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Article

Evaluating the Impact of Financial Technology on Banking Sector Performance An Applied Study of a Sample of Iraqi Banks

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Abstract: The current research aims to demonstrate the impact of financial technology on Iraqi banks, with dimensions including digital financial services, cybersecurity, and financial innovation, and its effect on the performance of the banking sector, encompassing profitability, operational efficiency, financial stability, and growth. In a sector where keeping pace with technology is one of the most critical elements for its sustainability and success, the research is based on the main hypothesis that "there is a significant and statistically significant impact relationship of financial technology requirements on banking performance." The descriptive, historical, analytical, quantitative, and statistical methods were used, with the questionnaire serving as the primary data collection tool. The sample consisted of 75 individuals in positions such as authorized manager, deputy authorized manager, department director, section director, deputy section director, branch officer, and unit officer. The SPSS statistical program was employed to calculate the mean, standard deviation, coefficient of variation, F-test, R2 determination coefficient, X2 test, and T-test. These results emphasize the importance of banks adopting financial technology in all its dimensions to achieve better banking performance, with a particular focus on financial innovation as a key factor in enhancing competitiveness. The research is divided into four sections: The first section focuses on the research methodology, while the second section covers the fundamental concepts of the research. The third section is dedicated to analyzing the research results and testing its hypotheses, and the fourth section highlights the most important conclusions and recommendations derived from the research.

Keywords: Financial Technology, Banking Performance

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1. Introduction

The Iraqi banking sector is witnessing rapid development, and one of its most important pillars is the technological advancements that have revolutionized traditional banking services. Financial technology (FinTech) is one of the most important innovations that has reshaped banking services, by offering innovative technical solutions that facilitate financial transactions, improve performance efficiency, and enhance the customer experience [1], [2]. FinTech has become a fundamental pillar in enhancing the competitiveness of banks, especially in light of the increasing economic challenges and the rapid changes in the global business environment. This research aims to assess the impact of financial technology on the performance of Iraqi banks, through an applied study on a selected sample of banks, in order to provide a clear vision of how this technology contributes to improving operational efficiency, increasing profitability, and enhancing customer satisfaction [3]. The research also seeks to identify the challenges facing the implementation of financial technology in the Iraqi banking environment and to suggest recommendations to maximize its benefits [4]. The importance of this research

stems from its ability to fill a knowledge gap in the field of the relationship between financial technology and banking performance in an unstable environment, and it provides a scientific basis to help decision-makers in the banking sector adopt effective technological strategies that support sustainable growth and development.

2. Materials and Methods

Firstly, The Research Problem

Despite the rapid development of financial technology and its importance in improving banking performance, the banking sector in Iraq faces challenges in effectively adopting this technology. The research problem revolves around how the application of financial technology impacts banking performance in Iraqi banks listed on the Iraq Stock Exchange. Despite the increasing use of digital financial services and technological innovations, banks face challenges in maximizing the utilization of this technology to best improve operational efficiency, cybersecurity, and achieve financial growth. There are also questions about the trust of employees and customers in cybersecurity and its impact on the quality of banking performance, in addition to the need to understand the dimensions that play a greater role in improving banking performance. This highlights the need to deeply understand the relationship between financial technology and banking performance to effectively guide policies and strategies, enhance competitiveness, and achieve financial stability and sustainable growth in a changing and evolving banking environment. From here, the following research questions can be formulated:

1. Do financial technology and its dimensions (digital services, cybersecurity, financial innovation) affect banking performance in the sample banks? Is there a significant relationship and impact between them that enhances the efficiency of banks?
2. How does the adoption of financial technology impact banking performance in the sample banks?
3. What are the dimensions of financial technology that contribute the most to improving banking performance?

Secondly, The Importance of the Research

This study is crucial for examining the influence of financial technology on the performance of the selected institutions, which are experiencing substantial changes in the banking and technological landscape. The study underscores the pressing need to use digital technologies to augment operational efficiency and elevate the quality of financial services, thereby bolstering the competitiveness of banks in local and regional markets. Cybersecurity has emerged as a need to safeguard financial data and mitigate cyber dangers, which the paper examines comprehensively. Examining this subject yields actionable ideas for enhancing banking operations by the incorporation of contemporary technologies, so fostering financial stability and sustainable development. The report offers a thorough examination of the implementation of financial technology within the Iraqi banking industry, identifying the gaps and obstacles encountered by banks, therefore assisting decision-makers in making data-driven strategic decisions. The study enhances the scientific literature on financial technology and banking performance, serving as a reference for future studies in this domain.

Third, Research Objectives The current research aims to:

1. Analyze the reality of using financial technology and its dimensions in the banks included in the research sample.
2. Measure the level of banking performance in the banks under investigation.
3. Study the relationship between financial technology and banking performance.
4. Identify the dimensions of financial technology that have the greatest impact on banking performance.

Fourth, Research Hypotheses

There is a significant correlation between financial technology and the performance of the research sample banks. Financial technology has a significant positive impact on

banking performance, and each of the dimensions of financial technology (digital financial services, cybersecurity, financial innovation) has a different significant impact on banking performance.

Fifth: Research Methodology The research used the descriptive analytical method, relying on collecting field data using a standardized questionnaire, and then statistically analyzing it using the (SPSS version 26) program to test the relationships and hypotheses between variables.

Sixth: Research Limitations

1. Temporal: The time period covered by data collection was during the year 2024
2. Spatial: The research focused on three Iraqi banks listed on the Iraq Stock Exchange (Bank of Baghdad, Ashur International Bank for Investment, Gulf Commercial Bank).
3. Subjective: The research addressed the impact of financial technology on banking performance through specific dimensions (digital services, cybersecurity, financial innovation).

3. Results

Chapter Two: Conceptual Framework of Fintech and Banking Performance

First: Financial Technology

1. Origin

The advent of the internet and digital communication technologies has revolutionized the world of financial services, fundamentally changing how individuals manage their money. Online banking has provided a convenient and flexible alternative to traditional financial transactions.

2. Concept

The term FinTech is relatively new, combining "technology and finance." According to, the term FinTech is a relatively modern term that combines technology and financial services. Therefore, it refers to providing financial services through the intensive use of technology, whether related to the services a company provides to a customer or those a company provides to another company [5]. Here, I present an innovative approach that differs from the usual methods. Or, FinTech refers to technologically-supported financial innovations that may lead to new business models, applications, processes, or products, which have a fundamental impact on financial markets, institutions, and the delivery of financial services [6], [7].

3. Importance

Fintech has revolutionized the banking sector through: Digital banking services: Such as banking applications, branchless accounts, and digital wallets. Mobile payment systems: Such as Apple Pay and Google Pay. Peer-to-peer (P2P) lending: Directly from individuals to individuals, where this lending allows individuals to obtain loans from individual investors without the need for a banking intermediary [8]. These tools have contributed to improving the efficiency of banking operations, reducing operating costs, and increasing the speed of transactions.

4. Risks

This research focuses on four main types of risks that may affect the banking sector as a result of the rapid expansion of financial technology.

a. **Operational Risks:** The increasing reliance on technical systems and automation increases the likelihood of technical malfunctions, software errors, or even system outages.
b. **Cybersecurity Risks:** The opening of the digital field to banks exposes them to sophisticated cyberattacks aimed at stealing data or disrupting systems (such as the hacking of customer data, and theft of money through unprotected financial applications).
c. **Compliance and Regulatory Risks:** Technology evolves faster than laws, making it difficult for banks to comply with all regulations when providing new services

(providing financial services without obtaining the appropriate licenses, violating data protection laws due to unclear rules regarding new technology, and the difficulty of supervising financial technology companies outside the traditional banking system [9], [10], [11].

d. **Financial Stability Risks:** The entry of new, unregulated entities such as financial technology companies may weaken the role of banks in the economy and create gaps in the financial system (a decrease in liquidity in banks as customers turn to alternative applications, the erosion of the profitability of traditional banks, and increased reliance on non-traditional systems, and this requires regulatory authorities and the banking sector to adopt flexible and updated supervisory policies, and increase investment in information security, advanced monitoring of emerging technology risks [12].

5. Dimensions

a. **Digital Financial Services**: Digital financial services are an essential part of fintech, including digital money transfers, electronic payments, online loans, and digital insurance. These services form the basis of the transformation that banks and financial institutions are witnessing [13]. This dimension is particularly useful in studying the relationship between digital payment technology and improved banking performance.

b. **Cybersecurity**: Cybersecurity is a pivotal dimension in any digital financial application. These services require robust protection to ensure the confidentiality of customer data and prevent electronic threats. Cybersecurity is considered an influential factor in enhancing trust and developing digital banking services.

c. **Financial Innovation**: In financial products, it opens the field for the development of new financial products, such as digital loans, digital payments, and cryptocurrencies .

Second: Banking Performance

1. **Concept**: Interest in the concept of banking performance began with the development of modern banking systems. This is due to the increasing role of banks as a major engine of the economy and financier of economic activity and their impact on financial stability through increased competition and global financial openness. All these required banks to scientifically and methodically evaluate their performance. It should be noted that early studies focused only on profitability as a single indicator, but subsequent studies addressed the evolution of the concept and clarified that the evaluation of banking performance includes efficiency, quality, and financial stability [14], [15]. According to , banking performance in the digital age includes achieving a balance between technological innovation and the stability of the financial system, where a bank is considered effective when it can exploit financial technology tools to increase operational efficiency and improve the customer experience without compromising financial and regulatory risks.

2. **Indicators:** The methods for measuring banking performance, according to many studies, including the study , relied on financial ratios, which are:

Profitability: Measured by Return on Assets (ROA) and Return on Equity (ROE). **Operational Efficiency:** Measured by the cost-to-income ratio

Asset Quality: Measured by the ratio of non-performing loans to total loans. **Liquidity Management:** The bank's ability to meet its obligations when needed. **Capital Management:** Measures the bank's ability to absorb unexpected losses. These indicators above are criticized because they do not take into account the cost of capital, as the bank may show high profits but does not add "real value" to its shareholders. Therefore, other indicators appeared, such as .

a. **Economic Value Added (EVA)** measures whether the bank generates real value after covering the cost of invested capital.

b. **Market Value Added (MVA)** measures the difference between what the owners invested and the current market value of their company.

c. **Shareholder Value Added:** Shareholder Value Added represents the profit or return that shareholders receive in addition to their original investments in the bank or company. It measures the extent to which the institution has succeeded in creating real wealth for its owners through sustainable profits and rewarding financial distributions [16]. This value represents the difference between the market value of the company (i.e., the value of its shares in the market) and the value of the capital invested by shareholders.

d. **Risk-Adjusted Return:** This is a measure that links the return generated by the bank or investment and the level of risk taken to achieve that return. In other words, this indicator takes into account that achieving high returns does not necessarily mean good performance if it is coupled with high risks [17]. Therefore, the risk-adjusted return shows how efficient the bank is in managing its funds by achieving the best possible return for the risks it is exposed to.

Environmental, Social, and Governance (ESG) Criteria: Environmental, social, and corporate governance (ESG) criteria are of great importance to global investors interested in sustainability, and this indicator measures the bank's commitment to environmental governance standards, social responsibility, and sound corporate governance.

3. **Types:** Based on the above-mentioned indicators and others, and in more detail according to the purpose of the evaluation, we can classify bank performance evaluations into the following categories:
   a. **Financial evaluation**: Financial evaluation focuses on profitability, solvency, and liquidity indicators, which determine the bank's ability to generate and sustain profits (Return on Assets (ROA), Return on Equity (ROE), Net Interest Margin (NIM), Non-Performing Loan Ratio).
   b. **Operational efficiency evaluation**: Operational efficiency evaluation is used to determine the bank's ability to manage its expenses and resources effectively, reduce waste, and increase productivity (Cost-to-Income Ratio, Productivity per employee, Number of branches versus the volume of operations).
   c. **Banking supervision evaluation (CAMELS)**: The CAMELS system provides a comprehensive assessment of the financial and managerial soundness of banks, and it is a comprehensive tool used by central banks to evaluate banks based on six main aspects (Capital adequacy, Asset quality, Management efficiency, Earnings, Liquidity, Sensitivity to market risk).
   d. **Strategic evaluation:** using modern indicators This focuses on creating value for investors by measuring whether the bank creates "real value" after deducting capital costs. Key indicators include (Economic Value Added, Market Value Added, Risk-Adjusted Return, Shareholder Value Added).
   e. **Ethical and sustainability performance evaluation (ESI)**: This is a relatively new index that focuses on the bank's environmental, social, and governance (ESG) responsibilities. Its most important indicators include attracting global investors and commitment to sustainable governance [18]. Its main indicators are (Environmental Performance Index, Bank Governance Index, and Social Responsibility Reports) .
4. **Dimensions** :The most commonly used dimensions in the studies are profitability, operational efficiency, and financial stability, as they reflect the bank's ability to generate profits within a complex operating environment. Risk management and customer service are also dimensions that affect the sustainable improvement of banking performance. Therefore, this research will rely on the following dimensions as the primary dimensions for evaluating banking performance.

Profitability: This dimension refers to the bank's ability to generate profits through its operational activities, which is measured using indicators such as Return on Assets (ROA), Return on Equity (ROE), and profit margin .

Operational Efficiency: Operational efficiency in the banking sector is measured by the bank's ability to convert its resources (such as capital and deposits) into revenues

while reducing operating costs. The Data Envelopment Analysis (DEA) model is used to measure this efficiency, where the relative performance of banks is assessed based on their inputs and outputs. Operational efficiency is a key dimension in evaluating the financial performance of banks, as it reflects the bank's ability to manage its resources efficiently to achieve the maximum possible profit at the lowest cost. Recent studies indicate that increasing operational efficiency directly contributes to enhancing financial stability and bank profitability.

Financial Stability: This refers to the bank's ability to maintain long-term financial stability and avoid financial risks that may affect its sustainability, and financial stability is measured by indicators such as the capital ratio and the non-performing loan ratio.

Growth: Includes the growth of deposits, loans, and the volume of business, and reflects the bank's ability to expand in the market and provide new services, and growth can be measured using indicators such as asset growth or loan growth.

4. Discussion

Chapter Third: Practical Aspect

: Practical Aspect

First: Presenting the Demographic Characteristics of the Research Sample

The characteristics of the sample on which the study was conducted are reviewed, and then the field data is presented by reviewing the descriptive tables of the variables used in the questionnaire.

Table 1. Personal Data of the Research Community

(%) Repetition	Percentage	Category	Item
60.0%	21	Male	Gender
40.0%	14	Female	
34.3%	12	Under 30	Age
28.6%	10	31–40	
22.9%	8	41–50	
14.3%	5	Over50	
45.7%	16	Administrative	Nature of work
25.7%	9	Technical	
17.1%	6	Customer Service	
11.4%	4	Other	
48.6%	17	Under 5 years	Years of experience
28.6%	10	5–10 years	
22.9%	8	More than 10 years	

Source prepared by the researchers based on statistical analysis using SPSS.V.26.

The data indicates that males constitute the majority with 60%, reflecting either the nature of the work at the study site or hiring preferences, while females represent a good percentage (40%), providing a relatively balanced gender representation in the sample. The results indicate that the young age group (under 30 years old) represents the largest segment (34.3%), followed by the 30-40 age group, indicating that the sample mainly consists of individuals of active working age. While the older age groups represent a smaller percentage, the majority of the sample members hold administrative positions with (45.7%), indicating ease of access for researchers or that the institution has a large administrative structure. A significant percentage of workers in technical fields and customer service also contribute, which enhances the diversity of experiences in the sample. The "Other" category represents the lowest percentage, which may indicate a lack of representation of unclassified jobs in the sample. The data also indicates that approximately half of the sample has relatively recent experience (less than 5 years), suggesting a workforce renewal or that the institution hires a large number of recent

graduates. In contrast, the category of those with long experience (more than 10 years) represented a moderate percentage, indicating the presence of a mix of young and experienced employees in the work environment.

Secondly: Description and Diagnosis of Research Variables To understand the impact of financial technology on banking performance, a field study was conducted on a group of Iraqi banks listed on the Iraq Stock Exchange (Bank of Baghdad, Ashur International Bank for Investment, Gulf Commercial Bank). In light of the sample unit's response to the population, the arithmetic mean and standard deviation of those answers will be used. Since this research relied on a five-point Likert scale in the responses of the research sample to the questionnaire, the level of each variable will be limited between (1-5) with three levels, as shown in Table (2), and includes three levels at the hypothetical mean of (3).

Table 2. Weighted Averages of the Research Sample's Responses

ASSESSMENT LEVEL	WEIGHTED AVERAGE	
Low	**From 1 to 2.33**	
Medium	**From 2.34 to less than 3.67**	
High	**From 3.67 to5**	

The source is prepared by the two researchers based on statistical analysis using SPSS.V.26.

The results of the study population's responses to the variables addressed in the questionnaire, based on the analysis of those responses related to the variables, are as follows:

1. Independent variable (FinTech)

Table 3. Results of description and diagnosis of the FinTech variable and its dimensions

Sequence	Paragraph content	Mean standard	tandard Deviation
1	I rely on digital banking services for my banking transactions	3.55	0.80
2	Fintech-based banking applications are better than those based on traditional applications.	3.65	0.75
3	I prefer to deal with a bank that relies on fintech for its banking applications	3.80	0.70
Digital Financial Services		**3.667**	**0.750**
4	I believe the banking sector has sufficient data protection measures.	3.75	0.68
5	I trust the security procedures implemented when using online banking services.	3.90	0.60
6	I have limited concerns about my data being stolen when using financial technology	3.20	0.85
7	I am notified of any unauthorized attempts to access my bank account.	3.50	0.72
Cybersecurity		**3.588**	**0.713**

8	Banks are offering new services and products.	3.60	0.82
9	Technological innovations enable access to new financial services.	3.85	0.70
10	Fintech has helped to improve the quality of banking services	4.00	0.65
11	Banks that rely on fintech tools offer more banking and financial services than traditional banks.	3.70	0.78
Financial Innovation		**0.737**	**3.788**
Overall Average		**0.733**	**3.681**

Source: Prepared by the researchers based on statistical analysis using SPSS.V.26.

We observe from the results shown in Table (3) that the FinTech variable was measured through three sub-dimensions. The weighted arithmetic means for the FinTech variable reached (3.681), which is greater than the hypothetical mean of (3) with a standard deviation of (0.733). This indicates that employees in the banking sector under study practice the use of FinTech at a moderate to high degree, according to their responses to the questionnaire items. The sub-dimensions are answered as follows:

1. The first dimension, **Digital Financial Services**, was measured through items (1-3), and its weighted arithmetic mean reached (3.667), which is greater than the hypothetical mean (3) with a standard deviation of (0.750). This indicates that employees use digital financial services at a moderate to high level. Item (3), "I prefer to deal with the bank that relies on FinTech in its banking applications," achieved the highest arithmetic mean, reaching (3.80). The researchers attribute this to customers' preference for innovation and the ease of banking transactions through digital financial applications. As for item (1), "I rely on digital banking services in my banking transactions," it obtained the lowest arithmetic mean within this dimension (3.55).
2. The second dimension, **Cybersecurity**, was measured through items (4-7), and its weighted arithmetic mean reached (3.588), which is greater than the hypothetical mean (3) with a standard deviation of (0.713). This indicates that employees have moderate confidence in the cybersecurity procedures followed in the banking sector. Item (5), "I trust the security procedures implemented when using online banking services," achieved the highest arithmetic mean, reaching (3.90). The researchers attribute this to a good security awareness among users. As for item (6), "I have limited concerns about the theft of my data when using FinTech," it obtained the lowest arithmetic mean (3.20), indicating the existence of some security concerns that require more attention.
3. The third dimension, **Financial Innovation**, was measured through items (8-11), with a weighted arithmetic mean of (3.788), which is greater than the hypothetical mean (3) with a standard deviation of (0.737). This indicates that financial innovation is practiced at a high level in the banks under study. Item (10), "FinTech has helped improve the quality of banking services," achieved the highest arithmetic mean, reaching (4.00). The researchers attribute this to the contribution of FinTech in raising the quality and efficiency of banking services. As for item (8), related to "banks providing new services and products," it obtained the lowest arithmetic mean in this dimension (3.60).
4. Looking at the results, it is clear that employees in the banking sector recognize the importance of FinTech and use it at a moderate to high level, with relative confidence

in cybersecurity, and they practice financial innovation to a good degree, which enhances the efficiency and effectiveness of the banking services provided.

2. The dependent variable is banking performance.

A - This variable was measured through questions (1-14), which included four sub-dimensions. Table (4) shows that the overall mean for banking performance was (3.68), which is higher than the hypothetical mean (3), with a standard deviation of (0.73). This indicates that the bank's performance is practiced at a moderate to high degree and reflects employee satisfaction with the overall level of performance.

Table 4. Banking Performance

Sequence	Paragraph content	Mean standard	Standard Deviation
1	The bank achieves high financial returns from its available financial resources.	3.75	0.65
2	The realized profits are a result of his successful investment management.	3.65	0.65
	Average profitability distance.	3.70	0.65
3	The services provided by the bank are characterized by speed.	3.70	0.80
4	The bank employees possess the required qualifications and skills to perform banking operations accurately.	3.75	0.75
5	Using FinTech tools contributes to saving time and cost.	3.55	0.75
Average operational efficiency		3.67	0.77
6	The bank has the ability to withstand financial crises	3.80	0.70
7	The bank has various means, including oversight, that limit the possibility of it becoming financially distressed.	3.70	0.70
8	The bank has a sufficient reserve of liquidity.	3.70	0.70
9	The bank has a flexible monetary policy to address various circumstances.	3.65	0.70
	Average financial stability	3.71	0.70
10	The bank's assets are steadily increasing.	3.55	0.80
11	Customer deposits at the bank are increasing continuously.	3.60	0.80
12	The lending services provided by the bank are continuously increasing.	3.60	0.80
13	The bank is recording consistent growth in its operating profits.	3.65	0.80
14	The bank is expanding geographically by opening new branches or offering expanded digital services.	3.80	0.80
Average Growth Distance Overall Average for Banking Performance		3.64	0.80

Average Growth Distance Overall Average for Banking Performance	3.68	0.73

The source was prepared by the researchers based on statistical analysis using SPSS.V.26 software.

B. **First Dimension: Profitability:** The results indicate that the bank achieves high financial returns from its available financial resources, with an arithmetic mean of 3.70, which is higher than the hypothetical mean of 3, with a standard deviation of 0.65. This indicates that the bank's employees believe that the profits achieved reflect successful investment management. The phrase "The bank achieves high financial returns from its available financial resources" received the highest rating with an average of 3.75, while the phrase "The profits achieved result from its reliance on successful investment management" received the lowest average of 3.65, which is considered a positive indicator of relative satisfaction with investment performance.

C. Second Dimension, Operational Efficiency: The data indicates that the operational efficiency of the bank is good, with an arithmetic mean of 3.62 and a standard deviation of 0.78, which indicates the speed of the services provided and that the bank's employees possess the required qualifications and skills. The highest-rated paragraphs were "The bank's employees possess the required qualifications and skills to perform banking operations accurately" with an average of 3.75, which reflects confidence in the capabilities of these employees. The phrase "The use of financial technology tools contributes to saving time and cost" recorded the lowest average of 3.55, which indicates room for improvement in the role of financial technology in the work environment.

D. **Third Dimension: Financial Stability**: It appears that the bank enjoys good financial stability, with an arithmetic mean of 3.71 and a standard deviation of 0.70. This means that the bank is able to face financial crises, possesses sufficient liquidity, and follows a flexible financial policy to deal with changing circumstances. The phrase "The bank has the ability to face financial crises" was the highest-rated, with an average of 3.80, which reflects the bank's financial strength and flexibility. The lowest phrase was "The bank enjoys a financial policy characterized by flexibility to face various circumstances" with an average rating of 3.65, which is good but indicates greater potential for development in this aspect.

E. **Fourth Dimension: Growth**: The results showed that the bank is experiencing continuous growth in various aspects, with an arithmetic mean of 3.64 and a standard deviation of 0.80. This indicates an increase in the bank's assets and deposits, in addition to expansion in lending services and the development of branches and digital services. The highest rating was for the phrase "The bank is working to expand geographically by opening new branches or providing expanded digital services" with an average of 3.80, which indicates a clear focus on expansion and innovation. The lowest-rated phrase was "The bank's assets are continuously increasing" with an average of 3.55, however, this average reflects continuous positive growth.

Third: Testing the Correlation Hypothesis

The first main hypothesis: There is a significant correlation between financial technology and banking performance in all its dimensions in the banks included in the research sample.

Table 5. Correlation results between FinTech and bank performance

Fintech	Cybersecurity	Financial Innovation	Digital Financial Services	Relationship	Dependent Variable
0.490	0.400	0.410	0.390	Correlation	
0.00	0.00	0.00	0.00	Significance	**Banking Performance**

Source: Prepared by the researchers based on the analysis results; (p) significant at (0.01) (p) significant at (0.05)

The results of Table (5) indicate a positive significant correlation between financial technology and banking performance in the banks under study. The research showed that the different dimensions of financial technology, namely digital financial services, cybersecurity, and financial innovation, are all positively correlated with banking performance. The correlation coefficient for digital financial services and banking performance reached 0.390, indicating that the development and use of these services contribute to improving the performance of banks. In contrast, cybersecurity achieved a correlation coefficient of 0.410, which confirms the importance of securing banks against cyber risks to enhance their financial and operational performance. Furthermore, financial innovation recorded a positive correlation of 0.400, highlighting the role of adopting new ideas and technologies in improving the efficiency of banking performance. When studying the relationship between financial technology as a whole and banking performance, the correlation coefficient reached 0.490, which is the highest value among the dimensions, indicating that the comprehensive and integrated use of financial technology in banks is a key factor in improving performance. All these correlations were highly statistically significant (probability value P= 0.00), indicating the reliability and non-randomness of the results. Based on this, it can be concluded that investing in financial technology, through the development of digital services, strengthening cybersecurity, and encouraging financial innovation, significantly contributes to improving the performance of banks and increasing their competitiveness in the financial market.

Fifth: Testing the Hypothesis of Influence This hypothesis related to measuring the effect of the independent variable on the dependent variable was tested in the research using a simple linear regression model. For this purpose, a main hypothesis was set to analyze the relationship of influence between the independent variable and the dependent variable, as follows:

Second Main Hypothesis: There is a significant effect of FinTech, with its dimensions (digital financial services, cybersecurity, financial innovation), on banking performance in the sample banks.

Table (6) presents the results of estimating the multiple linear regression model for the relationship between FinTech, with its dimensions (digital financial services, cybersecurity, financial innovation), and banking performance

Statistical Significance	t-statistic	B Regression Coefficient	Sub-dimensions	Statistical Significance	F-statistic	R-squared (R2)	Dependent Variable
0.00	2.154	0.051	Digital Financial Services	0.00	20.408	0.515	**Banking Performance**

0.00	2.418	0.055	Cybersecurity				
0.00	3.603	0.295	Financial Innovation				

Source: Prepared by the researchers based on the analysis results; the () value is significant at the level of (0.05). The tabular value (F) is (4.17) and (t) is (2.021) at a degree of freedom (DF) of 1,39.

Table (6) shows the results of the multiple linear regression model that examined the effect of financial technology dimensions (digital financial services, cybersecurity, financial innovation) on banking performance. The results show that the model explains approximately 51.5% of the variance in banking performance, with a coefficient of determination (R^2 = 0.515), which indicates the strong impact of these dimensions combined on the performance of banks. The calculated F value for the model was 20.408 with statistical significance at the 0.00 level. This indicates that the model as a whole is statistically significant and explains the relationship between financial technology and banking performance well. As for the impact of each dimension separately, it appears that financial innovation is the most influential with a regression coefficient of B = 0.295, and a t-value = 3.603, with strong statistical significance (0.00), which justifies the importance of innovation in improving bank performance. Cybersecurity came in second with a significant positive impact ((B = 0.055, t = 2.418, significance (0.00), which indicates the role of protecting financial systems in improving performance. Finally, digital financial services had a significant positive impact ((B = 0.051, t = 2.154, significance (0.00), which indicates that the development of digital services contributes significantly and tangibly to raising performance efficiency.

These results confirm the importance of banks adopting financial technology in all its dimensions to achieve better banking performance, with a particular focus on financial innovation as a key factor in enhancing competitiveness.

5. Conclusion

Chapter Four: Conclusions and Recommendations

First: Conclusions

The descriptive analysis revealed that the arithmetic means for all dimensions of financial technology exceeded the hypothetical average (3), indicating a substantial and promising utilisation of financial technology techniques to a moderate to high extent.

A positive and significant correlation exists between financial technology and banking performance, with a correlation coefficient of 0.490, statistically significant at the 0.01 level, indicating that the utilisation of financial technology directly enhances banking performance.

Financial innovation is the predominant factor affecting banking performance. The results of the regression analysis indicated that financial innovation exerts the most substantial significant influence (B = 0.295, t = 3.603, p = 0.00) relative to other dimensions, underscoring the critical role of innovation in enhancing the efficiency and quality of banking services and facilitating growth.

Cybersecurity positively influences banking performance, evidenced by a significant impact (B = 0.055, t = 2.418, p = 0.00) and a correlation value of 0.410, thereby affirming the importance of digital protection in fostering trust and optimising operations.

Digital financial services have a comparatively minor impact on banking performance, yet they exert significant influence. Despite having the least impact among the dimensions (B = 0.051, t = 2.154, p = 0.00), they significantly contribute to banking performance and are correlated with it at a value of (0.390), underscoring the necessity of enhancing these services.

The regression model accounts for a significant portion of the variance in bank performance, with a coefficient of determination (R^2) of 0.515, signifying that over half of the variation in bank performance can be elucidated by the dimensions of financial technology, thereby reflecting the robustness of the employed model.

Second: Recommendations:

1. Encouraging banks to invest in financial innovation due to its great impact on performance, by directing resources to develop innovative banking products and services that contribute to attracting customers and enhancing competitiveness.
2. Strengthening cybersecurity systems to ensure the protection of financial information and increase customer trust, therefore, security systems should be updated and developed regularly, and employees should be educated and aware of cyber threats.
3. Developing and improving digital financial services, although their current contribution, there is still room for improvement in the level of reliance on them, which requires simplifying user interfaces and increasing the effectiveness of digital applications.
4. Designing integrated financial technology strategies in all banking operations and encouraging banks to adopt an integrated approach that includes all dimensions of financial technology within their operational strategies.
5. Conducting continuous training courses for employees to enhance and raise their efficiency in dealing with and using digital tools and modern technologies, which positively reflects on the overall banking performance.
6. Activating specialized units within banks to manage innovation and digital transformation that are responsible for monitoring and updating financial technology applications, and responding to changes in the market and the technological environment.

REFERENCES

[1] W. Abdelrahim and A. Al-Zahraa, "Financial technology as a new monetary and financial trend in developed countries led by the United States and China," *The Economic Researcher Journal*, vol. 7, no. 11, pp. 326–346, 2019. [Online]. Available: https://www.asjp.cerist.dz/en/article/96139

[2] A. A. Abdul Amir, "Analysis of the relationship between operational efficiency and financial stability of Iraqi private banks using the CAMEL model," *Iraqi Journal of Islamic Banking and Finance*, vol. 30, no. 132, 2023. [Online]. Available: https://jpgiafs.uobaghdad.edu.iq/index.php/JAFS/article/view/1286

[3] V. Tiberius and C. Rasche, *FinTechs: Disruptive Geschäftsmodelle im Finanzsektor*, Wiesbaden: Springer Gabler, 2017.

[4] G. Dorfleitner, L. Hornuf, M. Schmitt, and M. Weber, "Definition of FinTech and description of the FinTech industry," in *FinTech in Germany*, Cham: Springer, 2017, pp. 5–10. doi: https://doi.org/10.1007/978-3-319-54666-7_1

[5] M. Abu Shawer, "The transformative impact of financial technology (Fintech) on the financial industry: Innovations, challenges, and future trends," *Iconic Research and Engineering Journals*, vol. 8, no. 1, pp. 411–414, 2024. [Online]. Available: https://www.irejournals.com/paper-details/1706078

[6] A. Saunders and L. Allen, *Credit Risk Management in and out of the Financial Crisis: New Approaches to Value at Risk and Other Paradigms*, 3rd ed., Wiley, 2020.

[7] J. C. Hull, *Risk Management and Financial Institutions*, 5th ed., Wiley, 2018.

[8] B. Ahmed et al., "The impact of the FinTech revolution on the future of banking: Opportunities and risks," *International Review of Financial Analysis*, vol. 81, 2022, Art. no. 102103. doi: https://doi.org/10.1016/j.irfa.2022.102103

[9] P. Gomber, J.-A. Koch, and M. Siering, "Digital finance and FinTech: Current research and future research directions," *Journal of Business Economics*, vol. 87, no. 5, pp. 537–580, 2018. doi: https://doi.org/10.1007/s11573-018-0852-x

[10] D. W. Arner, J. Barberis, and R. P. Buckley, "The evolution of FinTech: A new post-crisis paradigm?," *Georgetown Journal of International Law*, vol. 47, no. 4, pp. 1271–1319, 2016.

[11] E. M. Ferrouhi and S. Lehadiri, "The impact of banking efficiency on financial performance: Evidence from Moroccan banks," *International Journal of Financial Studies*, vol. 6, no. 3, p. 72, 2018. doi: https://doi.org/10.3390/ijfs6030072

[12] A. Damodaran, *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset*, 3rd ed., Wiley, 2012.

[13] M. Shaverdi, M. Beheshtinia, and M. Omidi, "Performance assessment of private banks in Iran using a hybrid MCDM approach," *International Journal of Financial Studies*, vol. 6, no. 3, p. 72, 2011. doi: https://doi.org/10.3390/ijfs6030072

[14] M. N.-E.-A. Siddique, S. M. Nor, Z. C. Senik, and N. A. Omar, "Corporate social responsibility as the pathway to sustainable banking: A systematic literature review," *Sustainability*, vol. 15, no. 3, p. 1807, 2023. doi: https://doi.org/10.3390/su15031807

[15] A. Dietrich and G. Wanzenried, "Determinants of bank profitability before and during the crisis: Evidence from Switzerland," *Journal of International Financial Markets, Institutions and Money*, vol. 21, no. 3, pp. 307–327, 2011. doi: https://doi.org/10.1016/j.intfin.2010.11.002

[16] A. Chen and K. Wong, "Operational efficiency and financial performance: Evidence from the banking industry," *Journal of Banking & Finance*, vol. 113, p. 105741, 2020. doi: https://doi.org/10.1016/j.jbankfin.2020.105741

[17] European Central Bank (ECB), "Supervisory banking statistics for the fourth quarter of 2023," Apr. 2024. [Online]. Available: https://www.bankingsupervision.europa.eu/press/pr/date/2024/html/ssm.pr240410~893f0389e1.en.html

[18] Federal Deposit Insurance Corporation (FDIC), "FDIC-insured institutions reported full-year 2023 net income of $256.9 billion and fourth quarter 2023 net income of $38.4 billion," 2024. [Online]. Available: https://www.fdic.gov/news/press-releases/2024/pr24014.html