibility of Sharia financial services at PT. Duha Madani Syariah.

Implication

The research findings on Quality Analysis and Sharia Financial Services at PT. Duha Madani Syariah have several implications. Firstly, it highlights the significance of utilizing technology to enhance the accessibility and convenience of Sharia financial services. The successful implementation of features like peer-to-peer lending demonstrates the potential for technology to
facilitate transactions while adhering to Islamic principles. Secondly, the research emphasizes the importance of aligning financial services with Sharia principles to meet customers' needs seeking ethical and compliant financial solutions. It can contribute to the growth and development of the Islamic finance industry.

Limitations and Recommendations for Future Research

There are certain limitations to consider in this research. Firstly, the study focused solely on PT. Duha Madani Syariah, limiting the generalizability of the findings to other financial institutions. Additionally, the research predominantly used a qualitative descriptive method, which may limit the ability to quantify and measure certain study aspects. Furthermore, the research was conducted within a specific timeframe, and factors such as changing market conditions or technological advancements may impact the findings' relevance and applicability over time. In building upon this research, future studies can consider the following recommendations. Firstly, expanding the scope to include other financial institutions and comparing their approaches to Sharia financial services could provide a broader understanding of the industry. Secondly, incorporating quantitative methods alongside qualitative approaches can provide a more comprehensive analysis and enable statistical comparisons. Additionally, investigating the customer perspective and conducting surveys or interviews with a larger sample size can offer deeper insights into customer satisfaction, preferences, and experiences with Sharia financial services. Lastly, examining the long-term implications and impacts of technology adoption in the Islamic finance sector can shed light on the potential growth and challenges.

REFERENCES


