

The Digital Transformation of the Islamic Finance Sector and Its Role in Promoting Financial Inclusion: A Case Study of a Sample of Clients from Al Salam Bank

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Received:08/10/2024 Accepted: 15/12/2024 published; 28/02/2025

Abstract:

The study seeks to highlight the importance of digitizing Islamic finance by examining its mechanisms and analyzing its role in mobilizing financial resources to enhance and improve financial inclusion at Al Salam Bank Algeria. A questionnaire was developed and distributed to a sample of 91 bank clients, and the data were analyzed using the Statistical Package for the Social Sciences (SPSS 25). The hypotheses were tested using statistical methods. The findings indicated that Al Salam Bank in Algeria utilizes digital financing services at a moderate level, with a noticeable positive impact. As a result, the study presented several recommendations, including the need for financial education for individuals lacking financial literacy, the development of technological infrastructure, and the reduction of costs related to financing and digital service fees. This could be achieved through central bank intervention to provide support to Islamic banks and financial institutions.

Keywords: Digitization of Islamic Finance, Financial Inclusion, Digital Finance Services, Al Salam Bank Algeria.

Jel Classification Codes : G21 ; G23

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I. INTRODUCTION

At the beginning of the 21st century, interest in Islamic banking grew significantly, particularly following the global financial crisis of 2008. Islamic finance has become a top priority for policymakers and regulatory bodies in most Islamic countries, and even in some Western nations, due to its crucial role in enhancing banking services and, consequently, achieving higher levels of financial inclusion.

With the rise of the Fourth Industrial Revolution (4IR), Sharia-compliant financial technology (Islamic fintech) has been integrated into financial markets and Islamic banking. This integration has streamlined the delivery of digital financial services and modernized Islamic financial products, making them more accessible and affordable. As a result, millions of individuals have been encouraged to transition from cash-based transactions to cost-effective, easily accessible digital services.

- **Study problem:** Based on this context, we present the following research problem:

To what extent does the adoption of digital Islamic finance services impact the achievement of financial inclusion?

To address the problem posed and achieve the previously stated objectives, the following main hypothesis was formulated:

- There is a statistically significant relationship at the significance level of ($\alpha \leq 0.05$) between Islamic digital finance and financial inclusion from the perspective of a sample of Al Salam Bank customers in Algeria.
- There is a statistically significant relationship at the significance level of ($\alpha \leq 0.05$) between Islamic digital finance and financial inclusion from the perspective of a sample of Al Salam Bank customers (Algeria).

The following sub-hypotheses are included within the main hypothesis:

- There is a statistically significant relationship at the significance level of

($\alpha \leq 0.05$) between Islamic digital finance and access to financial services from the perspective of a sample of Al Salam Bank customers (Algeria).

- There is a statistically significant relationship at the significance level of ($\alpha \leq 0.05$) between Islamic finance and the use of financial services from the perspective of a sample of Al Salam Bank

customers (Algeria).

- There is a statistically significant relationship at the significance level of ($\alpha \leq 0.05$) between Islamic digital finance and the quality of financial services from the perspective of a sample of Al Salam Bank customers (Algeria).
- **Study importance:** The scientific significance of this study lies in understanding Islamic digital finance and financial inclusion by emphasizing their various aspects and the relationship between them. The importance of the study topic includes:
 - Enhancing the Concept of Digital Finance: Recognizing it as a modern term with distinct features.
 - Understanding the Use of Islamic Digital Finance: Examining the extent to which Al Salam Bank in Algeria utilizes Islamic digital finance in its operations.
- **study Objectives:** This study aims to determine the existence of a statistical relationship between Islamic digital finance and financial inclusion at Al Salam Bank Algeria.
- **Study methodology:** The descriptive approach was adopted for the theoretical aspect of the study, while the analytical approach was used for the applied aspect, based on the program (SPSS 25), in order to test the hypotheses and analyze the results.

1. Theoretical Aspects of Digital Islamic finance:

1.1. Definition of Digital Islamic finance:

The term "Digital Islamic Finance" comprises two essential elements: "Islamic finance" and "digital." The first, Islamic finance, involves banking and financial transactions free from interest, conducted in accordance with Islamic law. These operations adhere to key principles, including the prohibition of *riba* (unjustified gains) and *gharar* (excessive uncertainty, risk, or speculation), a focus on engaging in *halal* (permissible) activities, and an overarching commitment to justice and other ethical and religious objectives (Warde, 2000, p. 5)

The second element, digital finance, refers to the digital financial ecosystem encompassing products, services, technologies, and infrastructure that enable individuals and businesses to access payments, savings, and credit services online. This system offers financial access without the need to visit a physical bank or

directly engage with a financial provider (Shofawati, 2019, p. 392)

In view of the above, digital Islamic finance can be defined as the use of digital technologies and platforms to provide Islamic financial products and services. This involves developing and innovating traditional financial services. These technologies enable the offering of Islamic finance products such as banking, investment, and insurance in a digital format, thereby increasing accessibility, efficiency, and convenience for users.

1.2. Key Banking Services of Islamic Banks

Islamic banking services can be categorized into two main parts:

1.2.1 Banking services that include credit operations (Islamic finance formats):

Islamic finance is based on the relationship between financial institutions, broadly defined, and individuals or institutions, providing them with funds either for personal needs or investment opportunities. These funds are offered through financial instruments that comply with Islamic law, emphasizing profit and loss sharing as well as social justice (sbaa Fatima Zahra, p. 221) The primary financing methods include (Kouache zahia, 2021, pp. 45 - 46)

- a. Partnership-based financing methods: Mudarabah, Musharakah
- b. Sale-based financing methods: Murabaha, Istisna, Salam
- c. Lease-based financing methods: Ijarah, Ijarah Muntahia Bittamleek
- d. Solidarity-based financing methods: Qard al-Hassan

1.2.2 Banking services that do not involve credit operations:

These non-credit banking services are offered as fee-based banking services. They encompass basic banking operations that are similarly available in conventional banks, albeit with minor variations in approach and implementation. Examples include documentary credits, letters of guarantee, transfers, and current accounts. (Ismail, 2019, p. 151)

The adoption of digital technology by banks has significantly enhanced the development of these services, making them accessible through digital channels. These services include payments, credit, savings, transfers, insurance, and financial information. "Digital channels" refer to platforms such as the internet, mobile phones, ATMs, PoS terminals, devices that support NFC technology, electronically enabled cards, biometrics devices, tablets, phablets, and other digital systems (Tariq Abbasi, 2017, p. 3)

1.3. Key Digital Technologies Used in Digital Finance

1.3.1 Financial Technology (Fintech):

Fintech is a term that integrates financial knowledge with technological capabilities to provide financial services and improve organizational performance. This sector has gained significant attention due to the rapid expansion of virtual cryptocurrencies, crowdfunding, blockchain platforms, peer-to-peer lending, and big data analytics. Other technologies fueling fintech advancements include the maturation of artificial intelligence, machine learning, and the Internet of Things (IoT) (Muhammad Maghanim, 2022, p. 204)

Among the most notable services and areas in fintech from which Islamic banks benefit are:

Table (1): The key services and areas of financial technology, along with its significance in Islamic banks

Areas of financial technology		
Technique	Producer	The benefit of Islamic banks from this technology
	Peer to peer lending	Abolition of financial intermediation
	Crowdfunding	Supporting innovations and financing small projects
	Cryptocurrencies	The Islamic Bank can conclude contracts or transactions with the payment or acceptance of their dues using Sharia - compliant cryptocurrencies
	Digital currencies	Issuing digital money with government approval
Artificial intelligence	- Robot advisors - Electronic platforms - Smart cards ...	▪ Enable the continuation of credit or debit operations independently in cases of closure of the bank's network ▪ Automated consulting, portfolio and risk management, automated counseling

		Take over the Shariah and financial control operations
Machin learning 	Improve customer experience	Increase the efficiency of any process associated with the improvement of production and services
Data visualization 	Business intelligence (data visualisation)	- The Islamic Bank benefits from the huge amount of information about the market to be invested in in financial feasibility studies of projects submitted under various financing formats. - Customer behaviour analysis

The source: Prepared by researchers based on:

(fouad atamnia, 2024, pp. 201- 202)

1.3.2 Digital platforms: Digital platforms are systems that facilitate communication among groups of individuals to achieve specific objectives, which may include services, products, events, education, and more (Fadel , 2018, p. 37). Islamic banks leverage these platforms in several ways: (fastercapital Islamic Fintech: innovations in digital Islamic banking services, 2023)

- a. Providing mobile banking services, online account setup, digital payment solutions, and investment management.
- b. Offering an automated advisory platform that allows users to invest in Sharia-compliant portfolios through a streamlined interface and an automated investment process.

1.3.3 Cloud computing: Cloud computing refers to an infrastructure where computing power and storage are managed by remote servers, accessible to users via a secure internet connection. Devices such as desktop or laptop computers, mobile phones, and tablets serve as access points for running applications. Islamic banks can benefit from cloud computing in the following ways:

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- a. Data storage: Islamic banks can store vast amounts of data through cloud computing, allowing for the electronic archiving of customer data, which can be retrieved as needed.
 - b. Cost efficiency: By leveraging cloud computing services, banks can minimize the requirement for physical storage facilities, lowering storage costs and minimizing the number of physical or potential storage units required. (fouad atamnia, 2024, p. 201)

1.4 Islamic digital finance applications

Technological advancements and modern communication methods have significantly influenced the financial and banking sector. Digital transformation has played a crucial role in shifting the banking business model from traditional to digital, resulting in the creation of innovative digital services and products. Islamic banks are not exempt from these changes; they are integral to both the local and global financial and monetary systems.

1.4.1 Digital Financial services: These are banking services based on the World Wide Web, enabling users to access their bank accounts via technology and conduct financial transactions, such as paying electricity bills or reviewing electronic account statements, directly from their bank accounts around the clock (Mazuri, 2018, pp. 2- 3)

Islamic banks have benefited from fintech solutions either by adopting internal innovation laboratories or through partnerships with fintech companies. These efforts assist in implementing their digital transformation strategies through solutions tailored to their objectives. The most prominent digital channels activated in Islamic banks include the following: (Shehadeh, 2021, pp. 250 - 252)

- a. The online banking service (Internet Banking): Offered through the bank's website, this platform serves as a specialized branch for customers, allowing them to access banking services anytime, day or night.
- b. Smartphone applications (Mobile Banking): These services include viewing account details, paying bills, transferring funds to local and foreign banks, and many other functions.
- c. Banking services via social media platforms: These services aim to reach a larger customer base, enhancing banks' opportunities to attract new clients.
- d. Digital customer Acquisition service: This service allows customers to open an account without visiting the bank. The required information is entered through the bank's website, saving the customer both time and

effort.

- e. Credit card payments without carrying a card: Known as "Credit & Apps," this service allows customers to choose the card they wish to use. After selection, the card is charged automatically by simply scanning a barcode with the phone.
- f. Digital finance: In line with their innovation strategies and development of Islamic products, Islamic banks have utilized smartphone applications and the internet to offer digital financing solutions. Pre-approved and qualified customers can obtain financing by completing an online form, allowing them to finalize all procedures through the bank's app and receive financing on the same day—without visiting any branch or physically signing documents (Shehadeh, 2021, p. 252)

1.4.2 Digital banks and digital branches:

- a. A digital bank op Accessing bank statements
- b. Withdrawing cash
- c. Transferring money
- d. Managing checking/savings accounts
- e. Opening a digital bank account
- f. Managing loans
- g. Paying bills
- h. Managing cheques
- i. Monitoring transaction records (What Is Digital Banking? Meaning, Types and Benefits, 2023)

2. Theoretical Aspect of Financial inclusion:

2.1 Definition of financial inclusion

- a. Financial inclusion can be defined as the process of ensuring access to financial services and providing timely, adequate credit when needed, particularly for vulnerable groups such as marginalized communities and low-income segments, all at an affordable cost. (c rangarajan , 2008, p. 1)
- b. According to a United Nations report, financial inclusion refers to the sustainable delivery of affordable financial services that integrate the poor into

the formal economy. (united nations, 2016, p. 3)

- c. Furthermore, financial inclusion involves ensuring universal access to reasonably priced financial services provided by stable and sustainable institutions. These services encompass savings, investments, loans, and insurance. (financial inclusion - an overview, 2018)

From these definitions, financial inclusion can be understood as the comprehensive process of ensuring universal access to a range of affordable financial services, including savings, investments, credit, and insurance, provided by sustainable institutions. It involves ensuring equal opportunities for access to financial services and aims to integrate vulnerable and low-income groups into the formal economy, enabling them to manage their financial lives effectively and participate fully in economic activities.

2.2 Dimensions of financial inclusion

The dimensions of financial inclusion are based on the World Bank's Financial Inclusion Index, developed by Demirgüç-Kunt, Asli; Klapper, Leora; Singer, Dorothy; Ansar, Saniya; and Hess, Jake in 2012. These dimensions are accessibility, usage, quality, and impact. (Thakshila, 2021, pp. 46- 48)

- a. **Financial Access:** This refers to the availability and accessibility of formal financial services and products that enable individuals to meet their daily financial needs. Usage: While some individuals may have access to financial services, they may opt not to use certain products due to religious or cultural considerations, low income, or the unsuitability of the product to their needs. In this context, "usage" refers to the extent to which formal financial services are adopted and continuously used by individuals to satisfy their financial needs.
- b. **Quality:** This dimension focuses on the suitability of available formal financial services and products in meeting the specific lifestyle needs of individuals.
- c. **Impact:** This refers to the degree of positive change achieved by individuals through the use of formal financial services in their lives.

Generally, all these dimensions are considered together to determine the overall degree of financial inclusion. However, these dimensions are subject to ongoing discussion and research to identify which is the most critical

among them.

II. The role of digital Islamic finance in enhancing financial inclusion of Al Salam Bank services:

1. About Al Salam Bank Algeria

Al Salam Bank-Algeria, a universal bank operating under Algerian law, upholds the moral values of the Algerian people. It offers Shari'a-compliant products, certified by its Shari'a council. Established with the approval of the Bank of Algeria in September 2008, Al Salam Bank-Algeria began operations with the primary goal of delivering innovative banking products and services to its clients.

The bank follows a clear strategy aimed at supporting the economic growth of various sectors within the country. It delivers innovative banking services to meet the expectations of the market, customers, and shareholders. As an alternative bank, Al Salam Bank-Algeria is distinguished by its unwavering commitment to adhering to Shari'a principles in all its transactions.

The bank's branch network currently consists of 24 branches across the national territory, with plans to open additional branches in line with its strategic vision. This expansion aims to provide its banking services and products to a broader audience, offering diverse solutions while maintaining the highest standards of quality. (Al Salam Bank , 2022)

2. Digital services provided by Al Salam Bank Algeria

Al Salam Bank-Algeria is a leader in digital banking innovation, offering a comprehensive suite of digital services that cater to the evolving needs of its customers. Through its intuitive mobile banking application and secure online platform, customers can access a broad range of banking services at any time and from any location. These services include account management, bill payments, fund transfers, mobile top-ups, among others. Designed to ensure a seamless and efficient banking experience, Al Salam Bank-Algeria's digital services reflect its commitment to excellence and customer satisfaction. Continuously setting new benchmarks in digital banking, the bank empowers its customers to conduct their financial activities with greater ease and convenience. The following table presents the key services provided by Al Salam Bank-Algeria.

Table (2): Digital Solutions at Al Salam Bank Algeria

Remote internet services	Services provided to individuals	Services provided to enterprises
1. Telephone banking application: ➤ The "Salam Smart Banking" app on your smartphone or tablet allows you to: - Check balances and recent transactions. - Search for and sort recent transactions. - Simulate financing. - Convert currencies. 2. Foreign trade platforms: ➤ Pre-domiciliation platform: A web portal for processing pre-domiciliation requests for import ➤ Letter of Credit Platform: The web portal that enables you to fill out the form to open a documentary	1. Access the following banking transactions via the website: Look at your accounts, download account statements and follow up. Electronic transactions, access to term deposits, transfer between accounts 2. The "Wimby for Al Salam Bank" app allows you to: Check your balance; Settle your dues with just a tap at the store's cashier; Split bills or expenses at the store; Transfer between accounts for "Wimby for Al Salam Bank" users; Check your current banking transactions; Manage your budget 3. Bank cards: ➤ payment and withdrawal card: E-Amina ➤ Savings Card: Amanti Savings Card ➤ Visa cards: Al Salam Prepaid Visa; Al Salam Classic Visa; Al Salam Gold Visa; Al Salam Platinum Visa; Al Salam Export Visa.	1. The premium package enables companies to: View the balances View recent operations Text messaging service Opposition to the check Search calculation operations Upload account statements Request a checkbook Follow-up facilities Access to term deposits Transfer between accounts Introduction of intensive transfers Implementation report 2. The Gold Package enables companies to: ➤ Merge accounts Electronic clearance of tax receivables 3. The "Al Salam Bank's Wimby" app: Your customers can make quick payments

credit for the import operation	4. "Dar IDJAR " is an online digital service provided by Diar Dzair, offering e-consumers online sub-leasing with digital online real estate financing. 5. Tayseer installment sale service for consumer finance in Murabaha format	from their smartphones.
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The Source: (Al Salam Bank , 2022)

3. Population and Study Sample:

The study population includes all Al Salam Bank customers who hold bank accounts. A randomly selected sample of these customers was targeted for the study. To ensure the credibility of the results, the questionnaire was distributed both electronically and in paper form to individuals with prior experience dealing with Islamic banks. A total of 91 valid questionnaires were collected for analysis.

4. Study Instrument:

The questionnaire was developed as a tool to collect information and consisted of 31 consecutive questions, organized into three sections. The first section addressed personal and employment data. The second section included a series of statements related to Islamic digital finance. The third section focused on financial inclusion, covering the following sub-themes: access to financial services, utilization of financial services, and the quality of financial services.

5. Testing for Questionnaire Validity and Reliability:

Table (3): Reliability of the Study Instrument (Cronbach's Alpha Coefficient)

Variance Components	Reliability Coefficient
Digital Islamic Finance	,847
Financial Inclusion	,904
All Dimensions	,915

The Source: Prepared by the researchers based on the findings from the SPSS statistical analysis software.

It is clear from the table that the value of Cronbach's Alpha coefficient for the total score was 91.5%, which is greater than the lowest acceptable value of the

stability coefficient of 60%, which confirms the stability of the questionnaire and its validity for analysis and reliability in the results to be reached.

6. Descriptive Analysis of the Characteristics of the Study Sample:

Table (4): Distribution of Sample Participants by Demographic Variables

Number	Variable	Category	Frequency	Percentage
01	Gender	Male	52	57,1
		Female	39	42,9
02	Age	20 to 35 years	33	36,3
		36 to 50 years	44	48,4
		Over 50 years	14	15,4
03	Educational Level	Secondary or below	16	17,6
		Higher Technician	28	30,8
		University (Bachelor's, Master's)	19	20,9
		Postgraduate Studies (Master's, Doctorate)	26	28,6
		Other	2	2,2
04	Occupation	Employee	36	39,6
		Retired	20	22,0
		University Student	13	14,3
		Unemployed or Daily Laborer	22	24,2
05	City	Region	86	94,5
		Countryside	5	5,5
06	Monthly Income	Less than 20,000 DZD	10	11,0
		From 21,000 DZD to less than 35,000 DZD	14	15,4
		From 35,000 DZD to less than 60,000	39	42,9

		DZD		
		More than 60,000	28	30,8
		DZD		

The Source: Prepared by the researchers based on the findings from the SPSS statistical analysis software.

The results of the previous table show the demographic data of the respondents from the research sample, which numbered (91) individuals, distributed according to gender into males at a rate of (57.1%), while it reached (42.9%) for females. The highest percentage in age was for the age group from 36 to 50 years; at a rate of (48.4%) and the highest percentage for the educational level was for the categories of senior technician at a rate of (30.8%) followed by postgraduate studies at a rate of 28.6% because the previous two categories are characterized by religious awareness in addition to knowledge of technology. As for the profession, most of the sample members were employees, which amounted to 39.6%, and most of them were from the city at a rate of 94.5%. As for the monthly income, the highest category was from 35,000 DZD to less than 60,000 DZD at a rate of 42.9%

Table (5): Statistical indicators for digital Islamic finance Statements

Number	Statements	Mean	Standard Deviation	Verification Degree	Rank
01	The bank has an online website to communicate with it and perform various financial services, such as paying bills, transferring money, and requesting checks.	3,6813	,92951	High	
02	The bank has a digital branch that allows customers to access financial services independently at any time, seven days a week.	3,9121	,86472	High	

03	The bank provides the service of opening accounts remotely (electronically) without the need to visit it	3,2637	1,03102	Medium	
04	The bank provides various ATMs such as cash withdrawal ATMs and money transfer ATMs.	4,2198	,84066	High	
05	The bank's ATMs are sufficiently widespread to meet your needs.	3,4945	1,06847	High	
06	The bank provides a variety of electronic cards to facilitate withdrawal and payment operations.	3,8242	,90177	High	
07	The bank provides a payment service through smartphone scanning.	3,4066	1,09522	High	
08	The bank has smartphone applications that enable users to perform various activities, such as currency conversion, checking balances, and viewing recent transactions.	3,8022	,95708	High	

09	The bank provides SMS and E-mail services to inform you of all transactions made on your account, such as withdrawals, deposits and bill payments.	4,2967	,73778	High	1
10	The bank uses social media to promote its new products and services.	3,9890	, ,98313	High	
11	The bank offers a digital personal financing service through its smartphone application for obtaining instant financing.	3,1758	,91401	Medium	15
12	The bank provides Murabaha financing electronically for various products without a serious margin or late fee.	3,3626	,93709	Medium	
13	The bank provides digital real estate financing - sub-leasing - without a late fee	3,2308	,81754	Medium	
14	The bank provides a savings card for investing your money in profitable	3,8132	,81530	High	

	projects, with profits deposited directly into your account.				
15	The bank provides you with financial advice via the Internet for financing and investment services.	3,7582	,94682	High	
Islamic Finance		3,6821	,52372		

The Source: Prepared by the researchers based on the results of the SPSS statistical analysis program.

From the table above, it is observed that statement No. (9) ranked first according to customer opinions, with an average score of 4.2967, indicating a "strongly agree" level. This is because Al Salam Bank uses SMS and email to inform its customers of all transactions performed on their accounts, such as withdrawals, deposits, and bill payments. On the other hand, statement No. (11) ranked lowest with an average of 3.1758, indicating an "agree" level. This lower ranking is attributed to the fact that the personal financing application for electronic installments, compliant with Shari'a provisions, is still relatively new. The application represents a partnership between Al Salam Bank-Algeria and institutions active in financial technology (FinTech) such as Diyar Dzair, ACM, EkiClik, and Savitem (<https://www.asalamalgerai.com>, 2022) for halal consumer financing via the Internet. It remains used by a minority, partly due to factors such as financial education and general trust in the system. Overall, the general average of the statements within this axis is 3.6821, with a standard deviation of 0.52372, indicating a low dispersion of values around the mean. Therefore, the results reflect a high level of agreement.

Regarding the descriptive analysis of financial inclusion, it is necessary to analyze the statements related to its main dimensions: access to financial services,

usage of financial services, and the quality of financial services, which will be detailed in the following table:

Table (6): Statistical Indicators for Financial Inclusion Statements

Number	Statements	Mean	Standard Deviation	Verification Degree	Rank
01	The bank's financial services cover various areas, including remote and underserved regions.	3,2308	1,14578	Medium	16
02	The number of bank branches is sufficient to allow easy access to financial services.	3,2527	1,14109	Medium	
03	The behavior and interactions of the bank's employees are good, making access to banking services easier.	3,9121	,97000	High	
04	The bank provides a comprehensive guide for using its financial services.	4,0440	,81530	High	1
05	Free account opening with Al Salam Bank and affordable account management fees with benefits offered to you, encouraging you to save in it	3,4725	,97000	High	
Access to financial services		3,5670	,73531	High	

06	The required official documents affect your use of financial services.	3,7033	,82320	High	
07	Bank commissions are an obstacle to benefiting from financial services.	3,6703	,86993	High	
08	Your educational qualifications are compatible with the use of financial services.	3,8791	,87984	High	
09	The bank's management is committed to providing its services in innovative ways that are easy to use and meet your needs.	3,8352	,89770	High	
10	The bank provides a direct response service to your inquiries about how to use the financial service.	3,7802	1,05201	High	
Use of financial services		3,7736	,60237		
11	You feel confident about the confidentiality of your data and financial information at the bank.	3,9341	,84066	High	
12	You feel satisfied with the bank, its employees, and the	3,7582	,82112	High	

	financial services provided.				
13	The bank discloses all relevant information related to financial services.	3,6484	1,03681	High	
14	The bank's management informs its customers about the method of calculating transaction costs transparently.	3,6044	,98747	High	
15	The bank is interested in conducting a periodic evaluation of the quality of services provided.	3,6154	,91614	High	
16	The bank gives importance to its customers' opinions in order to develop and innovate new financial services.	3,7253	,98957	High	
Quality of financial services		3,7143	,74754	High	
Financial Inclusion		3,6850	,60841	High	

The Source: Prepared by the researchers based on the results of the SPSS statistical analysis program.

The table shows that the overall average score for the financial inclusion dimension is 3.6850, with a standard deviation of 0.60841. This indicates a low dispersion of values around the mean, suggesting a high level of approval.

7. Hypothesis Testing and Discussion of Results:

a. Normality of Data Distribution

In hypothesis testing, statistical methods that require parametric tests assume that the data distribution is normal. Therefore, we will rely on the measures of

skewness and kurtosis. The following table illustrates the normal distribution of the study variables.

Table (7): Normal Distribution of Study Variables

Study Variables	Kurtosis	Skewness
Digital Islamic Finance	-,363	,689
Financial Inclusion	-,129	,065

The Source: Prepared by the researchers based on the results of the SPSS statistical analysis program.

Skewness and kurtosis coefficients indicate normal distribution. The study data are considered normally distributed based on the skewness coefficient if their values fall between -1 and 1, while acceptable values for the kurtosis coefficient range between -3 and 3. The table demonstrates that the various dimensions and components of the study, representing its variables, adhere to a normal distribution according to one or both coefficients. Therefore, the skewness and kurtosis coefficients confirm the normality of the data distribution.

b. Sub-Hypothesis Testing

Table (8): Analysis of variance of the regression line for the sub-hypotheses

Indepe ndent variab le	Dependent variable	Regr essio n const ant b	Regr essio n coeff icien t a	Correla tion coeffici ent R	Coefficie nt of determin ation R ²	Calcul ated t value	Calculat ed F value	Signifi cance level sig
Digital Islamic Financ e	Access to Financial Services	,396	,866	,676 ^a	,457	1,065	74,877	,000
	Use of Financial Services	2,036	,472	,440 ^a	,194	5,356	21,377	,000
	Quality of Financial Services	1,995	,467	,351 ^a	,123	4,055	12,494	,001

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The Source: Prepared by the researchers based on the results of the SPSS statistical analysis program.

The table above shows the results of the simple linear regression analysis used to determine the relationship between Islamic finance and access to financial services, use of financial services and quality of financial services.

The table shows a statistically significant effect relationship at a significance level ($\alpha \leq 0.05$), meaning that all sub-hypotheses are achieved.

- The correlation coefficient was strongly positive at 67.6% for the dependent variable access to financial services.
- And a moderate positive correlation for the dependent variable use of financial services at 47.2%.
- As for the dependent variable quality, it achieved a weak positive correlation at 35.1%.

In general, most of the ratios indicate a correlation between the variables under study with an interpretability estimated at 45.7% at best. The F test showed that there are no significant differences, which indicates that the regression model is statistically significant. The significance level in all hypotheses was less than the significance level ($\alpha \leq 0.05$)

c. Test the main hypothesis

- Null hypothesis: "There is no statistically significant effect and relationship at a significance level ($\alpha \leq 0.05$) between digital Islamic finance and financial inclusion among a sample of Al Baraka Bank and Al Salam Bank customers."
- Alternative hypothesis: "There is a statistically significant effect and relationship at a significance level ($\alpha \leq 0.05$) between digital Islamic finance and financial inclusion among a sample of Al Baraka Bank and Al Salam Bank customers."

The following table shows the analysis of variance of the regression line for the main hypothesis:

Table (9): Analysis of variance of the regression line for the main hypothesis

Significance level sig	Calculated F value	Calculated t value	Coefficient of determination R ²	Correlation coefficient R	Regression coefficient a	Regression constant b	Dependent variable	Independent variable
Digital Islamic Finance	Financial Inclusion	1,508	,594	,550 ^a	,303	4,244	38,615	,000

The Source: Prepared by the researchers based on the results of the SPSS statistical analysis program.

The table above illustrates a statistically significant relationship between Islamic finance and financial inclusion at a significance level of ($\alpha \leq 0.05$). The correlation coefficient is 55%, indicating a strong positive correlation. The t-value suggests no statistically significant differences in the average responses of the study sample. The coefficient of determination (R^2) is 30.3%, meaning that 30.3% of the variation in the dependent variable (financial inclusion) can be explained by changes in the independent variable (digital Islamic finance). The model was further confirmed to be statistically significant, with a p-value (sig) of 0.000, which is less than ($\alpha \leq 0.05$). Based on these findings, the null hypothesis is rejected, and the alternative hypothesis is accepted: 'There is a statistically significant effect and relationship at a significance level of ($\alpha \leq 0.05$) between digital Islamic finance and financial inclusion among customers of Al Salam Bank and Al-Ahli Bank.

The relationship between the independent variable (Islamic finance) and the dependent variable (financial inclusion) can be mathematically expressed through the linear regression equation as follows:

$$Y = 1,508 + ,594X$$

Where:

Y: Financial inclusion.

X: Digital Islamic finance.

III. Conclusion:

This study was conducted using a theoretical framework and an analysis of data obtained from a field study on a sample of Al Salam Bank customers. The findings highlight two significant ways in which digital Islamic finance influences financial inclusion.

Firstly, digital Islamic finance holds the potential to enhance financial inclusion by offering digital financial services in collaboration with financial technology (FinTech) companies, contributing to the concept of digital financial inclusion. This enables financially excluded groups to engage with the formal financial sector through digital platforms, provided that the costs remain affordable.

Secondly, digital technologies facilitate the delivery of digital financing and investment services through various Islamic financing structures. These include participation-based contracts, speculative partnerships (mudarabah), and other mechanisms that contribute to the equitable distribution of income and wealth, thereby fostering greater financial inclusion across society.

The key findings from the field study are as follows: The results of the primary hypothesis indicate a positive impact of digital Islamic finance on financial inclusion. Specifically, digital Islamic finance, characterized by the provision of banking services and products through digital channels such as the internet, mobile phones, credit and debit cards, mobile applications, and digital branches in compliance with Islamic Sharia principles, contributes to an increase in financial inclusion.

Additionally, the research demonstrates a strong positive correlation (67.6%) between digital Islamic finance and access to financial services. Digital Islamic finance not only enhances the security of the services provided by the bank but also reduces service costs and minimizes the need for physical visits to bank branches.

The study also reveals a positive impact of digital finance on the utilization of financial services, showing a moderate direct correlation of 47.2%. However, the quality of financial services exhibited a weaker direct correlation of 35.1%. This lower correlation may be attributed to various factors.

There are several reasons that may lead to a decrease in the use of digital Islamic financial services in the Algerian society, including:

1. **Lack of awareness and knowledge:** Customers may lack awareness of the availability of digital Islamic financial services and how to use them. Some may not be aware that these services are available in a digital format, while others may have a limited understanding of how they function.
2. **Trust in technology:** Some customers may be hesitant to adopt digital services due to concerns about the security of online transactions or a general lack of trust in technology.

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3. **Weak technological infrastructure:** Inadequate communication and internet network infrastructure hinder the spread of digital financial services, especially in rural and remote areas.
 4. **Limited adoption of electronic payment:** Despite efforts, the use of electronic payment methods remains low. A shortage of point-of-sale systems that accept electronic payments, along with limited awareness among merchants and customers about their benefits, slows their adoption.
 5. **Limited geographical coverage:** Al Salam Bank has not expanded its branches to all regions of the country, limiting access to digital financial services.
 6. **Cultural and social preferences:** Some customers may prefer traditional financial transactions and favor personal interactions over digital services.
 7. **Limited services offered:** The digital Islamic financial services provided may not meet the full range of customer needs, leading some customers to prefer traditional banking services.
 8. **Limited adoption of electronic payment:** The use of electronic payment methods is restricted, in part due to the limited availability or frequent malfunctioning of ATMs, which discourages broader adoption.
 9. **Limited expansion of ATM networks:** The bank may have restricted the growth of its ATM network, and existing ATMs may frequently be out of service.
 10. **Costs:** Many digital financial services are expensive or carry high fees, making them inaccessible to low-income groups. Furthermore, the high costs associated with Islamic financial products (e.g., the profit margin in Murabaha financing) compared to interest rates in conventional banks are due to the lack of central bank support for Islamic banks. The central bank has only recently started offering support for mortgage financing under the Mortgage Support Law.
 11. **Lack of promotion and marketing:** The bank may have inadequately marketed its digital Islamic services, resulting in customers being unaware of the potential benefits of these offerings.

Search recommendations:

1. **Developing regulatory frameworks:** It is essential to establish regulatory frameworks to counter cyber-attacks and protect banking systems. Although technology and digital finance offer numerous benefits, they also expose

consumers to risks such as financial fraud, cyber-attacks, and privacy violations.

2. **Enhancing payment systems and infrastructure:** Developing advanced payment systems and establishing appropriate infrastructure is necessary to ensure the provision of financial services to all geographical areas, particularly rural and remote regions, so that all segments of society can benefit from digital finance.
3. **Promoting financial education:** Financial education is needed for groups that lack financial knowledge to improve their understanding and use of financial services.
4. **Upgrading technological infrastructure:**
5. **Encouraging the use of digital identities:** Promoting the use of digital identities can simplify the process of opening accounts and accessing financial services.
6. **Addressing financial exclusion:** It is crucial to investigate the causes of financial exclusion and implement strategies to promote financial inclusion. This can be achieved by improving the management of financial services for underserved groups, including women, low-income individuals, and marginalized communities. Reducing costs and facilitating access to financial services are key to making financial control more accessible and inclusive for all customers.
7. **Central bank support for Islamic banks:** The central bank should contribute to reducing costs for Islamic banks, thereby enabling them to offer more affordable services to customers and improve access to financial services.

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