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Administration**



**Department of Islamic
Banking**

Conducting Islamic Financial Contracts Through Digital Platforms: Applications and Shari'ah Regulations

A Thesis Submitted in Partial Fulfilment of the Requirements for the
Master's Degree in Islamic Banking and Finance

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The student is awarded a grade in the thesis subject. *Pass*

☒ Without making any changes to the thesis.

☐ After making the modifications attached with this decision.

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Abstract

The rise of digital technology has revolutionized numerous sectors, including Islamic banking. This research explores the integration of Islamic financial contracts within digital platforms, examining the practical applications and the adherence to Shari'ah regulations. The study addresses a critical gap in the current literature by analyzing how Islamic finance principles, rooted in Shari'ah law, can be effectively implemented digitally while maintaining Shari'ah and regulatory compliance and promoting financial inclusion. The study begins by outlining the fundamental principles of Islamic finance, which prohibits interest (*Riba*), excessive uncertainty (*Gharar*), and gambling (*Maysir*), and requires profit and loss sharing (PLS) as well as asset-backing transactions. These principles are discussed in the context of Islamic digital contracts to understand their compatibility and potential challenges. A comprehensive review of selected digital platforms in Bahrain offering Islamic financial contracts is conducted, focusing on their structures, operations, and Shari'ah compliance mechanisms. Methodologically, the thesis employs a mixed-methods approach, combining descriptive analysis and qualitative data. Personal interviews with industry experts and Islamic finance specialists reveal practical structures and digitally applied contracts. The descriptive analysis illustrates structures and practical digital implementation of the applied Islamic financial contracts over digital platforms. The qualitative analysis focuses on the alignment of digital financial implementation with Shari'ah principles, identifying key compliance issues and innovative solutions. Findings indicate that while digital platforms offer significant potential for the growth of Islamic finance by enhancing accessibility and Shari'ah-compliance implementation, they also pose unique challenges such as Shari'ah, legal/legislative, and technology challenges. The study highlights successful models of digital platforms that effectively integrate digitalization with Shari'ah compliance structures, such as the Safaghat crowdfunding company which adapts investment agency and commodity Murabaha contracts digitally through the platform. Furthermore, the research underscores the importance of regulatory frameworks in supporting the development of digital Islamic finance. It calls for enhanced collaboration between technology developers, Islamic financial institutions (IFIs), and Shari'ah boards to ensure that digital Islamic financial products comply with Shari'ah regulations and meet the evolving needs of consumers by keeping pace with contemporary financial developments. The thesis concludes with some key digitalization challenges and recommended solutions to minimize their impact. This thesis contributes to the academic discourse by bridging the gap between traditional Islamic finance and modern digital innovations, offering insights and practical Indicators for the future development of Shari'ah-compliant digital financial systems.

Dedication

This thesis is dedicated **to my parents**, for their endless love, support, and encouragement throughout my life. Your sacrifices and unwavering belief in my abilities have been the driving force behind my achievements **-after Allah, the Almighty-**.

To my wife and kids, whose constant support and understanding have been invaluable. Thank you for standing by me during the late nights and challenging times.

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Chapter One

Introduction to The Study

1. Introduction.

1.1. Background of Islamic Finance and Preface.

1.2. The General Concept of Digital Platforms.

2. Research Problem.

3. Research Questions.

4. Research Objectives.

5. Research Significance.

6. Research Setting.

7. Research Methodology.

8. Literature Review.

9. Research Terminology.

Chapter 01: Introduction to The Study

1. Introduction

1.1. Background of Islamic Finance and Preface

Islamic finance originates from Islamic law (Shari'ah), which regulates economic and financial endeavors based on principles drawn from the *Quran* and the *Sunnah* (teachings of Prophet Muhammad peace be upon him). Although its inception traces back to the early stages of Islam, the modern Islamic finance sector emerged predominantly during the mid-20th century, notably gaining momentum in the 1970s and 1980s (M. Usmani, 1998).

Islamic finance is grounded in the enhancement of individuals' livelihoods, the fair allocation of income, and the promotion of social equity among community members (Rabbani et al., 2021). Distinguished from conventional banks, Islamic financial institutions (IFIs) adhere to Islamic laws (Shari'ah) in designing their offerings, conducting transactions, and presenting services to clients.

Furthermore, the primary goal of Islamic finance is to foster economic growth within society through the implementation of Shari'ah-compliant financial solutions (Irum Saba, Rehana Kouser, & Imran Sharif Chaudhry, 2019).

Therefore, as the global Islamic finance industry continues to expand, driven by increasing demand for ethical financial solutions, the integration of digital platforms holds significant promise for enhancing accessibility, efficiency, and transparency. Digitalization not only offers the potential to broaden the reach of Islamic finance to a global audience but also presents avenues

for innovation and product development tailored to the needs of diverse stakeholders.

However, the incorporation of digital platforms into Islamic finance necessitates a rigorous examination of the compatibility between technological modalities and Shari'ah principles, as Islamic finance operates within a distinctive ethical framework guided by principles such as risk-sharing, prohibition of interest (*Riba*), and adherence to moral and social responsibility. Consequently, any adaptation of financial contracts to digital platforms must ensure compliance with these foundational principles, thereby upholding the integrity and legitimacy of Islamic finance.

Through an analysis of relevant case studies, regulatory frameworks, and emerging trends, this research aims to provide insights that contribute to a deeper understanding of the transformative potential of digital platforms in Islamic finance.

This thesis embarks on a multidimensional exploration, encompassing a review of existing literature, case studies of successful implementations, and an investigation of the regulatory frameworks governing financial technology (Fintech) services in the digital age in Bahrain. By examining real-world applications and theoretical foundations, this research aims to contribute to the growing body of knowledge at the intersection of Islamic finance and digital innovation.

1.2. The General Concept of Digital Platforms

Digital platforms encompass online environments or structures designed to facilitate interactions, transactions, and

exchanges among users, often utilizing technology to generate value and enable diverse activities. These platforms span a wide range, encompassing social media networks, e-commerce websites, sharing economy platforms, and software-as-a-service (SaaS) solutions (Parker, Marshall W. Van Alstyne, & Sangeet Paul Choudary, 2016).

According to (Hafnawi, 2023), Digital platforms, in their broad concept, are defined as a set of integrated solutions delivered online, enabling the user or various business sectors to perform multiple tasks in the same online space, without the need for traditional methods, which provide the existence of linkage and integration among a series of information required by the user, allowing them to access the desired service from the same starting point.

The primary goal of digital platform strategy, in its fundamental concept, is market penetration and expansion by focusing on allowing a specific segment or multiple segments of participants to benefit from the presence or interaction of others to deliver a certain service, value, or task. This is because user engagement on the platform relies on their choices and interests (Hafnawi, 2023).

Additionally, platform strategy encompasses the technical aspects of information technology (IT) to select and enhance digital platforms. It also includes the strategic aspects of defining their purpose and how they operate to provide value. Another important aspect of a platform strategy is the presence of an integrated digital environment for the platform's operation, ensuring the integration of the systems associated with it, or

opening the door for third parties to access the platform through an application programming interface (APIs). This brings new and significant value by facilitating communication between the platform and developers of external applications (Hafnawi, 2023).

Digital platforms have emerged as a transformative force in the realm of Islamic banking and finance, offering several benefits to both financial institutions and customers. These platforms are pivotal in enhancing financial inclusion by providing access to Islamic financial services to a broader demographic, including underserved populations in remote areas (Ismail & Shah, 2018). Thus, by breaking down geographical barriers and offering user-friendly interfaces, digital platforms enable individuals to conveniently engage with Shari'ah-compliant banking products and services.

The integration of digital platforms in Islamic banking also fosters transparency and trust among customers. Through these platforms, customers can access real-time information about their financial transactions, investment portfolios, and alike (Ismail & Shah, 2018).

This transparency not only empowers customers to make informed financial decisions per Islamic principles but also builds credibility and loyalty towards Islamic banking institutions. Additionally, digital platforms facilitate seamless communication between customers and financial institutions, enabling prompt resolution of queries and concerns, and thereby enhancing the overall customer experience in the Islamic banking sector (Ismail & Shah, 2018).

2. Research Problem

The problem of the research lies in the possibility of providing a comprehensive digital platform that offers various types of Islamic financial contracts digitally at all stages of its execution, under the provisions and regulations of Shari'ah. One of the main challenges in achieving this goal is the legal and technological challenges related to providing all the Shari'ah requirements through which the contract is considered valid from a Shari'ah perspective.

Therefore, the establishment of digital platforms and the delivery of banking services through them are feasible, but the focus of the study is to study the current digital implementations and examine structures and operations to ensure the applicability of integrating Islamic financial contracts with innovative technologies.

3. Research Questions

- What is meant by digital platforms, and what is their added value to the Islamic banking sector?
- What are the main general regulatory and Shari'ah controls governing the process of conducting Islamic financial contracts online?
- How can Islamic financial contracts be digitized using digital platforms?
- What are the main contracts which applicable through digital platforms?
- What are the main challenges facing the digitization of Islamic banking and its financial products?

4. Research Objectives

- Clarifying the nature of digital platforms and their significant benefits for the Islamic banking sector.
- Understanding the procedural regulatory controls, as well as the Shari'ah regulations, for conducting Islamic financial contracts online and their general provisions, including digital platforms.
- Investigating how Islamic financial contracts can be applied through digital platforms and the steps involved in their digital execution.
- Identifying the main Islamic financial contracts that can be applied through digital platforms.
- Examining the current practical applications relevant to the study topic, explaining their structures and how they operate.
- Identifying the major challenges facing the digitization of Islamic financial contracts, hindering their continuity and development.

5. Research Significance

The significance of the research focuses on its applications and adherence to Shari'ah regulations which is vital in contemporary finance. As technology continues to revolutionize the financial industry, the integration of digital platforms in Islamic finance presents both opportunities and challenges. Understanding the implications of conducting Islamic financial contracts digitally is crucial for Islamic finance schoolers and specialists.

This research contributes to the growing body of knowledge in Islamic finance by shedding light on the practicalities, benefits, and potential challenges associated with digital platforms. Moreover, it

addresses the need to ensure compliance with Shari'ah principles in the digital realm.

6. Research Setting

The study focused on the Kingdom of Bahrain market, specifically the Islamic retail banking sector including some of the current platforms of Islamic banks and financial institutions in Bahrain and its digital channels related to the study.

7. Research Methodology

- **Descriptive Method:** Describing Islamic financial contracts, the nature of digital platforms, the legal and Shari'ah controls related to their implementation.
- **Field Study Method:** Conducting personal interviews with personnel in Islamic financial institutions specializing in Shari'ah and relevant technical expertise.
- **Inductive Method:** Tracing the regulations governing financial technology (Fintech) services in the Kingdom of Bahrain, as well as Shari'ah standards to ensure implementation integrity, extracting insights from research, studies, and relevant literature on the subject, and gathering information through field visits to some Islamic banks and other communications with other Islamic financial institutions.
- **Analytical Method:** Analyzing regulatory laws, Shari'ah standards, as well as some current applications of digital platforms in the Kingdom of Bahrain.

8. Literature Review

- **Online Financial Dealings – Dr. Muhammed Younes al-Birqadar.**

The study addressed many topics, including the nature of the Internet and its uses, the ruling on its use in financial transactions, methods of concluding contracts online, the Shari'ah status (*Takyeef*) of contract conclusion using the Internet, as well as issues related to expressing offer and acceptance in contracts concluded online, the timing of contract formation using the Internet, and the issues of possession (*Qabd*) and its effect on contracts concluded online. Finally, it addressed the topic of the Shari'ah protection of financial transactions conducted over the Internet.

The author concludes that contracts and financial transactions conducted using technology generally do not differ in their essence or provisions from those executed through traditional methods. However, they may have some specific provisions. Nonetheless, they are still subject to the principles of contract theory in Islamic jurisprudence, as well as to the general rules governing financial transactions in Islamic law.

Thus, it becomes apparent that the study focused on the jurisprudential and theoretical aspects rather than the practical and applied ones. Additionally, it did not address the aspect of the laws regulating digital banking services.

- **AAOIFI Shari'ah Standard No. 38 for Online Financial Dealings – 2015.**

This standard addressed the Shari'ah principles concerning the conclusion of financial contracts over the Internet, whether through the establishment of commercial websites or the provision of online

access services. This standard outlined the different facets of online financial transactions, including the Shari'ah legality of contracts formed digitally, defining the commencement time of contracts, permissible methods of ownership post-contract signing, and Shari'ah guidelines regarding the safeguarding of online financial transactions.

The standard did not address the legal aspect of regulating digital banking services because it is a Shari'ah standard intended to mention the Shari'ah principles related to conducting financial transactions online in general.

- **Jurisprudential Provisions for Electronic Transactions – Computers and Information Network (Internet) – by Dr. Abdulrahman bin Abdullah Al-Sanad, Dar Al-Waraq, Riyadh, First Edition, 1424 AH.**

The origin of this book is a doctoral thesis submitted by the author to obtain a PhD degree in the Department of Comparative Jurisprudence at the Higher Institute for Judiciary at Imam Muhammad bin Saud Islamic University in Saudi Arabia.

The book addressed electronic transactions and their concepts, exploring the ownership of information technology and its usage by discussing intellectual property and its boundaries. It also covers the legal rulings regarding the use of the Internet and related matters.

Then the book discussed the rulings regarding establishing electronic websites and concluding contracts through modern technological means. It also covers the conclusion of commercial and non-commercial contracts such as marriage contracts, divorce pronouncements, loan contracts, agency contracts, and guarantee contracts.

The book also addresses crimes related to information technology, types of attacks on computers, and methods of protection against such attacks.

However, the author did not address the practical aspect of Islamic financial contracts through digital means, including digital platforms. Additionally, the study is general regarding non-financial aspects such as marriage contracts and others.

- **Todorof, M. Shari'ah-compliant FinTech in the banking industry. ERA Forum 19, 1–17 (2018).**

This is an editorial article discussed the potential for Shari'ah-compliant FinTech to collaborate with and benefit Islamic banking. It covered the basics of Shari'ah finance law, compares Islamic banking with conventional banking, and examines the implementation of FinTech in Islamic finance, particularly peer-to-peer (P2P) lending.

The article explored the potential of Shari'ah-compliant FinTech in the banking industry, arguing that Islamic banking could benefit from the development of FinTech. The article suggested that Shari'ah-compliant finance can absorb some of FinTech's incarnations without contradicting Shari'ah principles. It also indicated that financial innovations such as peer-to-peer (P2P) lending may benefit users, particularly relevant to Muslims.

The paper is divided into five parts, starting with a brief introduction to Shari'ah finance law, comparing the two types of banking, and then examining FinTech's relationship to modern banking, particularly conventional banking. It then discussed the implementation stage of FinTech in Islamic finance and Shari'ah-compliant P2P lending.

The article concluded that the introduction of FinTech in Islamic banking can increase its competitiveness and inclusiveness by incorporating a greater number of products and services, lowering their existing prices, and closing the credit gap in many Islamic countries.

The article did not focus on the different types of Islamic financial contracts implementation through platforms and other related Shari'ah aspects.

Therefore, this thesis is distinguished from previous studies by the following:

1. Focusing on the concept of digital platforms and implementing Islamic financial contracts through.
2. Addressing the regulatory and Shari'ah requirements for adopting Fintech services in Islamic financial institutions in the Kingdom of Bahrain.
3. Discussing general aspects of digitalizing Islamic finance and related requirements.
4. Studying and analyzing samples of digital platforms in Bahrain executing some Islamic financial contracts.
5. Addressing some challenges for digitalizing Islamic finance and proposing general solutions.

9. Research Terminology

Islamic financial contracts – Digital platforms – Shari'ah regulations – Islamic Fintech – Fintech – Commodity Murabaha – Tawarruq – Shari'ah compliant – AAOIFI.

Chapter Two

Regulatory and Shari'ah Regulations for Digital Financial Contracts

1. Regulatory Landscape Related to Digital Platforms in Bahrain.

1.1. Central Bank of Bahrain (CBB) Fintech & Innovation Rules.

1.1.1. Eligibility Criteria for Providing Fintech Services.

1.1.2. Application and Approval Process.

1.2. AAOIFI Shari'ah Standard for Online Financial Dealings.

1.2.1. Launching Digital Websites for Contractual Dealings.

1.2.2. Protection of Online Financial Dealings.

2. The Shari'ah Status (*Takyeef*) of Digital Financial Contracts.

2.1. Through Voice or Video Chat Methods.

2.2. Through a Platform or Written Chat Methods.

3. Shari'ah Regulations Related to Digital Financial Contracts.

3.1. Contract Signing Session (*Majlis al-Aqd*).

3.2. Offer and Acceptance (*al-Iyjab wa al-Qabool*).

3.3. Possession of Subject Matter (*al-Qabd*).

3.3.1. Actual Possession.

3.3.2. Constructive Possession (*al-Qabd al-hukmi*).

Chapter 02: Regulatory and Shari'ah Regulations for Digital Financial Contracts

1. Regulatory Landscape Related to Digital Platforms in Bahrain

1.1. Central Bank of Bahrain (CBB) Fintech & Innovation Rules

As part of the ongoing efforts to promote financial digital transformation within Bahrain and advance digital financial services, the Central Bank of Bahrain (CBB) has established a specialized Fintech & Innovation Unit. This unit is tasked with ensuring the delivery of optimal services to both individual and corporate customers in the financial sector by fostering an adaptable regulatory framework that encourages Fintech innovation.

In addition to this initiative, the CBB has implemented various other measures, including the introduction of a regulatory Sandbox. This Sandbox facilitates startups, FinTech companies, and licensed entities to offer innovative banking and financial solutions. Furthermore, the CBB has issued regulations pertaining to crowdfunding services, catering to both conventional and Shari'ah-compliant financial services.

According to CBB, the responsibilities of the CBB's FinTech & Innovation Unit extend to overseeing the approval process for participation in the regulatory Sandbox, monitoring the progress of Sandbox participants' testing activities, staying abreast of technological and regulatory advancements in the Fintech landscape on both regional and international levels, spearheading

strategic Fintech initiatives, and collaborating closely with stakeholders across the Fintech ecosystem within Bahrain.

1.1.1. Eligibility Criteria for Providing Fintech Services

According to the CBB FinTech & Innovation rules, the main eligibility criteria for participation in the Sandbox include the following:

- a) **Innovation:** The service needs to exhibit genuine innovation, catering to an unmet market need, presenting notable distinctions from current offerings, or introducing new applications of existing technologies in the financial sector (as confirmed by market analysis and a comprehensive evaluation of the distinguishing attributes of the applicant's technology or operational approach in relation to competitors).
- b) **Customer benefit:** The service should provide tangible direct or indirect advantages to customers, such as enhanced security, improved customer experience, increased efficiency, higher product quality, reduced prices, or a combination thereof, supported by measurable estimates or demonstrations, whenever feasible, as evidenced by customer research.
- c) **Identification of Major Risks:** The applicant must recognize the primary risks linked with the proposed solution or service, along with the strategies to alleviate these risks, including plans for business continuity and disaster recovery.
- d) **Compliance with CDD and AML/CFT Requirements:** The applicant must demonstrate the

ability to adhere to the Customer Due Diligence (CDD) and Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT) requirements outlined in the CBB Rulebook.

- e) **Confidentiality Requirements:** The applicant should be capable of preserving the confidentiality of customer information under the CBB and Financial Institutions Law No. 64 of 2006, as amended ("CBB Law"), as well as other relevant laws.

1.1.2. Application and Approval Process

The Sandbox application process involves several steps and requirements, which are summarized based on the CBB FinTech & Innovation section over the official website.

Prospective applicants are encouraged to engage with the CBB early on to address any queries and ensure eligibility. Applications are submitted through the CBB's official website, with a declaration page signed and submitted alongside the application. In cases of collaborative projects involving multiple FinTech firms or partnerships with licensed financial institutions, joint applications are permissible. The application form necessitates detailed information about the applicant company, the proposed service or solution, compliance with eligibility criteria, communication plans with customers, testing strategies, outsourcing arrangements, and any other relevant information.

Then, the CBB undertakes a formal approval process, aiming to provide a decision within 15 calendar days after receiving all necessary information and documentation. The decision can include granting the application with or without conditions specified by the CBB or rejecting the application with the reasons provided. Certain regulatory requirements may be relaxed on a case-by-case basis, while core legal and regulatory standards such as those related to anti-money laundering and customer confidentiality must be always upheld. Upon approval, the applicant must establish a dedicated company registered with the Ministry of Industry, Commerce, and Tourism for Sandbox activities.

1.2. AAOIFI Shari'ah Standard for Online Financial Dealings

This standard issued by the Accounting and Auditing Organization of Islamic Financial Institutions (AAOIFI) deals with Shari'ah principles of the execution of financial contracts online, whether through the establishment of commercial websites or the provision of online access services. It aims to explain various aspects of this topic, including the Shari'ah status of contracts formed digitally, the determination of contract inception time, permissible procedures for asset possession post-contract signing, and Shari'ah regulations concerning the protection of online financial transactions.

1.2.1. Launching Digital Websites for Contractual Dealings

The fundamental principle governing digital platforms does not differ from the establishment of online

commercial websites in terms of legitimacy. Similarly, the execution of Islamic financial contracts through these platforms and digital sites sticks to the same principles. According to the provisions outlined in this standard, it is permissible to establish online commercial websites, provided they abstain from promoting Shari'ah-prohibited goods, services, or activities, or utilizing prohibited tools and means in promoting lawful goods, services, or activities. This ruling equally applies to digital platforms through which Islamic financial products can be offered, making their fundamental ruling is the permissibility, with the condition of adhering to Shari'ah principles (AAOIFI, 2015).

Furthermore, the establishment of such websites serves the interests of a significant portion of the population in the modern era, aligning with the overarching objectives of Shari'ah. The permissibility of concluding online financial contracts arises from the absence of any impermissible elements within these contracts where they do not fundamentally differ from traditional contracts, except in the method of their conclusion.

1.2.2. Protection of Online Financial Dealings

This section of the standard emphasized the necessity of safeguarding financial transactions conducted through digital platforms, encompassing all parties involved and its operations in general. Such protection is considered pivotal for the success of these platforms and to gain the trust of customers, thereby achieving one of the objectives

of Shari'ah, which is the preservation of wealth and rights in general.

This section addresses three fundamental aspects, firstly, the protection of commercial websites and the data of users from unauthorized access; secondly, the importance of verifying the identities of users; and thirdly, safeguarding users from contracts of adhesion (*Uqud al-Iz'an*)¹, in which the user has no choice but to accept the terms and conditions outlined therein without the right to modify them.

1. Protect commercial sites and clients' data from

attack: This part discussed the legal implications of online commercial activity. It argued that commercial websites function as private property, and trespassing on them can lead to compensation for the owner. The institution that owns the website has a responsibility to implement security measures to safeguard its rights and those of its clients.

- This includes protecting clients' data, which cannot be sold or transmitted without permission. Determining trespassing and data theft requires referencing established traditions and regulations that adhere to Islamic law principles.
- Compensation for trespassing should cover both direct financial losses and lost earnings, with expert

¹ Adhesion contracts (*Uqud al-Iz'an*): refer to agreements where one party, typically the party with greater bargaining power, imposes pre-drafted terms and conditions on the other party. These terms are usually presented on a "take it or leave it" basis, with little to no opportunity for negotiation.

assistance available for assessment. The right to claim compensation doesn't expire, but relevant regulations must be followed if they comply with Islamic law.

- Finally, responsibility for stolen money or data falls on the thief, or if identifying them is impossible, on whoever facilitated the act. The website owner isn't liable if they've implemented proper security measures and haven't explicitly assumed responsibility for all situations.

2. Verification of clients' identities: Within the context of online commerce, this part emphasized the importance of verifying clients' identities and legal capacity to protect the institution's interests. Shari'ah allows for electronic signatures as a verification method if it complies with existing regulations. If forgery or mistaken identity occurs concerning either party, the other party has the right to terminate the contract, where determining such forgery or errors relies on established evidentiary rules.

3. Clients Protection from adhesion contracts ('*Uqud al-Iz'an*): This part discussed online adhesion contracts, where pre-defined terms are presented to clients on a "take-it-or-leave-it" basis. Shari'ah emphasized state oversight of such contracts to ensure fairness for all parties. If the price and terms are deemed just, the contract is valid. However, if the price is excessive or the terms disadvantage the other part of the

contract, they have the right to seek legal intervention to nullify or modify the contract. Additionally, if the delivered product differs from the description or a previously seen model, the buyer can choose to complete the purchase, cancel it, or negotiate a solution with the seller.

2. The Shari'ah Status (*Takyeef*) of Digital Financial Contracts

2.1. Through Voice or Video Chat Methods

Voice chat is a communication between two or more parties through a window on the computer or platform and exchange of conversation, where parties can conclude contracts in a manner like concluding them physically. While video chat is when two or more parties can hold meetings and conclude contracts while seeing and hearing each other, in a manner that is hardly distinguishable from their actual physical meetings for this purpose (Yunus, 2009).

When a contract is concluded through audio or audiovisual communication between the parties, it should follow the same Shari'ah regulations as contracts signed in the physical presence of both parties. Accordingly, it must fulfill the requirements associated with such contracts, including the simultaneous presence of both parties (*Itihad al-Majlis*), the absence of any indication of disinterest from either party, the succession of offer and acceptance following customary practice, and other relevant regulations (AAOIFI, 2015).

2.2. Through a Platform or Written Chat Methods

Platform method is where the user can visit the digital platform and conclude contracts with the platform owner and its manager who showcases products and services through it, with the owner expressing acceptance digitally through the platform as well. While written chat communication is when two or more parties can connect through a window on the computer and exchange dialogue by writing texts to conclude contracts or other purposes (Yunus, 2009).

When a contract is established through written correspondence, such as email, or via online access to a platform, it falls under the jurisdiction of the rulings governing contracts signed in the absence of both parties, like the message-based contracting (AAOIFI, 2015).

3. Shari'ah Regulations Related to Digital Financial Contracts

3.1. Contract Signing Session (*Majlis al-Aqd*)

In digital contracts, a contract signing session refers to the process where parties involved in the contract come together virtually, typically through video conferencing or other digital communication platforms, to conclude and authenticate the contract. During this session, the parties review the terms of the contract, express their agreement, and formally sign the document electronically. This virtual meeting serves as the equivalent of a traditional face-to-face contract signing session, ensuring mutual understanding and consent among all parties involved in the transaction.

According to the AAOIFI Shari'ah standard No. 38, in the context of voice or video chat method, the contract signing session is the period of communication between the involved parties specifically concerning the contract. If the conversation concludes or is terminated, or if the parties transition to a different topic, the contract signing session is considered to have ended, unless the interruption is brief and reasonable.

Where on the other side, platform or written chat method, the contract signing session begins with the communication of the offer to the relevant party and extends until the acceptance is issued. Additionally, the session may be terminated if the offering party withdraws his/her offer before the other party decides regarding acceptance.

3.2. Offer and Acceptance (*al-Iyjab wa al-Qabul*)

In Islamic contract law, the establishment of a contract typically does not necessitate strict formalities. Instead, what holds significance, akin to other legal frameworks, is the essential demonstration of consent from each party involved. This consent is typically ascertained through the process of offer and acceptance. The offer, known as "*Iyjab*," and the acceptance, termed "*Qabul*," must align simultaneously during a meeting or "*majlis*" for the contract to be considered valid (Abd Rahman, 2000).

According to the Dictionary of Islam by Thomas Patrick Hughes, an offer is the initial proposal presented by one of the parties during negotiations or in the process of concluding a contract. Acceptance is the word spoken in the second place for

the making of a disposition of property and the agreement (*'Aqd*) becomes complete by it.

In digital contracts, offer and acceptance follow the same principles as in traditional contracts. An offer is made when one party expresses a willingness to enter a contract under certain terms, and acceptance occurs when the other party agrees to those terms without any conditions.

However, in the digital context, offer and acceptance can be communicated electronically through various means such as email, messaging platforms, or digital signature software. It's essential for both parties to clearly express their intention to enter a contractual agreement and for the acceptance to mirror the terms of the offer for the contract to be valid.

Regarding the expression of offer and acceptance in online financial contracts, AAOIFI Shari'ah Standard No. 38 stipulated general requirements to be considered as follows:

- Offer and acceptance in online contracts can take various forms that signify the mutual agreement of both parties to conclude the contract.
- If the offering party transmits a message via a website or email that includes all the rights and obligations related to the contract and does not reserve the right to withdraw the offer once it is accepted, then that message is deemed to constitute an offer.
- If the offering party transmits an electronic message via a website or email without specifying all the rights and obligations associated with the contract or includes a

provision allowing withdrawal even after acceptance, the communication is regarded as an invitation to negotiate rather than a formal offer. In such instances, the customary process of offer and acceptance must be followed to formalize the contract.

- In the scenario where a contract is concluded through a website, the act of clicking on the acceptance icon is deemed as an acceptance in the strict Shari'ah sense if the website system does not mandate confirmation of acceptance. However, if the website system necessitates confirmation of acceptance in any manner, acceptance is not considered valid without completing such confirmation. Accordingly, as a precautionary measure against errors by users, the institution offering services through its website should integrate a confirmation step into its system. This step serves to ensure that users confirm their acceptance before proceeding with the contract, thereby reducing the likelihood of misunderstandings or inadvertent agreements.

3.3. Possession of Subject Matter (*al-Qabd*)

Possession stands as a cornerstone in the lawful acquisition of wealth, as financial contracts remain incomplete and binding without possession of the relevant subject matter. Contemporary Islamic banking products and transactions often rely on legal or constructive possession rather than physical possession. In this regard, customary practices hold considerable control in determining the appropriate mode of possession (Rahman, 2020).

Possession of assets can occur either physically or constructively, where the method of taking possession varies depending on the nature of the assets and prevailing business customs. Dr. Al-Qurrah Daghi defined *Qabd* as relinquishment (*Takhliyyah*)¹ among the contracting parties and the subject matter in a form that enables receipt without any barriers based on customs. Additionally, according to (Yahaya, 2023), the results of his study showed that rapid technological advancements have altered some methods of buying and selling transactions including the issue of possession (*Qabd*), especially those involving gold.

(Rahman, 2020) also concludes that custom plays a significant role in determining the method of delivery and possession, provided it aligns with the principles of Shari'ah. The modes of possession adopted in one era may not necessarily be applicable in subsequent eras, as customs evolve. Consequently, practices grounded in custom may change accordingly.

3.3.1. Actual Possession

Actual possession in Islamic finance refers to the physical transfer of ownership of an asset from the seller to the buyer. This transfer typically occurs through manual delivery, such as handing over the asset directly from one party to another.

Actual possession is crucial in Islamic finance as it serves as tangible evidence of the transfer of ownership,

¹ Takhliyyah: refers to the seller giving up total control of management to the buyer.

ensuring that the buyer becomes the rightful owner of the asset and assumes all associated rights and responsibilities. It is a fundamental concept in Islamic financial transactions, ensuring transparency and adherence to Islamic principles of trade and commerce.

Although, digital transactions don't need to have actual possession to consider the validity of the application, as the contracting process is entirely conducted online through a digital platform. Therefore, possession here is realized by relinquishment (*Takhliyyah*) and enabling (*Tamkeen*) from the seller to the buyer, as will be explained in the following section (Omoola & Ibrahim, 2023).

Actual possession ensures that the underlying assets are tangible and owned by the parties involved in the transaction. This is particularly important in transactions such as Murabaha (cost-plus sale), where the goods must be physically or constructively possessed by the seller before they are sold to the buyer at a markup (M. H. A. Usmani, Usmani, Usmani, & Ali, 2019).

3.3.2. Constructive Possession (*al-Qabd al-Hukmy*)

Constructive possession (*Qabd hukmī*) is Qabd that does not need physical transmission of the subject matter (*ma'qūd 'alayh*) where the full control is transferred to the buyer through abandonment although physical possession of the sold items has not been moved to the new owner (Yahaya, 2023).

Additionally, AAOIFI mentioned that Constructive possession of an asset occurs when the seller facilitates the other party to take delivery and control of it, allowing for its disposal, even in the absence of physical possession (AAOIFI, 2015).

(Al-Zuhayli, 2002) also defined constructive possession where it occurs through each instance of *hiyāzah* (control) and *tamakkun* (capability) in overseeing something according to prevalent custom without necessarily physically handling it or exerting physical control over it or empowering the recipient of the subject matter (*ma'qud 'alayh*) without any obstacles.

In its sixth conference, the Islamic Fiqh Academy of Jeddah examined the matter of Qabd, especially concerning the emergence of various modern modes of financial transactions. Following extensive discussions, the Academy reached the following decisions:

- Qabd can be physically executed by hand or by measuring, such as in the case of food items, or by transporting and relocating the item under rightful possession and control. However, Qabd can also be established constructively through legal means by relinquishing the item, enabling the individual to exercise control over it, even without physical possession. The nature of Qabd varies depending on the type of item involved and is subject to relevant customary practices.

According to (Dr. Nazeih Hammad), the scholars' discussion of the meaning of "Qabd", its types, and its conditions is mostly about actual possession. However, that does not mean that constructive possession is not considered valid by scholars in all cases. On the contrary, it is accepted, recognized, and known to them in many situations where it substitutes for actual possession, even if it is not realized. This is due to necessities and reasons that require its consideration constructively, and the arrangement of rulings of actual possession accordingly. The author has also mentioned several forms of juridical estimation possession in the schools of jurisprudence.¹

¹ Dr. Nazeih Hammad, Possession – its provisions and its forms, AAOIFI Studies, P.1041-1054.

Chapter 03

Islamic Financial Contracts and Digitalization

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Chapter 03: Islamic Financial Contracts and Digitalization

1. Features of Islamic Financial Contracts

This part aims to clarify the main features of Islamic financial contracts in general, which render them distinct and unique from conventional interest-based contracts. This is imperative to ensure their realization during the digital application of these Islamic contracts through digital platforms.

This necessity arises from the significant influence by Islamic banking from conventional banking systems and their operational methods, particularly in the realms of technological and financial innovation. Such influence may impact some of the characteristics and features of Islamic financial contracts. This impact could manifest as the absence of some of these features during the digital implementation of Islamic finance, or their weakness and failure to be considered in a manner that fulfills their legal objectives and purposes. Therefore, it is crucial to mention some of these features to be considered when adopting digital platforms as a tool for delivering Islamic financial services.

1.1. Assets-backed Financing

One of the fundamental characteristics of Islamic finance lies in its asset-backed nature. Unlike conventional financing, which primarily deals with money and monetary instruments, Islamic finance relies on tangible assets. In many countries, conventional institutions are typically restricted from engaging in trading goods and maintaining inventories. However, Islam does not recognize money as a tradable commodity, except in specific circumstances. Money, devoid of intrinsic utility, serves

solely as a medium of exchange, with each unit being identical to another of the same denomination (M. Usmani, 1998).

Consequently, there is no scope for profiting from the exchange of these units. Profit in Islamic finance arises from transactions involving items with inherent utility traded for money or through currency exchange. Earnings derived from dealing with money or its representations in the same currency constitute interest (*Riba*) and thus are prohibited. As a result, Islamic financing, unlike its conventional counterpart, consistently relies on non-liquid assets, fostering the creation of real assets and inventories (M. Usmani, 1998).

Furthermore, in the Islamic financial system, equity forms the foundation with the absence of debt. Depositors in Islamic banks do not have their deposits guaranteed at face value because their returns are contingent upon the profits and losses incurred by the bank (Hassan & Lewis, 2007).

Thus, all traded assets through any Islamic digital finance must consider such a feature to avoid money-to-money exchange transactions or face liquidity risks during the implementation.

1.2. Free of Prohibited Elements (*Riba, Gharar, and Maysir*)

The prohibition of *Riba*, *Gharar*, and gambling serves as a pivotal factor in delineating invalid and voidable contracts within Islamic finance. These prohibitions establish crucial boundaries that must not be transgressed, defining the parameters within which contracts operate. (Ayub, 2007).

In Islam, Riba is strictly prohibited, but profits generated from trade and productive investment are actively encouraged (Hassan & Lewis, 2007). Interest, known as Riba in Arabic, denotes the additional amount that the borrower is obligated to repay to the lender, over and above the principal amount borrowed. It is often simplified as a return of money on money, highlighting the distinction between interest rates and rates of return on financial investments. The prohibition of interest stands as the foremost principle of Islamic finance, signifying its paramount importance in guiding the practices of Islamic financial institutions (Hassan & Lewis, 2007).

(Abdullah & Chee, 2013) mentioned one of the reasons why Riba is prohibited is that Interest-based financing exacerbates the wealth gap between the affluent and the underprivileged. Conventional banks typically demand collateral, typically in the form of assets, for business loans. Consequently, they tend to concentrate their lending activities on well-established enterprises and borrowers capable of providing collateral. This practice marginalizes smaller businesses lacking assets to pledge as collateral, leading to either exorbitant interest rates or outright denial of financing. Over time, these dynamics fuel the expansion of large businesses at the expense of smaller enterprises, often family-owned, which are disadvantaged and at risk of closure consequently.

Gharar, or uncertainty, is forbidden in contracts and transactions, requiring them to be devoid of significant and excessive uncertainty. However, slight, or minor uncertainty,

which is inherent in most transactions, is permissible (Abdullah & Chee, 2013).

Maysir, also known as gambling, is prohibited, encompassing activities like games of chance such as betting money in a slot machine or speculative borrowing to wager on currency movements. Maysir serves as a basis for rejecting conventional insurance and derivatives in Islamic finance (Abdullah & Chee, 2013).

1.3. In Line with the Objectives of Shari'ah (*Maqasid al-Shari'ah*)

Maqasid Shari'ah is an Arabic term, that combines "Maqasid" (objectives) and "Shari'ah" (Islamic law). Technically, it denotes the objectives derived from divine texts (Yazid, Asmadi, & Liki, 2015).

According to (Al-Ghazali, 1998), The fundamental aim of Shari'ah is to safeguard the welfare of individuals and shield them from *Haram*. Islam seeks to uphold the well-being of both the individual and society and thus places particular emphasis on protecting religion (*Deen*), life (*Nafs*), lineage (*Nasl*), intellect (*Aql*), and wealth (*Mal*).

Maqasid al-Shari'ah embodies the comprehensive perspective of Islam, emphasizing its holistic nature. Islam is regarded as a complete and interconnected way of life, necessitating an examination of its entirety rather than its individual components. Its objective encompasses the entirety of human existence - both individual and societal - across the temporal and spiritual realms, encompassing both the worldly life and the hereafter (Dusuki & Abozaid, 2007)

Therefore, Islamic finance fosters entrepreneurship through mutually beneficial contracts that connect capital owners to real economic activities, thereby benefiting society. In contrast, Riba and Gharar can lead to an unjust system that fosters corruption. Islam does not prohibit individuals from creating, managing, or accumulating wealth; however, it does provide specific rules, known as Shari'ah laws or Islamic regulations. These regulations are guided by the *Maqasid al-Shari'ah*, or Shari'ah objectives, which aim to achieve excellence in both this world and the hereafter by avoiding prohibited practices. By promoting transparency and stability in society, adherence to Shari'ah principles helps uphold these objectives.¹

On the other hand, conventional finance predominantly emphasizes wealth management, focusing on investment, wealth creation, and accumulation. While Islamic finance places significant emphasis on wealth purification through charitable distribution, including *Zakat*, *Sadaqah*, and *Khairat*. Islamic teachings advocate for the equitable distribution of wealth, discouraging its concentration in the hands of a few individuals. Moreover, Islam encourages the privileged wealthy to fulfill their duties and assist the underprivileged members of society.

Thus, Shari'ah scholars must not overlook Islamic principles and *Maqasid al-Shari'ah* when crafting laws, regulations, and Islamic digital and non-digital banking products. It's essential because numerous Islamic financial products, especially those developed in Malaysia, might adhere to the basic form and overt

¹ Islamic Finance & Objectives of Shari'ah, article from usmaniandco.com website, April 20, 2021

structure of an Islamic contract but fail to fulfill the essence and spirit of Shari'ah (Yazid et al., 2015).

Additionally, one of the most significant challenges facing the Islamic banking and finance industry today is to develop products and services that are Shari'ah-compliant or legitimate from an Islamic perspective (including Maqasid al-Shari'ah) without compromising their competitiveness, profitability, and long-term viability (Dusuki A, 2009).

Seeing that the repercussions of neglecting Islamic values and Maqasid al-Shari'ah are evident, as an example, in the rejection of Malaysian Islamic financial products in the global market, with some products being unable to be traded in certain countries. Additionally, criticisms of these products and practices have been voiced by various stakeholders, including individuals within the industry. Notably, Shaykh Taqi Usmani provided significant criticism regarding Sukuk products, stating that 85% of Sukuk issuances did not comply with Shari'ah rulings (Yazid et al., 2015).

(Dusuki A, 2009) did further reinforce this assertion by highlighting that in numerous Sukuk transactions, the liquidity facility and purchase undertaking fail to align with Maqasid al-Shari'ah because they involve a guarantee to the investor.

1.4. The Concept of Profit and Loss Sharing (PLS)

Profit and Loss Sharing (PLS) is a fundamental concept in Islamic finance that represents a partnership between capital providers (investors or financiers) and entrepreneurs or businesses. Unlike conventional finance, which typically

involves fixed-interest lending, PLS emphasizes a more equitable sharing of both profits and losses between the parties involved. Moreover, Muslim scholars have underscored that PLS contracts contribute to enhanced stability in financial markets (Hassan & Lewis, 2007).

In an Islamic financial context, PLS operates under the principles of Shari'ah, which prohibits the charging or receiving of interest (riba). Instead, Islamic finance promotes risk-sharing and encourages entrepreneurship while ensuring fairness and social justice (Mohd Nor & Ismail, 2020).

A profit and loss sharing contract entails that the outcome involves sharing both profits and losses, and it cannot be predetermined. Shareholders are only entitled to repayment if profits are generated; in the absence of profits, no payouts occur (Kettell B, 2011).

Then, the profits and losses stemming from a physical investment are distributed between the creditor and the borrower based on a predetermined formula that mirrors their individual levels of participation (Hassan & Lewis, 2007).

2. Digitalization of Islamic Financial Contracts

The digitalization of Islamic financial contracts involves leveraging technology to streamline and enhance the processes involved in Shari'ah-compliant financial transactions. Therefore, digitalization efforts in Islamic finance must adhere to Shari'ah principles while also addressing the complexities of modern financial transactions.

One of the methods used in the digital financing process is through a mobile application or a digital platform through which financing

operations are conducted digitally, and this program or platform represents the personality of the bank, for example, the bank assumes the role of mediator between the seller and the customer, and the digital platform makes an immediate contract with the merchant to purchase the goods that the customer wishes to finance, and after the purchase process is completed, the platform issues an electronic Murabaha contract to complete the contract with the customer.

Digital finance can be defined as a set of contractual operations organized in an acceptable Shari'ah manner, which takes place through the exchange of notices between the parties to the contract online, and automatically through specific devices or applications.

It is important to differentiate between digital finance and e-commerce to understand the concept of the digital financing process. The main differences are:

1. Digital finance requires three parties, namely the bank, the customer, and the merchant, while e-commerce is between two parties, the merchant, and the customer.
2. The customer does not contract directly with the seller in digital finance but rather contracts with the bank while contracting directly with the seller is made in e-commerce.
3. Digital finance requires several contracts (at least two contracts) sequential in a Shari'ah acceptable manner. While e-commerce is done through one contract, which is a sale contract, a service rental contract, etc.

2.1. Digital Finance Requirements

2.1.1. Shari'ah Requirements

Some of the Shari'ah requirements that must be considered when carrying out digital financing are the digital contract, how to create the offer and acceptance, ensuring the validity of the contractors' acts, as well as what is related to the contract signing session and related Shari'ah regulations. Also, the need for the commodity of the contract to be legally permissible by Shari'ah, and a statement of the available payment methods for the price and considering the provisions of possession and delivery in digital transactions that take place online.

Moreover, the memorandums of understanding that take place between the bank that owns the digital platform, and the merchant who owns the goods subject to financing, including how to apply the stages of digital financing between all parties to ensure the safety of the application in terms of Shari'ah and procedure.

Additionally, one of the Shari'ah requirements is the agency (*Wakala*) contract between the bank and the customer in the case that the legal legislation does not allow the customer to sell the goods subject to financing, or in the case of international goods that the customer cannot buy in his capacity, so the bank became as an agent for the customer in selling these goods subject to financing on his behalf and in his name.

It is stated in the Shari'ah Standard No. 30 of AAOIFI Standards – Clause No. 4/7 that the customer is prohibited

from authorizing the bank or its agent to sell the commodity he purchased from the bank in the Tawarruq contract unless the system did not allow the customer to sell the commodity himself except through the bank, so there is no objection to the power of attorney, provided that this is after the customer receives the commodity in real or Constructively.

2.1.2. Legal Requirement (Electronic Signature)

According to the UNCITRAL Model Law on electronic signature of 2001, an electronic signature is defined as data in electronic form that is integrated into, attached to, or logically linked with a data message, where its function is to identify the signatory about a data message and to indicate the signatory's authorization of the information contained within it.

Electronic signature is the main legal requirement that must be addressed in digital financing. No matter how many forms of electronic signature, they are required to prove the identity of the customer, or merchant when he is a party involved in the digital financing process. Many forms of electronic signature can be used in digital finance, including biometric signature (handprint, retina, voice, etc.), an electronic pen, or an electronic signature.

2.1.2.1. Biometric Signature

The biometric signature verifies the identity of the individual based on their inherent and physical characteristics and traits to distinguish and identify them. Biometric signature is

performed using the unique characteristics of everyone, either by utilizing behavioral or physical traits, to distinguish and identify them. Therefore, it is referred to as a signature by characteristics (Abu Leil, I. A., 2003). Among the most important physical characteristics relied upon by biometric signatures are fingerprint, iris, or voiceprint (Mahmoud Lotfi, M. H., 2002).

This type of signature involves capturing an accurate image of a physical trait of the person who wishes to use a biometric signature. This image is then stored on a computer device, encrypted, for verification purposes. The encryption is decoded to verify the validity of the signature by matching the traits and characteristics of the client using the signature with those stored on the computer device. It is programmed so that the locked mechanism will only be released after this fingerprint matches the programmed fingerprint in its memory (Abu Heiba, N., 2003).

2.1.2.2. Electronic Pen Signature

This type involves the signer writing their signature using a specialized electronic pen with a sensitive optical sensor that can write on the screen of a computer device. This is facilitated by a specific program that captures the signature and verifies its authenticity based on the

movement of the pen on the screen, the shapes it forms, the pressure applied by the pen, and other characteristics of the signer's signature. This signature would have been previously stored in the computer device (Al-Merri, A. R., 1998).

However, this system requires a computer device with specific specifications, making it incompatible with the flexibility needed for practical application in Islamic digital finance. Additionally, it requires an additional authentication authority. Moreover, this type of electronic signature has settled on not being relied upon as conclusive evidence in legal matters (Al-Aseeri, R., 2017).

2.1.2.3. Digital Signature

Digital Signature uses numerical values printed through encryption, secret keys, complex calculation methods, and mathematical equations. Through this process, the transaction transforms from a standard written and understandable message into a mathematical equation or a digital message that is unreadable and incomprehensible unless decrypted by someone possessing the decryption key. The recipient decrypts such a message using another key to obtain the transmitted information. The sender's signature is deemed valid if the message

appears clearly readable after decryption (Abdulhameed, T., 2007).

The digital signature is the most widely used, important, and renowned form of electronic signature in electronic transactions by companies and countries compared to other forms of electronic signatures. The reason for this undoubtedly lies in the security it provides, its reliability, and its reasonable cost (Abu Heiba, N., 2003).

Dr. Rashid Al-Aseeri also emphasized that this type of electronic signature achieves the highest levels of security and trust. Additionally, it ensures precise identification and distinction of its parties. (Al-Aseeri, R., 2017).

2.1.3. Technology Requirements

One of the technological requirements that must be met to create digital finance is smart devices such as an integrated digital platform that includes the digital process at all stages of its implementation, as well as banking systems and protection systems through which smooth practical implementation is ensured, and its safety from technical problems and cyber security risks that hinder the digital process.

2.1.4. Technical Requirements

The infrastructure and the power of the Internet are among the most important factors that contribute to the success of digital finance, as it is considered the basis of

the entire digital process, as well as the strength of telecommunications services in the region that adopts digital finance in its banking operations.

2.2. Digitalization Advantages to Islamic Finance

According to a report published by Ernst & Young (2020), digitalization has brought numerous benefits to Islamic finance, enhancing efficiency, accessibility, and transparency, and improving customer experience through online banking platforms, mobile apps, and digital payment solutions.

Additionally, it has facilitated greater financial inclusion by reaching underserved populations, enabling them to access Islamic financial products and services remotely. Moreover, digitalization has streamlined processes, reducing operational costs for Islamic financial institutions while ensuring compliance with Shari'ah principles.

FinTech innovations offer numerous benefits to the financial system as well, including cost reductions, improved service quality, and heightened customer engagement and satisfaction. These advancements enable firms to attain competitive advantages and bolster operational efficiency (Zouari & Abdelhedi, 2021).

FinTech innovations also leverage mobile technology to provide comprehensive banking services to customers, constituting a holistic business model. These innovations harness advanced technologies like blockchain¹, artificial

¹ Blockchain technology is a sophisticated database mechanism designed for transparent information sharing within a business network. It functions by storing data in blocks that are chronologically linked together in a chain.

intelligence¹ (AI), machine learning² (ML), big data analytics³, and cloud computing⁴ to accomplish their objectives efficiently (Dawood, Al Zadjali, Al Rawahi, Karim, & Hazik, 2022).

Therefore, in response to evolving global dynamics, technology is harnessed to implement the precise objectives of Shari'ah, enabling Islamic economic participants to adapt to more streamlined and secure methods of conducting business. On the other side, dependence on traditional paper-based documentation often results in delays, inefficiencies, and heightened susceptibility to errors and fraudulent activities. Although financial intermediaries facilitate interoperability within the financial system and mitigate risks, they also impose additional expenses and compliance burdens (Mohamed, 2017).

Another advantage of digitalization is Financial inclusion which refers to the accessibility and usage of financial services by individuals and businesses, particularly those in underserved or marginalized communities. It encompasses a range of services including banking, savings, credit, insurance, and digital payments.

Financial inclusion is crucial for economic development and poverty reduction, as it empowers people to manage their

¹ Artificial intelligence (AI) is a branch of computer science concerned with creating intelligent systems capable of mimicking human cognitive abilities.

² Machine learning (ML) is a subfield of (AI) focused on developing algorithms that can learn from data and improve their performance on specific tasks without explicit programming.

³ Big data analytics refers to the process of collecting, storing, analyzing, and extracting insights from vast and complex datasets.

⁴ Cloud computing refers to the on-demand delivery of IT resources and services over the internet.

finances, invest in education and healthcare, and participate in the formal economy (Khalil Shehadeh & Yousef Al-Atoum, 2021).

According to the World Bank Financial Inclusion Overview Conference (2020), financial inclusion is a key enabler in achieving sustainable development goals. It promotes economic growth, reduces income inequality, and fosters resilience to economic shocks. Moreover, it enhances social inclusion by providing opportunities for women, youth, and rural populations to access financial services and participate in economic activities.

Financial inclusion in Islamic finance through digitalization involves leveraging digital technology to expand access to Islamic financial services to underserved and unbanked populations, in alignment with the principles of Islamic finance. Digitalization has the potential to enhance financial inclusion by overcoming barriers such as geographical limitations, high costs, and lack of infrastructure that have traditionally hindered access to financial services, particularly in Muslim-majority countries and communities (Khalil Shehadeh & Yousef Al-Atoum, 2021).

Another advantage addressed by (Jawdat, 2022), is that digitalization improves the performance of Islamic banks by enhancing competitiveness and asserting its position in a time where survival demands efficiency, particularly as adapting digitalization will contribute to strengthening Islamic banking by opening new markets and attracting many customers previously inaccessible. Also, Islamic banks will be able to optimize their resources and reduce the costs of their transactions.

Digitalization similarly contributes to enhancing the marketing process of Islamic financial institutions and promoting their banking products and services worldwide, at lower costs compared to traditional methods, through a comprehensive platform for all the institution's operations.

Overall, digitalization has played a vital role in advancing the Islamic finance industry, fostering innovation, and expanding its reach globally.

2.3. The Process of Digitizing Islamic Financial Contracts

Digitalizing Islamic financial contracts involves transitioning traditional paper-based contract processes to digital platforms while ensuring compliance with Shari'ah principles and regulatory requirements. According to (Laldin, 2019), Islamic banks can generally leverage digital platforms to conduct Islamic financial contracts through the following process:

- 1. Platform Development:** Islamic banks can develop or partner with fintech companies to create digital platforms tailored specifically for conducting Islamic financial contracts. These platforms should be designed to accommodate various types of Islamic contracts such as Mudarabah, Murabaha, Ijarah, Musharakah, and others.
- 2. Online Banking Services:** Islamic banks can integrate Islamic financial contracts into their online banking services, allowing customers to initiate and manage transactions through digital channels such as internet banking and mobile apps. This provides convenience and accessibility for

customers to engage in Islamic finance from anywhere at any time.

- 3. Digital Contract Execution:** Islamic banks can enable customers to digitally execute Islamic financial contracts through the platform. Customers should be able to input relevant contract details, review terms and conditions, and digitally sign agreements in compliance with Shari'ah principles and regulatory requirements to be considered valid and enforceable under applicable laws.
- 4. Documentation Management:** Islamic banks should ensure that all documentation related to Islamic financial contracts conducted through the digital platform is securely stored and managed. Digital documentation should adhere to legal and regulatory standards and be easily accessible to relevant parties as needed.
- 5. Shari'ah Compliance Checks:** Implement automated Shari'ah compliance checks within the digital platform to ensure that transactions adhere to Islamic principles. This may involve integrating Shari'ah screening tools and algorithms to verify the permissibility of contracts, transactions, and financial products, or a regular Shari'ah auditing process to ensure compliance.
- 6. Secure Payment Processing:** Facilitate secure payment processing for Islamic financial transactions conducted through the digital platform and Implement encryption and other security measures to safeguard customer funds and sensitive financial information during payment transactions.

7. Customer Support: Provide comprehensive customer support services through the digital platform, including live chat, email, and phone support. Dedicated customer service representatives should be available to assist customers with inquiries, resolve issues, and provide guidance on Islamic finance products and services with the level of knowledge needed for such assistance.

8. Education and Awareness: Islamic banks should use the digital platform to educate customers about Islamic finance principles, products, and services. This may include providing informational resources, tutorials, and interactive tools to enhance customers' understanding of Islamic banking concepts and practices.

To sum up, the process of digitalizing Islamic financial contracts is available in some cases and applications, but it needs more developments to reach the goal of fully digital financial services that match the needs of all relevant stakeholders.

3. Islamic Financial Contracts Through Digital Platforms

This part aims to describe the most important Islamic financial contracts in general, in terms of defining the contract, explaining its structure and how to implement it, as well as showing how to digitize these contracts through digital platforms in general, without addressing the application examples of these contracts in this part, as the most prominent practical applications in the Kingdom of Bahrain will be presented in the next chapter (Chapter 4), which mainly rely on these contracts in their digital operations.

3.1. Finance-Based Contracts

Common finance-based contracts in Islamic finance include Murabaha and Tawarruq, among others. These contracts serve various purposes, such as investment financing, trade transactions, and project financing. Each contract has specific terms and conditions that govern the rights and obligations of the parties involved.

3.1.1. Commodity Murabaha (Cost-Plus Sale)

Murabahah refers to the sale of a commodity or property with an agreed profit margin against a deferred or lump sum payment. This transaction involves two contracts: the first contract is between the client and the bank, while the second contract is between the bank and the supplier. The client (purchaser) initiates the process by ordering a specific commodity through the bank. Subsequently, the bank purchases the commodity from the supplier and sells it to the client at an agreed-upon profit margin. The client then has the option to make either a lump sum or deferred payment to the bank.

The commodity Murabaha contract involves the sale of goods with a predetermined profit margin added to the cost price. There are two types of Murabaha sales. In the first type, the Islamic bank acquires goods and offers them for sale without any prior commitment from a customer to purchase them. In the second type, the Islamic bank acquires goods ordered by a customer from a third party and subsequently sells these goods to the same customer. In this scenario, the bank only purchases the goods after

receiving a commitment from the customer to buy them (Kettell B, 2011).

In other words, the Murabaha contract, wherein the customer commits to purchasing the item from the bank, is termed Murabaha to the purchase orderer. This distinguishes it from the standard Murabaha, which does not require such a commitment from the customer.

Murabaha to the purchase orderer involves the sale of an item by the bank to a customer (the purchase orderer) for a pre-agreed selling price, inclusive of a pre-determined profit margin over its cost price. This commitment is specified in the customer's promise to purchase. Typically, a Murabaha to the purchase orderer transaction entails the bank providing the customer with a Murabaha credit facility (AAOIFI, 2015).

Some observers perceive this mode of Islamic finance as resembling conventional interest-based lending operations. However, a significant distinction between Murabaha and interest-based lending lies in the fact that the markup in Murabaha compensates the bank for its services, such as sourcing and procuring the required goods at the best price. Moreover, the markup is not tied to a specific period. Consequently, if the client fails to make a deferred payment on time, the mark-up does not escalate from the agreed price due to the delay. Additionally, the bank retains ownership of the goods between the two sales, thereby assuming associated risks (Hassan & Lewis, 2007).

This contract is commonly used in car financing, where the client requests to purchase a specific car. The bank then acquires ownership of this asset by purchasing it from its owner and then sells it to the client at a markup price in addition to the purchase cost.

Digitalizing the Murabaha contract through a digital platform offers a transformative approach to Islamic finance, enhancing efficiency and transparency. This transition involves leveraging technology to streamline the process of executing and managing Murabaha contracts. By utilizing digital platforms, IFIs can significantly reduce paperwork, automate contract generation, and improve the overall speed of transaction processing. According to a study by Ahmed and Rahman (2017), digitalization can lead to a more seamless and error-free execution of Islamic financial contracts, such as Murabaha, ultimately benefiting both IFIs and customers.

IFIs must undertake several practical steps to effectively implement the digitalization of Murabaha contracts. Firstly, they should invest in secure and user-friendly digital platforms that comply with Islamic finance principles, ensuring the authenticity and integrity of contract details. Secondly, IFIs need to integrate digital signature solutions to facilitate the electronic signing of contracts, thereby enhancing convenience and reducing the need for physical documentation. Research by Akhtar et al. (2019) emphasizes the importance of secure digital platforms and electronic signatures in ensuring the validity

and enforceability of Islamic financial contracts, including Murabaha agreements.

Moreover, training staff and educating customers about the digitalization process are crucial steps in successfully implementing Murabaha contracts through digital platforms. IFIs need to conduct training sessions to familiarize employees with the digital platform and ensure they can efficiently handle digital transactions.

Simultaneously, educating customers about the benefits of digital platforms for conducting Murabaha contracts can enhance their trust and confidence in the digital process. As highlighted in a study by Islam et al. (2020), effective communication and education play a vital role in promoting the adoption of digital technologies in Islamic finance, paving the way for a seamless transition to digitalized Murabaha contracts.

3.1.2. Monetization (*Tawarruq*)

The Tawarruq contract serves as a key financing instrument within Islamic finance. It facilitates access to capital by clients while adhering to Shari'ah principles, which prohibit the charging of interest.

In a typical Tawarruq transaction, a financial institution, acting as the seller, purchases a tangible commodity on behalf of a client. The institution then sells the commodity to the client at a pre-agreed markup price payable in installments. Subsequently, the client sells the commodity in a separate transaction to a third party for immediate cash, typically at a lower price than the

purchase price from the institution. This process allows the client to obtain immediate liquidity while the institution earns a profit through the markup on the commodity sale.

The permissibility of Tawarruq stems from its underlying emphasis on sale and ownership transfer. Islamic scholars emphasize that the genuine purchase and resale of the commodity are essential for the contract's validity. Research by Chapra (2008) highlights the importance of ensuring the commodity is of tradable value and has a legitimate market to prevent the transaction from becoming a mere pretext for charging interest. Additionally, scholars like Siddiqi (2004) stress the need for separate and clearly defined contracts for the purchase and sale of the commodity to uphold the Shari'ah principle of transparency.

It is important to distinguish between Tawarruq and Bai al-Inah, where in Bai al-Inah, the lender provides credit to the borrower by selling an asset at a predetermined price, along with a pre-defined profit. Subsequently, the same lender promptly buys back the asset from the borrower, at the same fixed price. According to (AAOIFI, Shari'ah Standard no. 30), Monetization involves acquiring a commodity at a postponed price, established through either Musawamah (Bargaining) or Murabahah (Mark-up Sale), and subsequently selling it to a third party at a current spot price to access immediate cash.

Tawarruq is often used by individuals and businesses to access cash or raise funds without resorting to

conventional interest-based loans. It is commonly employed for short-term financing needs, working capital requirements, and other liquidity purposes (Ismon, 2012).

However, Tawarruq has been subject to scrutiny by some scholars due to concerns about its compliance with Shari'ah principles, particularly regarding the potential for the transaction to resemble a conventional loan with interest. As a result, its application and structuring may vary based on the interpretation of Shari'ah principles by different Islamic finance scholars and regulatory bodies. Tawarruq transactions need to be carefully structured and monitored to ensure compliance with Islamic finance principles and ethical standards (Ismon, 2012).

According to (M. H. Allaymoun and O. A. H. Hamid, 2019), the implementation of a digital Tawarruq platform requires a multi-step approach. Firstly, the platform needs to be designed per Shari'ah guidelines. This necessitates collaboration with Shari'ah scholars to ensure all functionalities comply with Islamic financing principles.

Research by Khan (2020) highlights the importance of incorporating Shari'ah-compliant e-commerce protocols within the platform's architecture. Secondly, the platform should integrate with existing banking systems for seamless data exchange and transaction processing. This integration, as explored by Ahmed et al. (2021), can streamline communication and minimize manual intervention, reducing errors and processing times.

This platform should offer a user-friendly interface for customers to apply for Tawarruq financing and select available commodities for purchase. Additionally, it should integrate secure payment gateways to facilitate the transfer of funds between the IFI and the customer. Smart contracts based on blockchain technology can be employed to automate the execution of the Tawarruq transaction, ensuring transparency and efficiency while minimizing the risk of human error.

Finally, robust security measures are crucial to safeguard sensitive financial data and ensure user privacy. Abdelrahman et al. (2022) mentioned that blockchain technology offers a promising solution for secure and transparent record-keeping within the Tawarruq framework.

By digitalizing the Tawarruq contract in this manner, IFIs can streamline the financing process, enhance transparency, and enhance the overall experience for clients seeking Islamic financing solutions.

3.2. Investment-Based Contracts

Islamic investment-based contracts provide Shari'ah-compliant alternatives to traditional financing. Contracts like Mudarabah and investment agency emphasize profit and loss sharing between investors and the IFIs while focusing on facilitating asset ownership through sale and markup structures. These instruments prioritize ethical business practices and real asset ownership, fostering a financial system aligned with Islamic principles.

3.2.1. Speculation (*Mudharaba*)

The Mudharaba contract represents a type of partnership and Profit and Loss Sharing (PLS) agreement between two parties: one party provides the capital (known as *Rabb al-mal*), while the other party contributes labor (referred to as *Mudarib*). Both parties then share the profits according to predetermined proportions agreed upon in the contract.

One of the forms of the Mudharaba contract entails an agreement between two parties: an Islamic Bank acting as an investor (*Rabb al-mal*), which provides financial resources to fund specific projects undertaken by the entrepreneur (*Mudarib*), who constitutes the second party. Another form is the opposite where the bank acts as *Mudarib* and the client as money provider.

Profits generated from such projects are shared between the parties based on a predetermined proportion, while any losses incurred are the responsibility of the Islamic Bank. In the event of losses, the *Mudarib* forfeits only their efforts and anticipated share in the profits, without bearing financial liability. (Kettell B, 2011).

In Mudharaba contracts, profits from investments are distributed based on a fixed, predetermined ratio. While *Rabb al-mal* retains possession of the assets, *Mudarib* typically has the option to buy out *Rabb al-mal*'s investment. Mudharaba agreements can be established between an Islamic bank, either as the provider of funds directly or as a trustee on behalf of depositors, and

business-owner clients. In the latter scenario, the bank functions as a Mudarib for a fee. Additionally, the bank serves as a Mudarib to its depositors, investing their funds in various schemes (Hassan & Lewis, 2007).

Digitalizing the Mudaraba contract through a dedicated platform can offer significant advantages for both parties. Research by Nienhaus and Yung (2009) highlights how digital platforms can enhance transparency and communication within Islamic financial partnerships.

A well-designed platform can automate contract creation, facilitate profit-sharing calculations, and provide secure document storage accessible to both Rabb al-Mal and Mudarib. Additionally, integrating the platform with online accounting tools can streamline financial reporting and ensure real-time visibility into venture performance.

Implementing a digital Mudaraba requires a phased approach. Firstly, the platform needs to be built per Shari'ah principles. Collaboration with Shari'ah scholars is crucial to ensure all functionalities comply with Islamic financing guidelines. Secondly, the platform should integrate with existing banking systems to enable secure online fund transfers and profit distributions.

This integration, as explored by Iqbal et al. (2020), can minimize manual intervention and transaction processing time. Finally, robust cybersecurity measures are essential to safeguard sensitive financial data and user privacy. Employing blockchain technology, as discussed by Khan

et al. (2022) in the context of Islamic finance, offers a promising solution for secure and transparent record-keeping within the Mudaraba partnership framework.

By embracing digitalization, the Mudaraba contract can be revitalized for the modern business landscape. A secure and user-friendly platform can streamline partnership formation, enhance transparency, and empower both Rabb al-Mal and Mudarib to make informed investment decisions.

3.2.2. Investment Agency (*Wakala bil-Istithmar*)

The Wakala bil-Istithmar, also known as Investment Agency, is a Shari'ah-compliant contract used in Islamic finance. It allows an investor (*Muwakkil*) to appoint an agent (*Wakil*), typically a financial institution, to manage their investment capital.

According to the AAOIFI Shari'ah standard no. 46, an Islamic investment agency contract refers to a legally binding agreement between an investment agency and its clients, outlining the terms and conditions governing their relationship and the management of investment funds under Islamic principles. This contract serves as the foundation for the investment agency-client relationship and provides clarity on the roles, responsibilities, rights, and obligations of both parties.

In the realm of Islamic finance, the emergence of digital platforms has revolutionized the way investment agencies operate, offering new avenues for Shari'ah-compliant investment opportunities and services. Islamic investment

agencies leveraging digital platforms provide convenient and accessible channels for Muslim investors to engage in halal investment activities. These digital platforms offer a range of services, including investment management, wealth management, financial planning, and advisory services, all tailored to comply with Shari'ah principles.

A well-designed platform can automate workflows, facilitate secure communication, and provide real-time access to investment performance data. The Muwakkil can monitor their portfolio performance and investment activities, fostering greater trust and engagement in the investment process. Additionally, the Wakil can leverage the platform for efficient portfolio management, document sharing, and streamlined reporting, reducing administrative burdens.

Chapter Four

Samples of Applications in Bahrain and Related Challenges

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Chapter 04: Current Applications in Bahrain and Related Challenges

1. Samples of Digital Platforms in Bahrain

1.1. Al Salam Bank Application

1.1.1. Introduction to the Bank's Application

Al Salam Bank is considered one of the largest Islamic banks in the Kingdom of Bahrain. The bank distinguishes itself by offering many distinctive digital Islamic banking services compared to other Islamic banks in the Kingdom of Bahrain. One of the most significant manifestations of this distinction is their digital banking application, which contains integrated digital services that meet the evolving financial needs and desires of customers in a manner that keeps pace with technological advancements in their daily lives.

It is worth mentioning that Al Salam Bank is now considered as the largest Islamic bank in the Kingdom of Bahrain, as it recently acquired one of the largest Islamic banks in Bahrain, Kuwait Finance House - Bahrain. This acquisition came shortly after it acquired Ithmaar Bank (retail sector), which further strengthened the bank financially and reinforced its commitment to adhering to the principles of Islamic Shari'ah in its transactions and banking services.

To obtain a comprehensive understanding of this digital application provided by Al Salam Bank, personal interviews were conducted with some bank employees from various departments, including the Shari'ah

Coordination and Implementation, the Internal Shari'ah Audit, and the Digital Channels. Among the most important of these interviews was that with the Head of the Digital Channels Department and one of the employees from the Shari'ah Department of the bank. Based on these interviews, I will provide a brief explanation of the application and its distinctive Islamic digital banking services.

Al Salam Bank application is an integrated digital platform that provides innovative and seamless banking solutions to customers. It serves individuals, businesses, and governmental sectors alike, where our study focus is on the individual side. The application is distinguished by its user-friendly interface, which elegantly displays various application services, and it also provides the highest levels of privacy and security.

Among the banking services offered by the application, like other digital applications of Islamic banks, is the ability to digitally apply for a credit card, or a debit card, or to apply for Islamic transactions such as personal financing, Murabaha, leasing, and other well-known banking services.

1.1.2. Digital Finance and Top-up Existing Finance Services

What distinguishes the application from others is its provision of a fully digital personal finance service through the application, starting from the application process until obtaining cash through its Shari'ah-

compliant Tawarruq mechanisms, without the need to visit branches or personally sign contracts there.

Additionally, the application offers the service of obtaining additional financing to cover existing financing with the bank named (Top-up Existing Financing). In such cases, if the customer wishes to settle his/her dues, he/she can request additional financing digitally through the application. If eligible, the process is executed digitally per Shari'ah guidelines, and the cash is disbursed within minutes after completing all the steps digitally.

This process of digital financing will be elaborated and discussed in the following paragraphs and based on the previously mentioned interviews. (samples of the electronic contracts used in the implementation process were not provided to the researcher due to confidentiality reasons)

1. Within the application interface, there is a dedicated icon for banking services called the "Digital Hub". Through this hub, customers can select the service of obtaining new digital financing or obtaining additional financing on their existing financing.
2. Once the customer applies for this service, the application digitally verifies the eligibility of the customer to obtain additional financing based on the type of current financing with the bank, including any guarantees or other relevant factors.
3. If the customer's eligibility for this service is confirmed, the application proceeds to verify their

personal information, ensuring that it is up-to-date and does not require any modifications (eKYC). This includes contact information, workplace details, address, salary, and other necessary data for the financing application.

4. Upon completing this step, based on the customer's financial data, the application presents several financial offers that align with their financial capability within a certain limit. For example, suppose the customer requests Islamic financing of 1000 Bahraini Dinars for 3 years. Still, the application digitally concludes that the customer can obtain a higher amount or for a longer repayment period based on their financial data. In that case, it offers alternative offers for the customer to choose from in addition to his/her initial request.
 - This feature serves as an effective alternative to visiting branches and inquiring about the best financing offers possible based on financial data. This process could take a long time for the customer to settle on a specific offer. Where through the application, the customer can explore all possible offers and choose the most suitable one without the need to visit a branch or waste time.
5. After the customer selects the suitable offer, this financing offer will be available for a limited period only. For example, the customer may have 72 hours from the time of selecting the financing offer to proceed

with the execution steps. If this period expires, the customer must reapply through the application.

6. Then the application begins by presenting the promise to purchase document by the customer to the bank, after the bank possesses the commodity, in addition to the guarantees deemed appropriate by the bank.
7. After that, the bank, digitally through the application, purchases the commodity from the supplier, takes possession of it, and acquires it constructively. For instance, Al Salam Bank may buy specific quantities of the commodity (Palm Oil) to possess them for future Tawarruq transactions for a certain period. Then, it purchases more without the need to acquire them when the customer requests financing.
8. Then, the application prepares the Murabaha contract between the bank and the customer. The customer digitally signs using his/her official signature registered on his/her national ID card. This is done through a notification to the customer indicating that the bank requests his/her approval by obtaining his/her digital signature from the authorized government entity, which is the Information & eGovernment Authority. This form of digital signature is legally recognized in Bahrain, and the bank has obtained the necessary legal approvals, making it a strong proof of authentication.
9. After the completion of the Murabaha contract, the customer becomes the owner of the commodity subject

matter. Then, he/she shall sell it digitally through a non-bank agent (Fajr brokerage company) with no other options for selling the commodity.

10. The step of selling the commodity subject to the transaction by the customer to a third party other than the one it was purchased from is the final step in the digital process. Once the customer confirms the sale of the commodity, the amount is credited to their account within minutes, thus completing the new or additional digital financing process.

When asked about the key features that distinguish the digital application for personal financing through Tawarruq, some of the standout advantages include:

1. Digital financing is available 24 hours through the application, whereas financing through branch visits is limited to official working hours. The importance of this feature is underscored by the fact that most digital financing requests received by the bank occur between 10:00 PM and 12:00 AM or from 4:00 PM to 6:00 PM, times outside of branch operating hours. This increases the accessibility of banking services at any time and with minimal effort.
2. Reducing costs and expenses for the bank by minimizing paper transactions, and reducing times and distances for customers, meeting their financial needs through the easiest means via mobile phones without the need to visit branches.

3. Adopting electronic signatures by extracting the official signature of the customer verified in their national ID card from an official government entity, facilitating the authentication process, and providing legal proof for digitally signed contracts and agreements.

- One of the significant legal issues avoided through the adoption of this form of electronic signature is when the customer signs with their finger on the application screen, potentially writing "I do not agree" instead of a signature, but the digital system does not interpret this word and its meaning but rather considers it a signature indicating the customer's consent to the contracts concluded. Later, the customer may claim the invalidity of these contracts, arguing that he did not sign them but rather wrote "I do not agree". Despite this, such claims are often rejected.

1.1.3. Shari'ah Analysis and Discussion

Based on the above explanation, the researcher, based on his review of data, information, and interview responses, believes that the product in this digital form complies with the necessary Shari'ah requirements. The application provides all Shari'ah requirements during the digital execution steps of the product.

However, the researcher identified a Shari'ah concern during the explanation of the digital execution process over the application, which relates to the customer's right

to withdraw from all steps of the execution process before final approval through the application. In other words, nothing would result from the previously signed contracts if the customer canceled the process instead of the confirmation step, which is the last step before selling the commodity to obtain the cash needed. This could indicate that the transaction is a sham to obtain a loan with interest.

After researching this issue, the researcher concluded that this situation can be measured based on the rulings of the contracting parties present in the contract signing session. The first contracting party is the customer requesting financing, the second party is the bank, and the contract signing session is the application's digital platform.

From this perspective, it can be said that the customer has the right to withdraw his acceptance issued to the bank under the council's option (*Khiyar al-Majlis*), as they are both still in the contract signing session and before terminating it by clicking on the final approval icon. Once this icon is clicked, the contract signing session ends and the contract becomes binding for both parties, except in the case of a condition option (*Khiyar al-Shart*) for one of the contracting parties, which is not present in this case.

Another significant issue related to the validity of Tawarruq contracts is the matter of the customer's authorization to the bank or its agent to sell the commodity purchased from the bank under the Tawarruq contract.

The researcher believes that it is preferable to provide options for the customer other than authorizing the agent to sell the goods, as applied in Kuwait Finance House - Bahrain (KFH-B) in their Tawarruq transactions, where The customer receives an SMS message stating that the commodity has been deposited into your account, with a link that allows the customer to access it to dispose of the commodity, either by selling through the bank's agent, collect/authorize person to collect, or request delivery of the commodity.

Although the latter options may not occur often, they greatly negate the suspicion of the transaction being a sham, even with the validity of the application without such options, as mentioned in the AAOIFI Shari'ah standard no. 30 for Tawarruq.

1.2. Flooss Application – Instant Financing App

1.2.1. Introduction to the Company

According to the company's website, Flooss is licensed by the CBB as a Financing company and partners with "Benefit" company. "Flooss provides digital financing without the hassle of paperwork and rigid conditions. Through Flooss App, the financing application can be done anytime and anywhere. Flooss promotes convenience in the digitization of financial services and reduces the time-consuming processes for customers for a simple experience".

The company started its operations with financing in the conventional way which is interest-based loans through

the application. Now, the company is providing a new service which is mentioned on the website “FLOOSS Islamic Financing is a new service focused on providing Islamic-compliant financing to customers in Bahrain. This means it follows the rules and regulations of Islamic finance, ensuring that all financial transactions are in accordance with Islamic principles”. For that purpose, the company appointed the “Shariyah Review Bureau” audit company as its Shari’ah board which monitors its operations and ensures Shari’ah compliance.

1.2.2. Digital Tawarruq through the App

The Flooss application allows the customer to request financing amounts from a minimum of 100 BHD to 1,000 BHD maximum (Microfinance), for a financing duration ranging from 2 to 12 months. The finance process is implemented through the Tawarruq or commodity Murabaha contract between Flooss and the customer as per Shari’ah requirements.

To provide the full process of implementation of digital financing through the Flooss application, the researcher interviewed one of the Shari’ah board members through a phone call and discussed all necessary aspects. (samples of the electronic contracts used in the implementation process were not provided to the researcher due to confidentiality reasons)

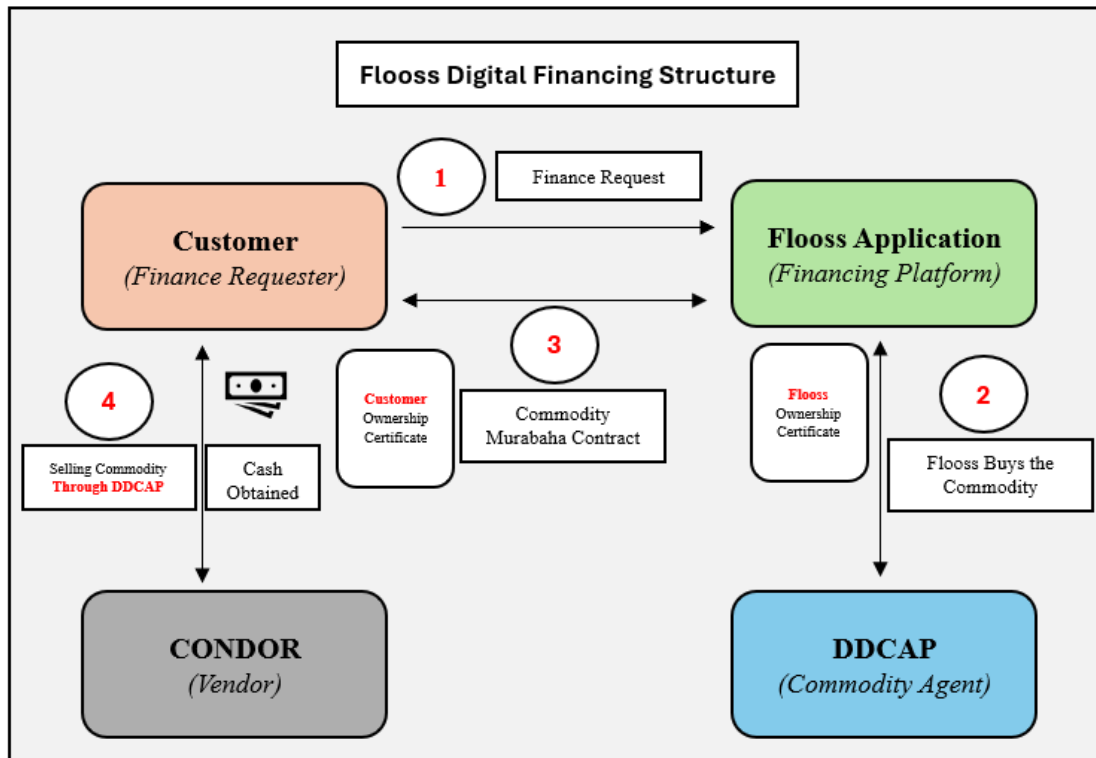


Diagram 1: Flooss Digital Financing Structure – Source (Author's own)

The above diagram illustrates the structure of the financing process through the Flooss application:

1. The customer requests finance (for example 1,000 BHD) from Flooss through the platform.
2. Flooss purchases a commodity worth 1,000 BHD from DDCAP.
 - DDCAP Group™ is a leading provider of asset facilitation services and financial technology solutions in the Islamic financial market with a well-qualified Shari'ah board ensuring Shari'ah compliance for all transactions.
 - Used commodities are metals such as iron, copper, platinum, and aluminum. (Platinum is the most frequently used by Flooss).

- *A certificate of ownership will be issued for Flooss proving its legal ownership of the commodity before implementing the commodity Murabaha with the customer.*
3. A commodity Murabaha contract will be concluded digitally between Flooss and the customer. A new ownership certificate will be issued to the customer.
- *Based on the contract, the customer will pay the installments to Flooss through the platform as agreed.*
4. The customer will appoint DDCAP as an agent to sell the commodity to a third party, which is in most cases “Condor vendor” in the market.
- *Once the transaction is completed, the money will be disbursed to the customer’s account through the platform.*

1.2.3. Shari’ah Analysis and Discussion

Based on the above explanation of the digital financing structure for Flooss, we can say that the process is almost the same as the traditional paper-based transaction, except for the online implementation of the contracts through the digital platform.

It is mentioned that the Flooss App is for microfinance transactions that do not exceed 1,000 BHD, and the used commodity for Murabaha is platinum in most cases. Such a small amount of 1,000 BHD is nothing compared to the price of platinum per KG (1 kg of platinum worth approximately 31,000\$ = 11,700 BHD). Thus, a question might be raised about how the company will buy such a small quantity of platinum for such a small amount of money.

The answer to that question is that the Flooss company predicts a certain number of finance transactions per week (for example), and then purchases a bulky unit of platinum from DDCAP to run its operations through the platform. Accordingly, each finance amount will represent a portion of this bulky unit with a specific barcode or serial number, and such portion of the platinum is owned by the customer in common (على الشيوع).

Another Shari'ah matter related to the agent (DDCAP) who sells the commodity on behalf of the customer, the customer can request the delivery of the commodity but at his/her own cost, such an option cannot be done through the platform as the only option is appointing DDCAP, rather the customer can contact the Flooss company for delivery (such delivery request mostly will not occur due to the high cost of shipping, separating the owned portion of platinum from the bulky unit, and other costs related).

Additionally, it was noticed that the administrative fees charged by the application is fixed and not linked to the amount of finance requested. The admin fees are fixed, which equals 6.500 BHD per request. This indicates that the company complies with the concept of prohibiting charging interests through misleading fees or "implies interest".

1.3. SAFAGHAT – Digital Crowdfunding Investment Company

The FinTech crowdfunding business model relies on a collective of individuals or companies coming together to pool funds for various projects or ventures. This approach democratizes access to capital and fosters innovation by allowing a diverse group of people to participate in funding startups and initiatives (Mollick, 2014).

According to (Li & Xu, 2021), crowdfunding platforms enable borrowers to acquire funds by offering lenders or investors a share in the project's success. The typical FinTech crowdfunding business model involves three key stakeholders: fund contributors (investors or lenders), customers or projects (borrowers), and the FinTech platform (investment agent) that facilitates engagement among all stakeholders.

1.3.1. Introduction to the Company

According to the company's website, Safaghat stands as a pioneering venture in financing-oriented crowdfunding platforms within the Kingdom of Bahrain. Distinguished for its adherence to Shari'ah principles, Safaghat operates as a Shari'ah-compliant platform, employing the Murabaha model to provide financial backing to Small and Medium Enterprises (SMEs) and businesses.

Despite Bahrain's well-established financial system and extensive track record in investment and financing, a noticeable void persists in the realm of investment and financing, exacerbated by escalating service fees and a

dearth of expertise in identifying secure, high-yield investments. In response to these challenges, the Safaghat team has collaborated to devise an integrated solution aimed at addressing these issues comprehensively.

Drawing upon their collective expertise in investment, finance, and digital innovations, Safaghat has created numerous partnerships aimed at alleviating investor challenges prevalent in both the Kingdom of Bahrain and the wider Middle Eastern region. Offering secure, user-friendly, and high-yield investment avenues, the company stands at the forefront of crowdfunding investment and financing. Notably, Safaghat secured a pioneering position as one of the initial entities in this domain to be accepted within the Sandbox regulatory framework of the Central Bank of Bahrain (CBB). Successfully navigating this environment, the company has subsequently attained final approval from the CBB, solidifying its status as an "Ancillary Services Provider - Crowdfunding Platform Operator."

Safaghat has initiated numerous partnerships with both local and international banks under the scrutiny of regulatory bodies. Their services are tailored to offer ease, convenience, safety, and digital accessibility. Operating round the clock, investors can seamlessly access Safaghat platform via the website or dedicated smartphone applications compatible with Android and iOS devices. Leveraging the expertise of seasoned professionals, Safaghat as a financial intermediary (Wakil bil-Istithmar)

provides meticulously crafted investment opportunities characterized by short maturity periods and attractive, high returns, surpassing those of comparable investments within the same timeframe.

The company maintains a distinct objective of delivering superior investment options accessible to all. Transaction fees associated with financing values are set at remarkably low rates compared to prevailing norms in financial markets, with investors bearing no portion of these fees. Safeguarding an equitable investment landscape for all stakeholders, the primary aim of the company's establishment is to foster a competitive investment environment that yields positive outcomes for the financial and economic systems across participating nations.

1.3.2. Digital Commodity Murabaha and Investment Agency

To obtain a comprehensive conceptualization of the working mechanism of the SAFAGHAT platform, and to know the jurisprudential characterization of the transactions that take place through the platform, the company's Shari'ah advisor was contacted, as well as one of the company's finance department employees, and through a phone call, they explained how the company works, the relationship of the parties with each other, and the contracts used in the crowdfunding process for the deals offered through the company's digital platform. (samples of the electronic contracts used in the

implementation process were not provided to the researcher due to confidentiality reasons)

Through this phone interview, the researcher created the following structure, which illustrates all the steps of implementation through the digital platform, and the parties involved in this transaction as follows:

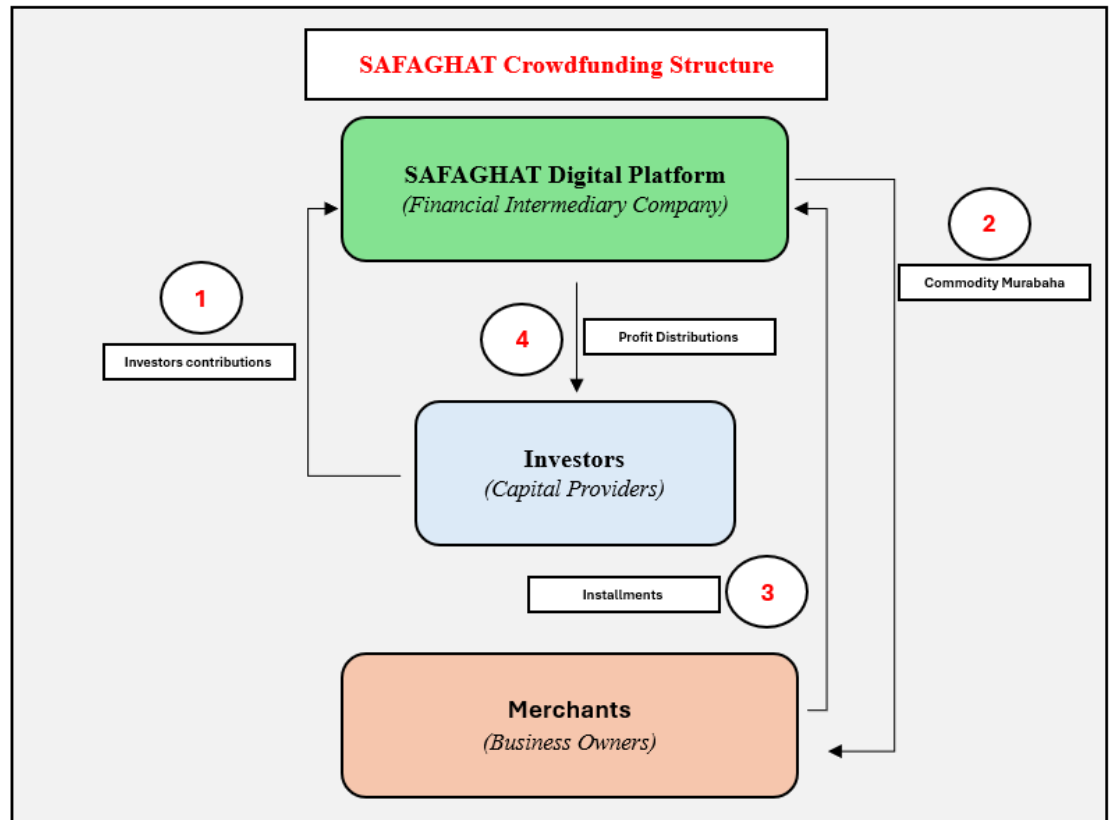


Diagram 2: *Safaghat Digital Crowdfunding Structure – Source (Author’s own)*

The above structure illustrates the whole process of SAFAGHAT digital crowdfunding:

1. Investors contribute to the available deals presented over the platform with all needed details such as deal type, expected profit rates, maturity date, and the deal number. (see figure “1” in Appendices)
 - *An investment agency contract is to be concluded between SAFAGHAT and the investors, where*

SAFAGHAT acts as a “Wakeel Bil-Istithmar”, while the investor acts as a “Muwakkel”.

- *SAFAGHAT receives investment agency fees from investors, which will be deducted from the investor's profit before the distributions (as agreed and mentioned in the investment agency agreement).*

2. Collected funds through the platform will be used on commodity Murabaha financings to applicant merchants with SAFAGHAT. (See figure “2” in Appendices)

- *SAFAGHAT undertakes detailed due diligence/assessment about the applicant merchants to ensure financial stability and other necessary measures to avoid high-risk deals.*
- *The commodity Murabaha contract is implemented using the commodity of Palm oil through the “Itqan fund company” in Malaysia (where the process is executed according to the Shari’ah-compliant commodity Murabaha structure).*

3. The merchants pay the installments of the commodity Murabaha contracts to SAFAGHAT.

- *The installment consists of the commodity cost plus the agreed profit as per the agreement.*

4. SAFAGHAT distributes the profits to participating investors according to the announced dates in the deal opening until maturity.

- *Upon maturity, the investor has the right to withdraw the capital, or “it is also possible to withdraw the invested money immediately after the end of the investment period”.*

1.3.3. Shari’ah Analysis and Discussion

Through the structure of the Safaghat crowdfunding company and its operational methods, we can identify several parties and contracts. The first contract is an investment agency agreement between the investor and the Safaghat platform. In this agreement, the investor acts as the *Muwakkil*/capital provider, and the platform acts as the agent (*Wakeel*) for investment. The second contract is the commodity Murabaha agreement between the platform and the merchant, where the platform acts as the financier, and the merchant acts as the financed party seeking funds.

One of the most important Shari’ah issues that must be focused on in such a contract structure is the matter of the investment agent's guarantee of the investors' capital or the combination of agency and personal guarantee.

The Shari’ah standard for AAOIFI No. 5 on guarantees prohibits such combination, as stated in clause 2/2/2: Combining agency and personal guarantees within a single contract simultaneously, where one party acts both as an agent and a guarantor, is impermissible due to the inherent conflict between the nature of these contractual roles. Furthermore, when a party acting as an agent provides a guarantee for an investment, it transforms the transaction into an interest-based loan. This occurs because not only is

the capital of the investment guaranteed but also the returns, resembling a scenario where the investment agent takes a loan and repays it with an additional sum, akin to Riba.

Accordingly, based on the phone interview conducted, it is clear that the company adheres to the above Shari'ah principle. The company does not guarantee capital for the investor except in cases of proven negligence or misconduct on Safaghat's part. It takes all possible measures to avoid high-risk deals and avoids dealing with merchants who are in default or have credit obstacles, all to avoid loss of capital or failure to achieve the expected profits for investors.

In addition, the following question appeared in the Frequently Asked Questions (FAQs) section of the company's website regarding its investments: "Are my funds safe as an investor?" The platform's response clarifies the company's adherence to the principle, stating: "Yes, we at Safaghat invest your money in safe projects with the most reputable companies. And if anything goes wrong with the merchant, Safaghat shall return your capital, in case of any proven violation or shortcoming from Safaghat's side."

Additionally, another question was raised regarding the existence of investment risks and the probability of capital recovery in case of the bankruptcy of the merchant. The response aligned with the principle of not guaranteeing capital as well, stating: "Safaghat provides low-risk

investment opportunities and takes the responsibility of returning back your capital if there are any delays with the merchant, in case it is proven there were violations or shortcomings from Safaghat's side."

The researcher also observed that the platform does not charge the merchant any fees other than the commodity Murabaha installments. This confirms the company's commitment to not charging other fees that are prohibited by the AAOIFI Shari'ah standard for Murabaha, such as a commitment fee or fee for providing a credit facility. This is stated in clauses 2/4/1 and 2/4/2 of standard No. 8. Additionally, the company's Shari'ah advisor confirmed that the platform does not impose any fees on the merchant, but rather takes its fees from the investor in return for the investment agency, as mentioned earlier.

2. Challenges Faced When Digitalizing Islamic Finance

2.1. Shari'ah Compliance Challenges

A primary obstacle hindering the seamless incorporation of FinTech within Islamic Finance stems from the perspective of numerous Shari'ah scholars, who consider certain FinTech innovations, such as bitcoin and other cryptocurrencies, incompatible with Shari'ah principles. Consequently, achieving effective integration of FinTech technologies within the Islamic finance sector necessitates establishing a framework of standards to guarantee the Shari'ah compliance of the products being introduced (Hasan, Hassan, & Aliyu, 2020).

One of the Shari'ah violations during the process of digital financing that should be avoided is the lack of separation between the two guarantees, the guarantee of the bank and the guarantee of the agent customer. AAOIFI Shari'ah Standard No. 8 of the AAOIFI Murabaha Standard stipulates that the two guarantees, the guarantee of the institution (the bank) and the customer's agent guarantee (if the customer is appointed as the bank's agent in the purchase of commodity for the bank), must be separated between the execution of the agency and the conclusion of the Murabaha contract through notice from the customer of the execution of the agency and the purchase, and then the notice from the bank for the sale. (See appendix A and B in the Appendices)

Therefore, if the bank authorizes the customer to buy, it must be confirmed that he is an agent of the bank so that the guarantee is on the bank as an owner of the commodity before selling it to the customer, and then the Murabaha contract is executed by the bank through selling the commodity it owns to the customer.

Additionally, in the realm of FinTech, ensuring Shari'ah compliance presents a unique set of challenges due to the innovative nature of financial technology and the need to adhere to Shari'ah. One significant challenge is the interpretation and application of Shari'ah principles to novel financial products and services offered by FinTech companies. Islamic finance traditionally relies on established principles derived from the Quran and Sunnah but applying these principles to emerging technologies such as blockchain, peer-to-peer lending, and digital currencies can be complex and require input from

Shari'ah scholars well-versed in both Islamic jurisprudence and modern financial technology (Todorof, 2018).

Another challenge is the risk of non-compliance with Shari'ah principles stemming from the automated and algorithmic nature of many FinTech platforms. Algorithms and machine learning models may inadvertently generate outcomes that conflict with Islamic finance principles, such as interest-bearing transactions or investments in non-compliant assets. Additionally, the lack of transparency and accountability in algorithmic decision-making processes poses challenges in ensuring FinTech platforms operate under Shari'ah guidelines and ethical standards (Laldin, 2019).

Furthermore, regulatory uncertainty and inconsistency present challenges for Shari'ah compliance in FinTech. While some jurisdictions have specific regulations governing Islamic finance and FinTech activities, others may lack clear guidelines or may apply conventional financial regulations that do not account for the unique features of Islamic finance. This regulatory ambiguity can create compliance risks for FinTech companies offering Islamic finance products and services, as they navigate the intersection of financial technology, Islamic finance, and regulatory requirements (Ercanbrack, 2019).

2.2. Legal and Legislative Challenges

Fintech solution providers are encountering heightened scrutiny from governmental bodies, presenting a significant challenge. Both Fintech solution providers and regulators must collaborate on finding common ground to enable the effective implementation of such innovations within the Islamic finance

industry. Cooperation between these stakeholders is essential to overcome regulatory hurdles and foster the integration of fintech solutions in Islamic finance (Hasan et al., 2020).

Accordingly, Islamic finance faces various legal and legislative challenges that impact its growth and development. One significant challenge is the lack of harmonization and standardization of Islamic finance laws and regulations across jurisdictions. Unlike conventional finance, which has well-established legal frameworks, Islamic finance operates in a diverse regulatory landscape with differing interpretations of Shari'ah principles and varying levels of legal infrastructure. This lack of uniformity complicates cross-border transactions, hinders market integration, and increases compliance costs for Islamic financial institutions (Ercanbrack, 2019).

In Bahrain, Islamic finance faces several legal and legislative challenges despite being one of the leading Islamic finance hubs in the region. One significant challenge is the need for continuous development and enhancement of the legal and regulatory framework to keep pace with the evolving nature of Islamic finance products and services.

While Bahrain has made significant strides in developing a comprehensive regulatory framework for Islamic finance, including the establishment of the Central Bank of Bahrain's Shari'ah Supervisory Board (CSSB) and the issuance of specific Shari'ah standards by AAOIFI for Islamic banks and financial institutions, there remains room for improvement in areas such as standardization of Shari'ah governance practices, legal documentation, and dispute resolution mechanisms.

Another challenge is the need for greater alignment between Islamic finance regulations, international standards, and best practices. Bahrain's Islamic finance industry operates in a globalized environment and competes with established financial centers worldwide. Therefore, ensuring regulatory equivalence and compliance with international standards, such as those set by the Islamic Financial Services Board (IFSB) and the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), is essential to enhance Bahrain's competitiveness as an Islamic finance hub and attract international investors and market participants (Ercanbrack, 2019).

To sum up, addressing these legal and legislative challenges requires concerted efforts from regulators, policymakers, industry stakeholders, and Shari'ah scholars to enhance legal certainty, promote standardization, and create an enabling environment for Islamic finance. This may involve the development of comprehensive legal frameworks tailored to Islamic finance, harmonization of Shari'ah standards, capacity building for regulators and Shari'ah boards, and greater collaboration between jurisdictions to facilitate cross-border transactions and market integration (Haneef, R., & Mirakhor, A., 2014).

2.3. Technology Integration Challenges

Islamic finance faces several technology-related challenges that need to be addressed to fully realize its potential. One of the primary challenges is the development of Shari'ah-compliant digital banking and financial services platforms. Existing

banking systems are predominantly based on conventional interest-based models, making adapting them to Islamic finance principles challenging. Additionally, ensuring compliance with Shari'ah principles in the design and operation of digital platforms requires robust governance frameworks and sophisticated technological solutions (Rabbani, 2022).

Another challenge is the integration of emerging technologies such as blockchain, artificial intelligence, and big data analytics into Islamic finance operations. While these technologies offer significant opportunities for innovation and efficiency improvement, their application in Islamic finance must adhere to Shari'ah guidelines and principles. This necessitates collaboration between Islamic finance experts and technology specialists to develop tailored solutions that meet both regulatory requirements and market demands (Dawood et al., 2022).

Furthermore, cybersecurity and data privacy concerns pose significant challenges for Islamic finance institutions, particularly as they digitize their operations and interact with customers through online channels. Addressing these challenges requires substantial investments in cybersecurity infrastructure, training, and regulatory compliance to safeguard customer data and maintain trust in the financial system (Irum Saba et al., 2019).

Overall, overcoming these technological challenges is crucial for Islamic finance to remain competitive in the digital era and continue serving the needs of its stakeholders effectively.

Conclusion and Recommendations

The examination of conducting Islamic financial contracts through digital platforms, as outlined in this thesis, reveals significant insights into the convergence of traditional Islamic finance principles with modern digital technologies. The findings underscore the potential for digital platforms to enhance the accessibility, efficiency, and inclusiveness of Islamic financial services, while also identifying critical challenges that must be addressed to ensure efficiency and Shari'ah compliance.

Generally, contracts and financial transactions conducted through technology tools are often the same in principle and provisions as those executed using traditional means. However, they may include some unique provisions. Nonetheless, they are subject to the laws of contract theory in Islamic jurisprudence, as well as the broader regulations governing financial transactions under Shari'ah.

The primary implication of this research is the recognition that digital technology can substantially contribute to the growth and sustainability of Islamic finance. Digital platforms facilitate broader reach and engagement. This accessibility enhancement can lead to greater financial inclusion and empowerment within the community.

However, the integration of digital platforms with Islamic finance necessitates particular attention to Shari'ah compliance. Automated processes, digital contracts, and other fintech innovations must be evaluated to prevent any accidental contravention of Islamic principles, particularly concerning Riba (interest), Gharar (excessive uncertainty), and Maysir (gambling). The study highlights successful case studies where digital platforms have been effectively employed to implement Islamic financial contracts with required Shari'ah regulations.

Based on the findings, several recommendations emerge as follows:

1. There is a need for continuous collaboration between fintech developers, Islamic financial institutions, and Shari'ah scholars.
 - *This interdisciplinary partnership is crucial to developing innovative solutions that uphold Islamic principles while leveraging the benefits of digital technology. Additionally, regular training and updates for employees and Shari'ah scholars on emerging fintech trends can facilitate more informed and relevant guidance.*
2. Regulatory bodies should develop comprehensive frameworks that address the unique challenges posed by digital Islamic finance.
 - *These frameworks should include guidelines for ensuring Shari'ah compliance in digital transactions, mechanisms for real-time Shari'ah auditing, and standards for transparency and consumer protection. Such regulatory measures will foster trust and confidence among users, which is vital for the widespread adoption of digital Islamic financial services.*
3. Digital platforms offering Islamic financial products should invest in user education. Providing clear, accessible information about how their services comply with Shari'ah principles can enhance user understanding and acceptance.
 - *Additionally, platforms should be proactive in gathering and responding to user feedback to continuously improve their offerings and maintain trust.*
4. Utilizing digital platforms to educate both customers and employees on the basics of digital Islamic finance, its role in promoting financial inclusion, and the importance of awareness of Shari'ah regulations for financial contracts in general.

5. Working on issuing a Shari'ah standard for the execution of Islamic financial contracts through digital platforms, to ensure the Shari'ah-compliance of the practical implementation, and to be used as a comprehensive guideline on how to conduct these contracts digitally as per Shari'ah regulations.

Regarding the digitalization challenges addressed in chapter four, the researcher proposes the following solutions and recommendations to overcome these challenges:

1. For Shari'ah Compliance Challenges:

- a. Increase the level of Shari'ah awareness among Islamic financial institutions' employees, by training workshops presented by well-qualified specialists or Shari'ah board members.
- b. Conducting more awareness raising Shari'ah efforts for customers and those interested in Islamic banking to raise the cultural level of the importance of Islamic financial institutions and the role of financial technology in developing this industry and achieving its desired goals.
- c. More cooperation between Shari'ah supervisory bodies to reach the best practical solutions to face the Shari'ah challenges of digitizing Islamic financial contracts and seeking to focus efforts towards finding a comprehensive Shari'ah guide that regulates the process of digitizing Islamic financial services.

2. For Legal and Legislative Challenges:

- a. Concerted efforts from regulators, policymakers, industry stakeholders, and Shari'ah scholars to enhance legal certainty, promote standardization, and create an enabling environment for Islamic finance.

- b.** Development of comprehensive legal frameworks tailored to Islamic finance, and harmonization of Shari'ah standards.
- c.** Developing legal legislation to comply with Shari'ah requirements, help accommodate the requirements of digital Islamic finance and contribute to its legal authenticity.

3. For Technology Integration Challenges:

- a.** Collaboration between Islamic finance experts and technology specialists to develop tailored solutions that meet both regulatory requirements and market demands.
- b.** Substantial investments in cybersecurity infrastructure, training, and regulatory compliance to safeguard customer data and maintain trust in the financial system.

In conclusion, this thesis contributes to the evolving discourse on the digitization of Islamic finance by highlighting both the opportunities and the challenges inherent in this transition. The integration of Islamic finance with digital platforms is not only feasible but also desirable for its potential to democratize financial services.

Future research should focus on the long-term impacts of digital Islamic finance on global Islamic financial markets other than Bahrain and its role in fostering the Islamic banking sector. Moreover, there is a need for more studies regarding implementing other Islamic financial contracts that were not addressed in this study and its digital implementation, such as Ijarah, Istisn'a, Salam, and similar products to have the full Shari'ah and regulatory landscape for developing comprehensive digital platforms that serve all kind of stakeholders with all their different financial needs.

References

- AAOIFI. (2015). *Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) Shari'ah Standards* (1st ed.). Dar Al-maiman.
- Abd Rahman, H. (2000). Offer and Acceptance in Islamic Law of Contract. In *Jumal Syariah* (Vol. 8).
- Abdelrahman, M., Al-Qudah, Y., & Omran, A. (2022). Blockchain-enabled Sharia-compliant trade finance: A conceptual framework. *International Journal of Islamic and Middle Eastern Finance and Management*, 14(3), 321-342.
- Abdulhameed, T. (2007). *Electronic Signature and its Validity in Evidence*. Alexandria: Dar Al-Jamia Al-Jadida.
- Abdullah, D. V., & Chee, K. (2013). *Islamic Finance: Why it Makes Sense (for You)* (2nd ed.). Singapore: Marshall Cavendish Business.
- Abdullah, D. V., Chee, K. (2013). *Islamic Finance: Why it Makes Sense (for You)*. Singapore: Marshall Cavendish Business.
- Abu Heiba, N. (2003, May 12). Electronic Signature. Paper presented at the Electronic Banking Conference between Sharia and Law, United Arab Emirates, Dubai Chamber of Commerce and Industry.
- Abu Leil, I. A. (2003, May 12). Electronic Banking Transactions Documentation and the Liability of the Authenticating Entity Towards Harmed Third Parties. Paper presented at the Electronic Banking Conference between Sharia and Law, United Arab Emirates, Dubai Chamber of Commerce and Industry, 5/1854.
- Ahmed, N., & Rahman, M. (2017). Digitalization of Islamic finance contracts: Challenges and opportunities. *International Journal of Islamic Financial Services*, 1(2), 45-58.
- Ahmed, S., Arif, M., & Hassan, M. N. (2021). Digital transformation in Islamic banking: A framework for successful implementation. *Journal of Islamic Marketing*, 12(3), 527-548.
- Akhtar, M., Khan, A., & Ali, S. (2019). Implementing secure digital platforms in Islamic finance: A case study of electronic signatures in Murabaha contracts. *Journal of Islamic Finance and Banking*, 6(3), 210-225.
- Al-Aseeri, R. (2017). *Fiqh Provisions for E-commerce and the Legislations Regulating it: a Comparative Legal and Jurisprudential Study*. Riyadh, Saudi Arabia: Dar Al-Miman.
- Al-Ghazali, M. (1998). al-Mustasfa min 'ilm al-usul. *Dar Al-Kutub al-, Islamiyyah*.
- Alī Muḥyī al-Dīn al-Qarah Dagḥī, “al-Qabḍ: ṣuwaruh, wa bi-khaṣṣat al-mustajaddah minhā wa aḥkāmuha”, *Majallat Majma' al-Fiqh al-Islāmī* VI, no. 1 (1410H), p. 555-634.
- Al-Merri, A. R. (1998). *The Validity of Modern Technological Means in Proving Commercial Contracts*. (Doctoral dissertation). Faculty of Law, Cairo University.
- Ayub, M. (2007). *Understanding Islamic Finance*.
- Chapra, M. U. (2008). *The Islamic financial system: Theory and practice*. Islamic Research and Training Institute.

- Dawood, H., Al Zadjali, D. F., Al Rawahi, M., Karim, D. S., & Hazik, D. M. (2022). Business trends & challenges in Islamic FinTech: A systematic literature review. *F1000Research*, Vol. 11. F1000 Research Ltd. <https://doi.org/10.12688/f1000research.109400.1>
- Dusuki A. (2009). *Challenges of Realizing Maqasid al-Shariah (Objectives of Shariah) in Islamic Capital Market: Special Focus on Equity-Based Sukuk*. Penang.
- Dusuki, A. W., & Abozaid, A. (2007). A CRITICAL APPRAISAL ON THE CHALLENGES OF REALIZING MAQASID AL-SHARIAH IN ISLAMIC BANKING AND FINANCE. In *IIUM Journal of Economics and Management* (Vol. 15).
- Ercanbrack, J. (2019). The Standardization of Islamic Financial Law: Lawmaking in Modern Financial Markets. *The American Journal of Comparative Law*, 67(4), 825–860. <https://doi.org/10.1093/ajcl/avz010>
- Hafnawi, B. (2023, July 8). Digital Platforms Strategies. *Technology and Digital Topics Magazine - LinkedIn*.
- Haneef, R., & Mirakhor, A. (2014). Islamic finance: legal and institutional challenges. *ISRA International Journal of Islamic Finance*, 195(2632), 1-39.
- Hasan, R., Hassan, M. K., & Aliyu, S. (2020). Fintech and Islamic Finance: Literature Review and Research Agenda. *International Journal of Islamic Economics and Finance (IJIEF)*, 3(1). <https://doi.org/10.18196/ijief.2122>
- Hassan, Kabir., & Lewis, Mervyn. (2007). *Handbook of Islamic banking*. Edward Elgar.
- Iqbal, Z., Farooq, A., & Bashir, A. (2020). Digital transformation of Islamic banking: A framework for successful implementation. *Journal of Islamic Marketing*, 11(2), 390-409.
- Irum Saba, Rehana Kouser, & Imran Sharif Chaudhry. (2019). Fintech and Islamic Finance-challenges and Opportunities. *Review of Economics and Development Studies*, 5(4), 581–590. <https://doi.org/10.26710/reads.v5i4.887>
- Islam, M. S., Hossain, M. A., & Rahman, S. (2020). Enhancing customer adoption of digital platforms in Islamic finance: The role of communication and education. *Journal of Islamic Banking and Finance*, 13(4), 112-127.
- Ismail, A. G., & Shah, S. Z. A. (2018). The impact of digital platforms on Islamic banking and finance. In T. A. Rahman (Ed.), *Islamic finance: An alternative for a new social order* (pp. 285-301). Springer.
- Ismon, N. Y. B. (2012). Legality of Tawarruq in Islamic Finance. In *Tazkia Islamic Finance and Business Review* | (Vol. 7). Retrieved from <http://zulkiflihasan.wordpress.com>
- Jawdat, N. (2022). Digital Islamic finance in light of the Corona Pandemic: Opportunities, challenges and future prospects. *Jordan Journal of Islamic Studies*, 18(1), 69–96.
- Kettell B. (2011). *Islamic Finance in a Nutshell A Guide for Non-Specialists* (1st ed.; B. Kettell, Ed.). John Wiley & Sons.
- Khalil Shehadeh, M., & Yousef Al-Atoum, A. (2021). Islamic Digital Finance and Its Role in Promoting Financial Inclusion. *Jerash for Research and Studies Journal*, 22(2), 825–849. Retrieved from <https://digitalcommons.aaru.edu.jo/jpu/vol22/iss2/11>
- Khan, M. A. (2020). E-commerce and Islamic finance: A Sharia perspective. *Journal of Islamic Economics, Banking and Finance*, 14(2), 147-163.

- Khan, M. A., Alam, T., & Hai, N. F. M. (2022). Blockchain-enabled Islamic microfinance: A conceptual framework. *International Journal of Islamic and Middle Eastern Finance and Management*, 14(4), 441-458.
- Laldin, M. A. (2019). Islamic Finance in the Digital World: Opportunities and Challenges. *Journal of Islam in Asia*, 16(3), 284–299.
- Li, B., & Xu, Z. (2021, December 1). Insights into financial technology (FinTech): a bibliometric and visual study. *Financial Innovation*, Vol. 7. Springer Science and Business Media Deutschland GmbH. <https://doi.org/10.1186/s40854-021-00285-7>
- M. H. Allaymoun and O. A. H. Hamid, "Integrated System (E-Murabaha) A new Approach to E-Commerce," *2019 International Conference on Fourth Industrial Revolution (ICFIR)*, Manama, Bahrain, 2019, pp. 1-6, doi: 10.1109/ICFIR.2019.8894779.
- Mahmoud Lotfi, M. H. (2002). *The Legal Framework for Electronic Transactions*. Cairo: Dar Al Nahda Al Arabiya.
- Mohamed, H. (2017). Smart Contracts in Islamic Economic Transactions. *Wahedinvest Journal*.
- Mohd Nor, A., & Ismail, S. (2020). Profit and Loss Sharing (PLS) and Non-PLS Financing in Malaysia: Which One Should Be the One? *KnE Social Sciences*. <https://doi.org/10.18502/kss.v4i6.6585>
- Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*, 29(1), 1–16. <https://doi.org/10.1016/j.jbusvent.2013.06.005>
- Nienhaus, M., & Yung, M. C. (2009). Transparency in Islamic finance: A conceptual framework. *Journal of Islamic Accounting and Business Research*, 1(2), 87-107.
- Omoola, S., & Ibrahim, H. K. (2023). The Legal Implications Of Abandoned Digital Assets In Shari'ah-Compliant Fintech Platforms. *ISRA International Journal of Islamic Finance*, 15(2), 60–79. <https://doi.org/10.55188/ijif.v15i2.542>
- Parker, G. G., Marshall W. Van Alstyne, & Sangeet Paul Choudary. (2016). *Platform Revolution: How Networked Markets Are Transforming the Economy and How to Make Them Work for You*. W. W. Norton & Company.
- Rabbani, M. R. (2022). Fintech innovations, scope, challenges, and implications in Islamic Finance: A systematic analysis. *International Journal of Computing and Digital Systems*, 13(1), 579–608. <https://doi.org/10.12785/IJCDS/130147>
- Rabbani, M. R., Bashar, A., Nawaz, N., Karim, S., Ali, M. A. M., Rahiman, H. U., & Alam, M. S. (2021). Exploring the role of islamic fintech in combating the aftershocks of covid-19: The open social innovation of the islamic financial system. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(2). <https://doi.org/10.3390/joitmc7020136>
- Rahman, Md. H. (2020). Application of Constructive Possession (Qabd Hukmi) In Islamic Banking Products: Shariah Analysis. *Turkish Journal of Islamic Economics*, 7(1), 81–102. <https://doi.org/10.26414/a075>
- Siddiqi, A. Y. (2004). *Islamic economics: Its philosophy and objectives* (3rd ed.). Darul Ishaat.
- Todorof, M. (2018, August 1). Shariah-compliant FinTech in the banking industry. *ERA Forum*, Vol. 19. Springer Verlag. <https://doi.org/10.1007/s12027-018-0505-8>
- Usmani, M. (1998). *An Introduction to Islamic Finance* (1st ed.). Arham Shamsi.

- Usmani, M. H. A., Usmani, A., Usmani, M. U. A., & Ali, H. (2019). Issues of Possession in Murabaha Financing. *COMSATS Journal of Islamic Finance*, 4(2), 81–93. <https://doi.org/10.26652/cjif.4201925>
- Wahbah ibn Muṣṭafā al-Zuhaylī, al-Muʿamalāt Al-Māliyyah Al-Muʿāṣirah, (Damascus: Dar al-Fikr, 2002).
- Yahaya, M. Z. (2023). Constructive Possession in the Sale and Purchase of Gold According to Changes in the Customary Practice. *Samarah*, 7(3), 1317–1332. <https://doi.org/10.22373/sjhk.v7i3.16025>
- Yazid, M., Asmadi, M. N., & Liki, M. (2015). The Practices of Islamic Finance in Upholding the Islamic Values and the Maqasid Shariah 1. *International Review of Management and Business Research*, 4(1), 286–294. Retrieved from www.irmbrjournal.com
- Yunus, M. B. (2009). *Online Financial Dealings*. AAOIFI Studies.
- Zouari, G., & Abdelhedi, M. (2021). Customer satisfaction in the digital era: evidence from Islamic banking. *Journal of Innovation and Entrepreneurship*, 10(1). <https://doi.org/10.1186/s13731-021-00151-x>

Internet websites

<https://flooss.com/>

<https://usmaniandco.com/>

<https://www.alsalambank.com/en>

<https://www.cbb.gov.bh/fintech/>

<https://www.safaghat.com/>

Appendices

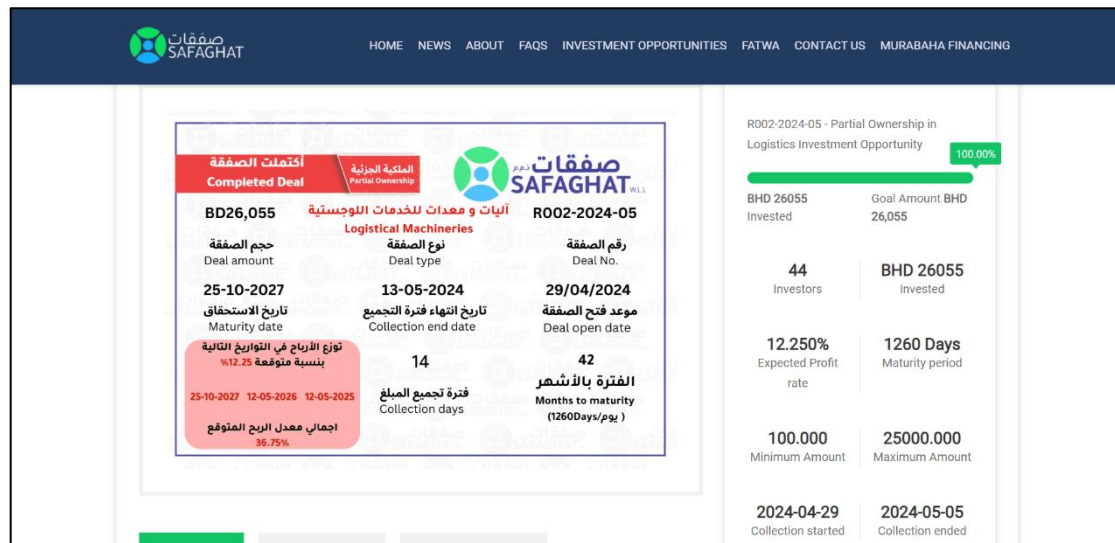


Figure 1: Sample of announced deal over Safaghat digital platform website.

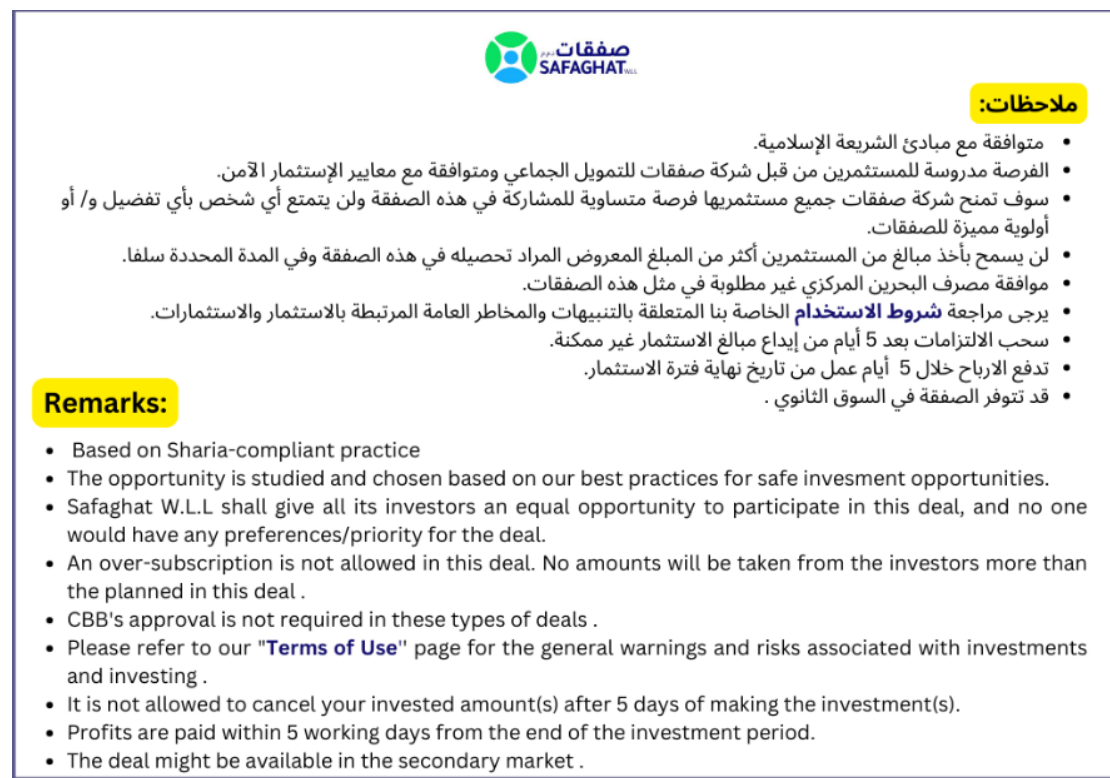


Figure 2: Sample of attached deals remarks over Safaghat digital platform website.

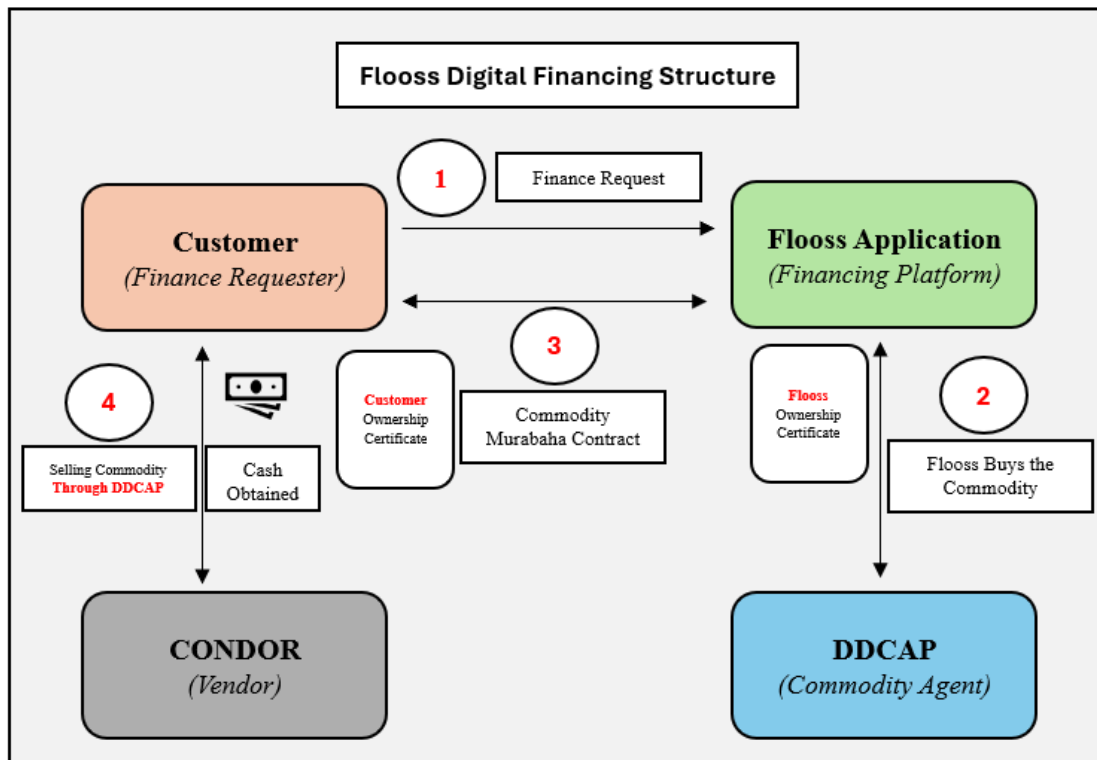


Diagram 1: Flooss Digital Financing Structure – Source (Author’s own).

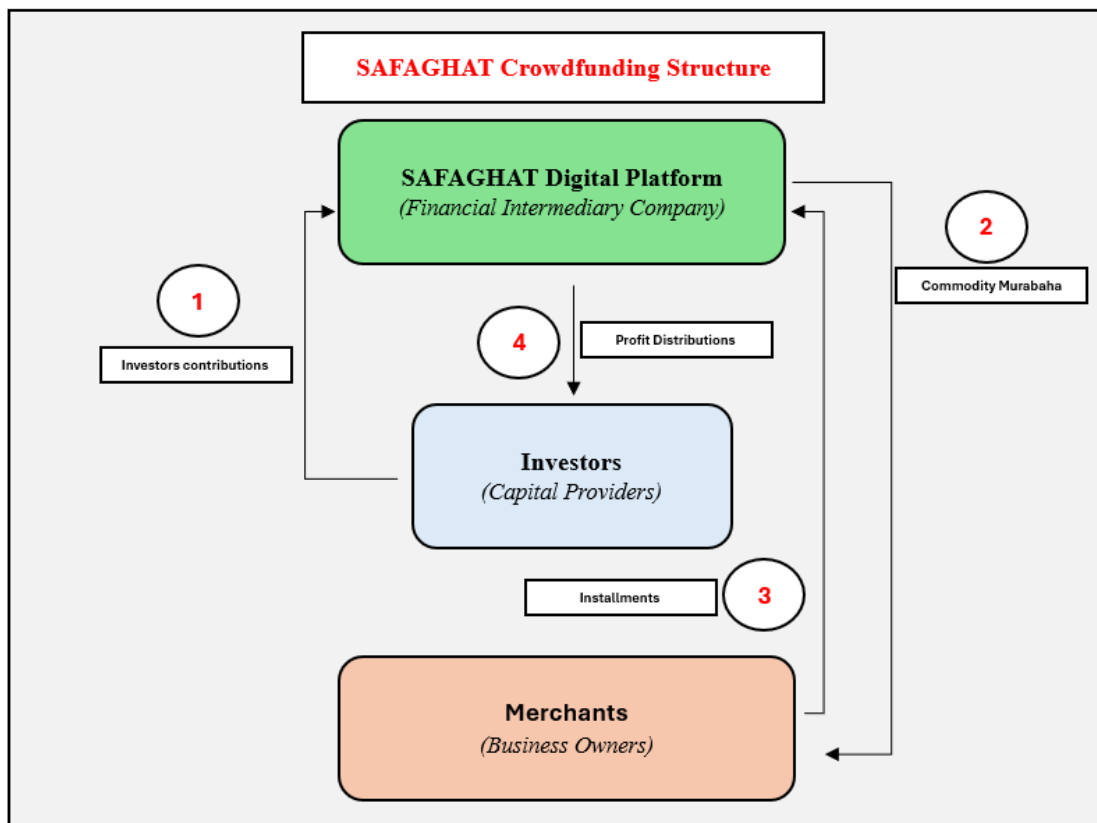


Diagram 2: Safaghat Digital Crowdfunding Structure – Source (Author’s own).

Appendix (A)

Notice from Institution's Customer of Its Performance of Purchasing Asset or Good As Agent for Institution, and of Its Offer to Purchase Item from Institution According to Contract of Murabahah

**Notice from the institution's customer of its performance of the
purchase of the asset or good as agent for the institution:**

From: (The Institution's customer as agent)

To: (The Institution).....

In the performance of my contract of agency with you, I hereby
inform you that I have purchased the item described below on your
behalf and for your benefit. This item is in my possession on your
behalf.

In accordance with my promise to you, I hereby agree to purchase
this item from you for a total price of, namely the cost price of
..... plus the mark-up of

The payment of this price will be in accordance with the following
schedule of instalments:

-

-

-

Please send the acceptance in accordance with this offer.

Appendix A: *Customer's notes as an agent for the bank - Source (AAOIFI, P.216).*

Appendix (B)
**Notice of Acceptance by Institution of
Customer's Offer to Purchase Asset or
Good to Be Acquired, and of selling item
by Institution to Customer**

Notice of the acceptance by the Institution of the customer's offer to purchase the asset or good to be acquired:

From: (The Institution).....

To: (The customer as the Institution's agent).....

In response to your notice dated, containing your offer to purchase the item described below which is owned by us, we hereby confirm to you our sale of the item to you at a total price of comprising the cost price of plus the mark-up of, in accordance with the conditions explained in the general agreement to a contract of Murabahah.

Please send the acceptance in accordance with this offer.

Appendix B: *Notice of acceptance by the bank - Source (AAOIFI, P.217).*

الملخص

أحدث ظهور التكنولوجيا الرقمية ثورة في العديد من القطاعات، بما في ذلك قطاع الصيرفة الإسلامية. تستكشف هذه الأطروحة تكامل العقود المالية الإسلامية ضمن المنصات الرقمية، وتدرس التطبيقات العملية ومدى الالتزام بالضوابط الشرعية. يعالج البحث فجوة مهمة في الأدبيات الحالية من خلال تحليل كيفية تطبيق العقود المالية الإسلامية بفعالية بشكل رقمي مع الالتزام بالضوابط الشرعية والتنظيمية وتعزيز الشمول المالي. وتبدأ الدراسة بتحديد المبادئ الأساسية للصيرفة الإسلامية، والتي تحظر التعامل بالربا والغرر والقمار، وتؤكد على أهمية المشاركة في الربح والخسارة، بالإضافة إلى تحقيق مقاصد الشريعة. تمت مناقشة هذه المبادئ بشكل عام في سياق المعاملات المالية الإسلامية الرقمية لفهم مدى توافقها والتحديات المحتملة. كما تم إجراء دراسة شاملة لمنصات رقمية مختارة في البحرين تقدم عقوداً مالية إسلامية، مع التركيز على هيكلها وتشغيلها وآليات امتثالها للضوابط الشرعية. ومن الناحية المنهجية، تستخدم الأطروحة منهجاً مختلطاً يجمع بين التحليل الوصفي والبيانات النوعية. وتم كذلك إجراء مقابلات شخصية مع بعض خبراء الصناعة والمتخصصين في التمويل الإسلامي بهدف التعرف على الهياكل العملية والعقود المطبقة رقمياً. يركز التحليل الوصفي على توضيح هذه الهياكل والتطبيق الرقمي للعقود المالية الإسلامية المنفذة رقمياً عبر المنصات الرقمية. ويركز التحليل الكيفي على مدى مواءمة التنفيذ المالي الرقمي مع المبادئ والضوابط الشرعية الخاصة بالمعاملات المالية الإسلامية، وتحديد قضايا الامتثال الرئيسية والحلول المبتكرة. تشير النتائج إلى أنه على الرغم من أن المنصات الرقمية توفر إمكانات كبيرة لنمو التمويل الإسلامي من خلال تعزيز إمكانية الوصول والكفاءة وإمكانية التطبيق الشرعي للعقود، إلا أنها تطرح أيضاً تحديات فريدة من نوعها، كتحديات شرعية، وقانونية تشريعية، وتقنية. وتسلط الدراسة الضوء على بعض النماذج الناجحة لمنصات رقمية دمجت بفعالية بين التطبيق الرقمي والامتثال بالضوابط الشرعية، كشركة صفاقات للتمويل الجماعي التي تطبق عقدي الوكالة بالاستثمار ومراصة السلع رقمياً من خلال منصتها الرقمية. إضافة على ذلك، يؤكد البحث على أهمية الأطر التنظيمية في دعم تطوير التمويل الإسلامي الرقمي، كما وتدعو الأطروحة إلى تعزيز التعاون بين مطوري التكنولوجيا والمؤسسات المالية الإسلامية والهيئات الشرعية لضمان التزام المنتجات المالية الإسلامية الرقمية مع الضوابط الشرعية، وتلبية الاحتياجات المتطورة للمستهلكين من خلال مواكبة التطورات المالية المعاصرة. وتختتم الأطروحة ببعض التحديات الرئيسية والحلول الموصى بها للحد من تأثيرها. تساهم هذه الأطروحة في الإضافة العلمية الأكاديمية من خلال سد الفجوة بين التمويل الإسلامي التقليدي والابتكارات الرقمية الحديثة، وتقدم رؤى ومؤشرات عملية للتطوير المستقبلي للأنظمة المالية الرقمية المتوافقة مع الشريعة الإسلامية.

جامعة البحرين

قسم الصيرفة الإسلامية



كلية إدارة الأعمال

إِجْرَاءُ الْعُقُودِ الْمَالِيَّةِ الْإِسْلَامِيَّةِ عَبْرَ الْمِنْصَّاتِ الرَّقْمِيَّةِ: التَّطْبِيقَاتُ وَالضَّوَابِطُ الشَّرْعِيَّةُ

أطروحة مقدمة كجزء من متطلبات الحصول على درجة الماجستير في الصيرفة والتمويل
الإسلامي

إعداد

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(أستاذ مشارك)

جامعة البحرين

مملكة البحرين

سبتمبر - 2024 م