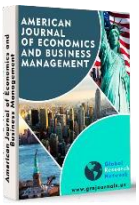

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The Impact of Financial Technology and the Application of the Foundations of Artificial Intelligence on Financial Performance

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Abstract:
This research aimed to study the impact of financial technology and the application of the foundations of artificial intelligence on financial performance, by applying it to a sample of Iraqi banks. This research relied on the descriptive and explanatory approach. The research adopted a questionnaire tool to collect data from a random group of Iraqi banking sector employees from various job levels, as the number of respondents to the questionnaire reached 383 people. SPSS 25 and AMOS 24 were used to conduct all data analyses.

The study refined the scales and evaluated the construct's validity and reliability using the following methods: Cronbach's alpha coefficient for measuring validity, and Pearson's correlation coefficient between the item and the total score of the dimension toward measuring validity. The results of simple regression analyses indicate that FinTech has a positive impact on financial performance (β= 0.723, t = 18.092 and p<0.01) and this provides support for the first half "There is a statistically significant impact of FinTech on financial performance". The results of simple regression analyses indicate that artificial intelligence has a positive impact on financial performance (β = 0.590, t = 15.292, and p < 0.01) and this supports H2 "There is a statistically significant effect of applying the foundations of artificial intelligence on financial performance." Financial performance." The results of multiple regression analyses also indicate that financial technology and artificial intelligence have a positive impact on financial performance (β= 0.517, t = 9.612, and p<0.01) and (β= 0.265, t = 5.480, p< 0.01) for artificial intelligence. Supporting H3: "There is a statistically significant impact of financial technology and the application of artificial intelligence principles on financial performance." The research recommends the necessity of keeping pace with technology that will raise financial performance to the best levels and adopting the foundations of artificial intelligence that help improve performance levels. As a whole, not just financial performance.

Keywords: Financial Technology, Artificial Intelligence, Financial Performance, Performance.

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1. Introduction

Recent years have seen a sharp rise in human-computer contact, which has prompted further research into the coexistence of humans and machines in the AI environment of today (Hannoon, Al-Sartawib & Khalid, 2021). Among other things, artificial intelligence, machine learning, and the Internet of Things are important sources of information generation in a variety of ways, some of the data flash points of big data that can be utilized for decision-making include information volume, diversity, and dissimilarity (Hannoon, Al-Sartawib & Khalid, 2021). The field of artificial intelligence (AI) has focused on creating intelligent machines that can carry out tasks that require human intelligence. AI is a branch of science and technology that involves creating intelligent machines that can mimic human behavior and intelligence (Ottosson and Westling 2020). AI systems and algorithms are used to learn, reason, and make decisions based on data inputs, AI technologies can also analyze data, automate tasks, and provide assistance in a variety of domains (Ottosson and Westling 2020).

With the introduction of more potent computer systems and the availability of vast amounts of data, the notable developments and real-world applications of AI began to pick up steam in the 21st century (Ratia et al. 2018; Haenlein and Kaplan 2019). The sector, the objectives, and the resources at hand will all influence how AI is specifically implemented, for instance, businesses have created in-house AI capabilities, partnered with AI solution providers, or used cloud-based AI platforms to use AI's potential and obtain a competitive edge in their respective sectors (Burström et al. 2021).

Miller and Brown pointed out (2018), that the notion of artificial intelligence as an area of scientific study is not new; it was first proposed at the Dartmouth Conference in 1965, when the phrase "intelligent machine" was first used. Looking back, though, the phrase "intelligent machine" does not adequately describe the range of HMI. The phrase artificial intelligence subsequently arose as a result of the process by which machines learn to recognize patterns and characteristics directly from data to execute algorithms (Miller and Brown, 2018).

Artificial intelligence is considered one of the most important inventions of the modern era in the world of technology, and although artificial intelligence has not enjoyed full development until this moment, it has succeeded in penetrating all the fields that we encounter daily in our lives, starting with applications and electronic methods that carry out tasks automatically and quickly, from robots that operate with artificial intelligence to computers that operate with the same system to enter and save data (Ma & Siau, 2018). Global communications networks are going to undergo tremendous advancements in the upcoming years, which will drastically alter how people and organizations do business and send money (Abdul-Rida, Karim, and Harjan, 2020). Because conventional banks "for example" that made money in the past by mobilizing, storing, and lending cash deposits would not be able to sustain themselves in their existing form over the next decades, the financial sector must keep up with these technological advancements since there will be a challenging scenario in which electronic currencies rather than cash are used (Hassan and Hassan, 2019). Because of the increasing complexity and speed of the banking needs of individuals and institutions, the banking industry is facing significant challenges from the rapid advancement of technology and the inability of traditional banking institutions to keep up with the industry's rapid development (Abdul-Rida, Karim, and Harjan, 2020). As a result, the development and modernization of banking services and product systems for various sectors will also need to accelerate (Hassan and Hassan,

2019).

Financial technology has recently made a strong appearance on the financial scene due to its rapid developments (Chishti & Barberis, 2016); This is because it offers opportunities for growth at the global level by diversifying economic activity and creating new opportunities for financial products and tools (Al-Dakash, 2019). Additionally, because financial technology can solve a wide range of problems, it has facilitated access to individuals and institutions that are currently underserved by financial services by offering a new model for transactions between individuals and other things that it provides at a faster pace (Al-Dakash, 2019). This requires institutions in their various forms to change the means and methods used in the various stages of business to meet the requirements of applying and using modern information technology technologies and adopting the latest programs, software, or means of communication, especially about developments in dealing with the Internet and websites that have a relationship with the nature of modern business and services, and the areas of dealing with the institutions in which the work takes place (Joudah, 2023).

Technology and innovation have revolutionized financial markets and economies in the twenty-first century, changing financial services and goods, particularly banking services. The goal of financial technology, or fintech, is to offer better and more automated financial services. Its original definition referred to computer technology used in trading companies' or banks' back offices. However, as time goes on, its business model has evolved to incorporate new, effective information technologies like big data, blockchain, artificial intelligence (AI), and the Internet of Things (Song et al., 2021). Fintechs have the potential to streamline information exchange, accelerate processing, lower expenses, and encourage ongoing advancements in transactional lending (Cenni et al., 2015; Liberti & Peterson, 2019). In addition to the emergence of new innovators in the industry and the rapid growth of online commerce platforms, tech giants have been a driving force behind the digitization of banks through the use of these new technologies, hoping to improve customer-bank interactions and generate new sources of revenue. In actuality, digital banking is the ideal illustration of how emerging financial technology may impact the direction of the banking industry. Financial technology is now the foundation of the operations of nearly all banks and financial institutions, enabling them to offer online banking services, high degrees of automation, and artificial intelligence (AI) to facilitate decision-making (Asongu, 2018). Investing in financial technology is the process of making large purchases of expensive new hardware and software that may be used to improve the quality of banking services and, as a result, cause traditional operations to undergo a digital revolution.

In recent years, the financial technology sector, which has been abbreviated by the term "FINTECH," has revolutionized the field of financial and banking services at all levels. In light of the rapid developments and changes that the banking sector is experiencing as a result of technological development and the rapid spread of financial technology, which has led to an increase in the intensity of competition, banks must respond to this competitive environment by adopting modern technologies represented in information and communication technology and electronic banking as part of their business strategies, and thus banks have changed as most sectors through technological innovations to achieve their goals, continue to grow and develop, and maximize shareholder wealth. Therefore, banks have embarked on an unprecedented deployment of banking products and services based

on financial technology, such as ATMs, and implementing payments by transferring electronic funds to the payment terminal at points of sale as tools. Prominent in enhancing the performance of banks globally. With all these new changes, banks in Iraq must keep pace with this and achieve relevance to their performance and effectiveness in providing advanced services to raise their competitive capabilities in the local and foreign markets. In addition to what was mentioned previously, financial performance expresses the results achieved by the organization, identifying the reasons that led to achieving those results, emphasizing the reasons for the good results, and proposing solutions to overcome the reasons that led to bad economic results, through improving the performance of the activities and services that It is carried out by institutions, in integration with technological developments. Therefore, this study decided to investigate the impact of financial technology and the application of the foundations of artificial intelligence on financial performance, by applying this to a sample of Iraqi banks.

2. Theoretical framework

The term financial technology or (Fintech) is a combination of two terms. The first is financial, which means financial services are provided in an innovative way using the latest technical means such as mobile phones, social media, and the payment and settlement system. The second is information technology, which is the technology that was invented. To provide services such as transfers, payment and settlement operations, and investment) without the need to deal with financial institutions. As a result of the integration of financial services and information technology, the term financial technology was used to indicate the employment of technological innovations in financial services to become an innovative industry competing with traditional financial services. One example of this innovative technology. Cell banking has also been defined, which refers to the use of the phone in financial services (Kim et al. 2015).

Financial technology is the services or products that employ technology in traditional financial services to improve their quality due to the speed and ease of this technology, and it also allows a larger number of individuals to access financial services (Abdel Rahim et al. (2018).

The Financial Stability Board has defined financial technology as financial innovations using technology that can create new business models, applications, processes, or products that have a tangible material impact on financial markets and institutions (The Financial Stability Board 2019). As for emerging companies in the field of financial technology, they are defined as companies. They employ technology in financial services to make these services easier, faster, more transparent, and efficient, and these companies also aim to eliminate traditional financial services or capture part of their market share. (Sadlakowski et al., 2017).

According to the Oxford Dictionary, "computer programs and other technologies used to support or enable banking and financial services." Financial technology represents a new sector in the financial industry, as it includes the huge amount of technology used in finance to facilitate trade, as well as all the new innovations in the field of financial services (MICU & MICU, 2016). Fintech is an emerging financial services sector that includes third-party payments, insurance products, risk management, and peer-to-peer lending (shim & shin, 2016). Fintech is an economic industry consisting of companies that use technology to make financial systems more efficient (wharton, 2014).

Fin-Tech sectors

Financial technology sectors can be divided into two main sectors: first-stage sectors and second-stage sectors. Below is a breakdown of these sectors:

First stage sectors: These sectors belong to the emerging environment, as these sectors are characterized by the fact that their customers possess simple technological means such as smartphones and applications. This technology enables them to obtain simple financial services such as payment and credit and includes payments, lending, and capital collection on the payment side. Companies provide the ability to pay users through phones and the Internet, such as (Apple Pay, PayPal, and Amazon) in exchange for the goods and services they receive, which brings many benefits to end users, such as reducing transaction costs and reducing time and effort as a result of shortening distances. Al-Tarsh (2019). Among the most prominent of these companies is the company Payments (Mdfoo3at) from Jordan, which specializes in bill payments, and (BEAM), which specializes in electronic wallets, Hamdi and Oqasim 2019). As for borrowing and raising capital, innovations have contributed to changing the form of borrowing and investment. One of the most important of these innovations in financial technology models is crowdfunding. This type of financing can be defined as financing done through financial platforms: these platforms collect sums of money from a large number of contributors in small amounts to finance a specific project. This financing is part of peer-to-peer financing, in which the financial intermediary is dispensed with, so these platforms have become digital financial markets. The financial crisis that the world witnessed in 2008 contributed to the spread of this type of financing because financial institutions lost the trust of individuals in them, and the presence of These online platforms has contributed to their spread and facilitated the process of searching for capital by Barneyah et al. (2019).

Sectors of the second stage: In these sectors, we find that emerging companies in the field of financial technology have developed new activities that employ modern technological innovations and provide a modern environment and investment movement. These sectors include financial transfers, wealth management, insurance technology, and virtual currencies (Najwa, 2019).

Artificial Intelligence

In 1973 the first appearance of an artificial intelligence system was related to the (Hear Say) system for recognizing speech and pronunciation. The most important stages of artificial intelligence development were in the year (1950) and were called general problem-solving methods, while from the year (1960-1970) these were called the stage involved knowledge representation methods, which are knowledge-based systems. However, in the year 1990, this stage moved from integrated artificial intelligence systems to a comprehensive information environment (Al-Khawalid and Talijia, 2012).

The concept of artificial intelligence is one of the modern concepts that has received great attention in Jordanian commercial banks. Partial interest in artificial intelligence began in the early nineties at the beginning of the last century. However, in the current century, it has received great attention as it has become no longer possible for Jordanian commercial banks to monitor their activity and ability. On competitiveness at all levels, except when paying attention to artificial intelligence and its applications, as this intellectual resource is considered one of the most important components of Jordanian commercial banks, which is seen in this era as the pioneering resource that brings Jordanian commercial banks to global competitiveness (Mangani, 2017).

There have been many points of view that have attempted to find a specific definition of artificial intelligence, considering it a concept that has recently begun to be applied from an accounting perspective, there is not yet a specific agreement on its concept, but there is some consensus among researchers on a fundamental point in their definition of it, which is that it is a field of study that studies how computers and their programs are created capable of intelligent human behavior (Copeland, 2018).

While (Elaine, 2017) defined artificial intelligence as how to make computers perform the functions assigned to them better than humans and make systems think and act like humans, whereas artificial intelligence is seen as the ability of devices to perform actions and activities that are only expected from the human brain, and these include Activities include the ability to know and the ability to acquire it. It also includes the ability to judge, understand relationships, and produce original ideas. Artificial intelligence aims to create an intelligent machine that can interact in ways similar to humans, and thus it is seen as a simulation of the human brain.

As for (Eletter, 2018), he defined it as a system related to designing and applying algorithms to analyze and learn from data and interpret it. It coordinates and organizes several learning techniques, through discovering shapes using logic and probability theories. It investigates how to develop computer technology so that it becomes able to perform actions similar to those it performs, the human mind is capable of learning and completing physical tasks and simulating human experience and decision-making.

3. Financial Performance

Financial performance is considered one of the main components of companies, as it provides an integrated system of accurate and reliable information to compare the actual performance of companies' activities through specific indicators to identify deviations from previously set goals. Financial performance is considered a tool for personal judgment through values, behavior, and moral and ethical standards, and a tool for objective judgment on the efficiency of companies. At the level of its activities and the extent to which goals are effectively achieved in terms of numbers and material aspects that can be accurately measured through certain standards (Al-Zghoul, 2018).

Performance in general and financial performance in particular are among the topics that have received the attention of researchers with various intellectual trends. Financial performance is mainly used to measure the performance of banks because it is characterized by continuity and stability and contributes to directing banks toward the best and correct path (Rahouma and Zabit, 2016).

(Khan, et al., 2019) indicated that financial performance is a measure of the extent of the institution's efficiency in employing its assets and achieving profits, and (Sam, et al., 2019) also described financial performance as a comprehensive indicator of the bank's ability to achieve profits from its investment operations. During a specific period financial performance represents the most important axe that management and investors focus on, as it is what enables and ensures the bank's survival. Al-Qaisi (2019) adds that financial performance represents the bank's ability to achieve the main goals of expansion, continuity, and maximizing Profitability through optimal use of the resources available to it.

The importance of financial performance

The importance of financial performance in general has emerged through the

meanings and indicators it provides that reflect the financial status of the company's performance and its ability to achieve its goals. Financial performance evaluates the performance of companies from several angles, and in a way that serves internal and external data users who have financial interests in the company to determine the strengths and weaknesses of the company, and benefit from the data provided by financial performance to make financial decisions for users (Ben Nadhir and Shamlan 2017). The importance of financial performance also stems, particularly in the process of following up on the company's work, examining its behavior, monitoring its conditions, evaluating its performance levels and effectiveness, and directing performance towards the right and desired direction by identifying obstacles, explaining their causes, proposing corrective measures, and rationalizing the general uses of companies (Al-Sharia 2017).

Financial performance works to achieve goals by serving all internal and external parties, as it helps to follow up and know the banks' activity and nature. It also helps to follow up on the economic and financial conditions surrounding it, and to determine the impact of financial performance tools such as profitability, liquidity, and debt, knowing the stock price, and helps in conducting the analysis process. Comparing and interpreting financial data and understanding the interaction between the data to make the appropriate decision for the banks' conditions (Amarna, 2023). It also helps to uncover some administrative and organizational problems, as the analytical study of the results of financial performance ensures the detection of some organizational and administrative defects. It helps in assessing the validity of personnel affairs systems and the extent of the safety and success of the methods used in selecting and appointing employees (Ben Nadhir and Shamlan 2017).

4. Literature Review

This part is devoted to literature review and hypothesis development. Accordingly, this chapter focuses on these characteristics, reviewing previous studies related to each of them, and then developing a hypothesis for each of the variables. And there are some of these searches:

Ahmed's research (2023) aims to identify artificial intelligence and its relationship to improving logistical performance and developing financial performance by applying it to youth and sports directorates in the governorates of North Upper Egypt. One of the most important results was the presence of a positive significant correlation between artificial intelligence and both improving logistical performance and developing financial performance in the youth and sports directorates in the governorates of North Upper Egypt.

Shiyyab et al.'s study (2023) aimed to investigate the extent to which Jordanian banks refer to and use artificial intelligence technologies in their operational processes and examine the impact of disclosing terms related to artificial intelligence on financial performance. Content analysis is used to analyze the spread of artificial intelligence and related information. Relevance in the textual data of the annual report. Based on content analysis and regression analysis of data from 115 annual reports of 15 Jordanian banks listed on the Amman Stock Exchange for the period 2014 to 2021, the study reveals a steady increase in mentions of disclosure of terms related to artificial intelligence since 2014. It continues The level of disclosure related to artificial intelligence is weak for some banks, which indicates that Jordanian banks are still in the early stages of adopting and implementing artificial intelligence technologies. The results indicate that disclosure of keywords related to artificial intelligence has an

impact on the financial performance of banks. Artificial intelligence has a positive impact. on accounting performance in terms of return on assets and return on equity and a negative impact on total expenses, which supports the prevailing view that AI improves revenue and reduces cost and is also consistent with previous literature findings.

Mushtaq et al.'s study (2022), aims to investigate the probability of financial performance indicators predicting text sentiment. 10K is an application of artificial intelligence. We use natural language processing (NLP), a subfield of artificial intelligence (AI), to predict while analyzing... 3,729 annual financial reports from 10,000 S&P 500 companies over the 2002-2019 time period. Our findings indicate that company financial performance indicators help reduce negativity in the text portion of the 10k. On the other hand, there is no significant correlation between the company's financial performance indicators and the positive 10K. Our results are robust to alternative econometric specifications and alternative measures of key variables and contribute to the accounting and financial disclosure literature by suggesting that indicators of corporate financial performance can predict the tone of 10K filings.

Lachuer & Jabeur's research (2022), aims to study the relationship between corporate social responsibility and financial performance of companies in an emerging market through artificial intelligence. The research found that in a bull market, CSR is negatively related to financial market performance. By using XAI, we show that CSR exclusively improves the financial performance of more sustainable companies. It was also highlighted that there are thresholds that moderate the relationship between the level of CSR and our financial variables.

Krulicky and Horak's research (2021) aims to propose an appropriate tool for cluster analysis and determine the ability of a business to survive potential financial distress through artificial intelligence. The basic analysis clearly shows that companies in liquidation attempt to reduce the value of inventories and engage additional foreign capital with a view to survival, while there is a certain solidarity between companies' key persons.

The study by Potanin and Sidorov (2020) aimed to study the relationship between the financial performance and market share value of Russian public companies, such as PJSC Mechel, PJSC Novolipetsk Iron and Steel Works, PJSC Magnitogorsk Iron and Steel Works, and PJSC Severstal using an artificial neural network (ANN). The average values of discrepancies between the actual value of the market capitalization to equity ratio and the value calculated using ANN were 6.0, 2.5, and 8.2% for NLMK, Severstal, and MMK, respectively. The use of ANN showed the overvaluation of the stock exchange share prices of PJSC Mechel concerning market averages.

The research by Hu, Nian, and Wang. (2019) evaluates listed companies in China's AI industry from the perspective of financial performance and analyzes the development status of China's AI industry from a macro perspective. This study chooses the more objective and appropriate DEA analysis as the evaluation method according to the characteristics of the AI industry. Based on summarizing the development status of the AI industry and AI-listed companies, an empirical analysis is conducted. In the data sample, 34 AI companies listed on the stock exchanges of Shanghai and Shenzhen in China were selected, and the DEA model with the production orientation model was used to analyze the benchmark data. The result shows that in different stock panels, efficiency displays different development trends and distribution status.

Bakr's study (2022) this study aimed to investigate the main financial technology

adopted by banks to improve and enhance their financial performance and financial position. The study population consisted of commercial banks listed on the Amman Stock Exchange (ASE) and listed on the Abu Dhabi Securities Market (ADX) during the period extending between 2012 and 2020. To achieve the objectives of the study, 115 questionnaires were distributed to the study sample in Jordan and the Emirates, with 5 questionnaires for each bank. The dependent variables included financial performance and financial position, while the independent variable represented financial technology (Fintech). Multiple linear regression analysis was used to test the study hypotheses. The results of the study showed a statistically significant impact of financial technology on total deposits, total loans, profit margin, net profit, and total assets.

A study by Muhammad (2016), the study addressed the role of information technology in evaluating the financial performance of insurance companies. The study assumed that there is a statistically significant relationship between information technology and activity ratios, profitability ratios, liquidity ratios, liquidity evaluation, profitability evaluation, and activity evaluation for insurance companies.

Henni (2010) study: The purpose of this study is to study the impact of information technology on the financial performance of Jordanian banks listed on the Amman Stock Exchange for the period 2005-2008. To achieve this goal, a questionnaire was distributed to evaluate the potential impact of information technology on the banking sector, while performance was estimated through relevant financial ratios. Analysis of variance (ANOVA) and regression are used to depict possible relationships. The results of the study revealed that there is no relationship between information technology and the financial performance of Jordanian banks. Therefore, we can conclude that investments in information technology have no impact on the performance of Jordanian banks, which can be explained by other factors. Finally, investments in information technology should be accompanied by appropriate organizational change to increase the likelihood of a positive return.

5. Methodology

This part is the research methodology, and it contains the principles for researching independent and dependent variables, declaring the objective of the research, displaying how to collect data, defining the population, and its size, and the analysis procedures used to define the relationship between the financial technology, financial performance and the artificial intelligence. To fulfill its objectives, this study used a deductive methodology that, after data collection and analysis, evaluates a theory that has already been tried in other nations and looks at hypotheses drawn from the literature. This research depends on the descriptive and explanatory approach and aims to explain the impact of financial technology and the application of the foundations of artificial intelligence on financial performance. To find secondary data sources, the researcher resorted to theoretical frameworks within previous studies by reading a variety of websites, researching the impact of financial technology and applying the foundations of artificial intelligence on financial performance, and reviewing relevant books, periodicals, articles, and reports from both. And through the use of these secondary sources. The applied aspects of the subject of the study were addressed, and primary data was collected through field research by distributing questionnaires to study some of the research items, inventory them, and collect the necessary information about the subject of the study. Within the questionnaire, a Likert scale was applied, which is designed to examine the degree to which respondents agree or disagree with statements that are usually on a five-point

scale. The scale allows respondents to rate their agreement with each statement using the scale provided. The questionnaire was distributed using the survey method, as the sample included employees from all administrative levels in the accounting department of commercial banks in the State of Iraq. The questionnaire was developed by the aim and subject of the study regarding studying the impact of electronic marketing strategies on the financial performance of companies in light of applying the foundations of artificial intelligence.

Research Hypotheses

H_1: There is a statistically significant effect of financial technology on financial performance.

H_2: There is a statistically significant effect of applying the foundations of artificial intelligence on financial performance.

H_3: There is a statistically significant impact of financial technology and the application of artificial intelligence principles on financial performance.

Data analysis and results:

A SPSS 25, and AMOS 24 software is used to carry out all the data analyses.

The study refines the measures and assesses the construct validity and reliability in the following ways Cronbach's Alpha coefficient to measure reliability, and Pearson's correlation coefficient between the paragraph and the total score for the dimension toward measure the validity.

Validation and reliability of measures:

Reliability is assessed and the results indicate the Cronbach's α values for all measures are well above the threshold recommended value of 0.60

Validation is assessed and the results indicate the Pearson's correlation coefficient values for item total correlation are significant at the 0.01 level

Table 1. Reliability of measures for study variables

Variables	Number of items	Cronbach's Alpha
Financial Technology	17	0.86
Artificial intelligence	13	0.85
Financial performance	14	0.85

Table 2. Validation of measures for study variables

Financial Technology		Artificial intelligence		Financial performance	
item	item total correlation	item	item total correlation	item	item total correlation
1	.526**	1	.414**	1	.595**
2	.564**	2	.494**	2	.516**
3	.603**	3	.537**	3	.582**
4	.544**	4	.590**	4	.580**
5	.591**	5	.620**	5	.599**
6	.518**	6	.591**	6	.548**
7	.609**	7	.671**	7	.575**
8	.549**	8	.542**	8	.597**

9	.587**	9	.621**	9	.612**
10	.620**	10	.641**	10	.561**
11	.600**	11	.626**	11	.618**
12	.502**	12	.693**	12	.564**
13	.516**	13	.622**	13	.606**
14	.620**			14	.520**
15	.562**				
16	.493**				
17	.440**				

**. Correlation is significant at the 0.01 level (2-tailed).

Sample properties:

As shown in Table (3), the number of participants in the study was (383), where most of the respondents were age of 25-30 years with a percentage of 30.5% (n = 117), and most of the participants had a Bachelor's degree were 38.9% (n = 149) and most of them were Experience of 11-16 years with a percentage of 37.1% (n=142)

Table 3. Details about the sample are showed in the following

Variables	N= 383	%
Age		
(25-35)	117	30.5
(36-40)	64	16.7
(41-50)	55	14.4
(51-60)	69	18.0
60 and above	78	20.4
Education		
Diploma and below	99	25.8
Bachelor's degree	149	38.9
Master's degree	66	17.2
PhD degree	69	18.0
Experience		
5-10	105	27.4
11-16	142	37.1
17- 22	79	20.6
23 and above	57	14.9

The researcher used a correlational analysis to assess the relationships among the variables of interest. The results revealed that Financial performance is related positively with Financial Technology (r= .680, p<0.01) and Artificial intelligence (r= .617, p<0.01).

Table 5. Table 4. Correlations and descriptive statistics:

	Mean	SD	1	2	3
Financial Technology	4.47	0.32	1		
Artificial intelligence	4.46	0.36	.698**	1	
Financial performance	4.46	0.34	.680**	.617**	1

Hypothesis testing

The objective of this study was accomplished through the application of simple and multiple regression analysis, a fitting method for testing the study's hypotheses due to its encompassing set of statistical procedures aimed at estimating relationships

between variables. This analytical approach proves valuable in comprehending how alterations in an independent variable, while keeping other variables constant, influence the typical value of a dependent variable. In alignment with the study's fundamental causality assumptions, a series of regression equations were employed to assess the hypotheses.

However, recognizing the potential for multicollinearity to yield misleading outcomes in regression analysis, a precautionary step was taken. The variance inflation factor (VIF) was computed for all independent variables, and it was determined that all VIF values were below 3. This finding effectively ruled out any concerns related to multicollinearity

Results of the simple regression analyses shown in (Table 5) indicate that Financial Technology is positively effect to Financial performance (β= 0.723, t = 18.092 and $p<0.01$) this provides support for H1

Results of the simple regression analyses shown in (Table 6) indicate that Artificial intelligence is positively effect to Financial performance (β= 0.590, t = 15.292 and $p<0.01$) this provides support for H2

Results of the multiple regression analyses shown in (Table 7) indicate that Financial Technology and Artificial intelligence is positively effect to Financial performance (β= 0.517, t = 9.612 and $p<0.01$) for Financial Technology and (β= 0.265, t = 5.480 and $p<0.01$) for Artificial intelligence This provides support for H3

Table 5. Results of simple regression for predictor Financial Technology:

	Financial performance		
	β	**t**	**SE**
Predictor			
Constant	1.229**	6.862	0.179
Financial Technology	0.723**	18.092	0.040
Adjusted R^2	0.461		
F	327.335**		

**significant at the 0.01.

Table 6. Results of simple regression for predictor Artificial intelligence:

	Financial performance		
	β	**t**	**SE**
Predictor			
Constant	1.828**	10.589	0.173
Artificial intelligence	0.590**	15.292	0.039
Adjusted R^2	0.379		
F	233.836**		

**significant at the 0.01.

Table 7. Results of multiple regression for predictor Financial Technology and Artificial intelligence:

	Financial performance		
	β	**t**	**SE**
Predictor			
Constant	0.966**	5.390	0.179
Financial Technology	0.517**	9.612	0.054
Artificial intelligence	0.265**	5.480	0.048

Adjusted R^2	0.499
F	191.154**

**significant at the 0.01

6. Conclusion

This study used an approach based on the descriptive analytical approach to study the impact of financial technology and the application of the foundations of artificial intelligence on financial performance. The research adopted the questionnaire tool to collect data from a random group of Iraqi banking sector employees from various job levels, as the number of people responding to the questionnaire reached 383. The study aimed to test the following hypotheses H1: There is a statistically significant effect of financial technology on financial performance.

H2: There is a statistically significant effect of applying the foundations of artificial intelligence on financial performance.

H3: There is a statistically significant impact of financial technology and the application of artificial intelligence principles on financial performance. SPSS 25 and AMOS 24 were used to conduct all data analyses.

The study refined the scales and assessed construct validity and reliability in the following ways: Cronbach's alpha coefficient for measuring validity, and Pearson's correlation coefficient between the item and the total score of the dimension towards measuring validity.

The goal of this study was achieved by applying simple and multiple regression analysis, which is the appropriate method for testing the study hypotheses because it includes a set of statistical procedures aimed at estimating relationships between variables. This analytical approach proves valuable in understanding how modifications in an independent variable while holding other variables constant, affect the model value of the dependent variable. Consistent with the study's basic causal assumptions, a series of regression equations were used to evaluate the hypotheses. However, recognizing the potential for multicollinearity to lead to misleading results in regression analysis, a precautionary step was taken. The variance inflation factor (VIF) was calculated for all independent variables, and it was determined that all VIF values were less than 3. This result effectively ruled out any concerns of multicollinearity

The results of simple regression analyses indicate that FinTech has a positive impact on financial performance (β= 0.723, t = 18.092 and $p<0.01$) and this provides support for the first half "there is a statistically significant impact of FinTech on financial performance". The results of simple regression analyses indicate that artificial intelligence has a positive impact on financial performance (β= 0.590, t = 15.292, and $p<0.01$) and this supports H2 "There is a statistically significant effect of applying the foundations of artificial intelligence on financial performance." Also the results of multiple regression analyses indicate that fintech and artificial intelligence have a positive impact on financial performance (β= 0.517, t = 9.612, and $p<0.01$) for fintech and (β= 0.265, t = 5.480, and $p<0.01$) for artificial intelligence. Support for H3 "There is a statistically significant impact of financial technology and the application of AI principles on financial performance." The research recommends the need of keeping pace with technology that will raise financial performance to the best levels and adopting the foundations of artificial intelligence that will help improve performance levels as a whole, not just financial performance.

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