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The influence of financial technology on profitability in Jordanian commercial banks

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ABSTRACT

The aim of this study is to identify the influence of Financial Technology (FinTech) on profitability in Jordanian commercial banks. The convenience sample was surveyed using a descriptive cross-sectional approach. Questionnaires were used to collect the data. The study population consists of commercial banks. The tool was sent to employees of all Jordanian commercial banks through email, Facebook and Twitter in order to meet the researchers' target sample size of at least 381 participants. The data was analyzed using the Statistical Package for Social Sciences (SPSS) version 24. The results showed an impact of financial technology (financing, money transfers and lending) on banks' profitability. The results of this study demonstrate that the adoption of FinTech solutions by banks has a significant impact on their profitability and position. Financing, money transfer and lending are crucial in determining a bank's profitability and overall success. Therefore, this study contributed to the growth of a new model that connects financial technology through financing, money transfers and lending to profitability and it added many topics related to financial accounting technology for increasing profitability in Jordanian commercial banks.

Contribution/Originality: This study is unique in the adoption of financial technology and the profitability of banks in Jordan by presenting a new model to suit the requirements of Jordanian commercial banks. It also includes financial accounting technologies such as equity financing and accounts receivable as a means of diversifying funding sources.

1. INTRODUCTION

The growth of FinTech has been greatly accelerated by the digital revolution which is also accompanied by improvements in communication technology and widespread internet usage (Al-Zaqeba, Abdul Hamid, Ineizeh, Hussein, & Albawwat, 2022). The COVID-19 epidemic has accelerated the shift in which people are more dependent on digital services for performing financial transactions as a result of social isolation measures and lockdowns (Baker, Kaddumi, Nassar, & Muqattash, 2023). Financial technology (FinTech) refers to the use of

technology to enhance the delivery of financial services and improve the efficiency of financial institutions. In fact, many financial organizations including prominent banks are transitioning from traditional employment to digital labor. These banks are implementing state-of-the-art digital banking systems that facilitate the rapid introduction of new services (Cho, Lee, & Song, 2016). Therefore, it involves the utilization of modern technology to revolutionize the provision of financial services, encompassing online platforms, mobile payments, cloud computing and other cutting-edge technologies (Shubailat, Al-Zaqeba, Madi, & Khairi, 2024). The Financial Services Technology Consortium was founded by Citigroup in the early 1990s but FinTech's origins date far deeper (Kalra, 2019). Technology has been evolving in the financial sector in many years with early examples including the introduction of ATMs and electronic trading systems (Kriebel & Debener, 2019). Furthermore, FinTech's rapid development can be observed in its rise in several industries such as lending, personal finance, retail investing, crowdfunding, remittances, startup payments and financial research (Nugroho & Sugiyanto, 2023). Since the public's demand for online financial services and the use of internet media to access digital data is growing, financial technology is being applied to improve the effectiveness of operational activities and the calibre of bank services provided to its clients (Hassan & Misrina, 2021). As a result, the increased application of technology and the creation of new channels for the supply of financial services contribute to an increase in bank profit margins (Pazarbasioglu et al., 2020). On the other hand, there is evidence that technological improvements can reduce bank profitability in some nations (Jebril, Almaslmani, Jarah, Mugableh, & Zaqeeba, 2023). Banks are attempting to improve the financial services they offer in reaction to the emergence of FinTech especially in the context of new competitors entering the market that could negatively affect bank profitability (Medyawati, Yunanto, & Hegarini, 2021).

FinTech is still relatively new in countries like Jordan but since the Central Bank of Jordan launched the FinTech Regulatory Sandbox in 2018, policymakers, researchers and regulators have given it a lot of attention. The sandbox provides a controlled and secure environment for conducting necessary tests and examinations of innovative financial technology adhering to clear standards and timelines with the utmost rigor. Accordingly, the aim of this study was to determine how the use of financial technology impacts the profitability of Jordanian banks. Modern e-banking options are becoming more and more available from both domestic and foreign banks as a result of the increased competition brought on by FinTech. The study especially looks at how FinTech has impacted profitability in banks. A review of the services that banks offer to their clients is included as well as the primary reasons why they use the internet and other electronic channels to service them. It is noteworthy because it reveals the elements that affect operations, leading to higher profits and the capacity to control risks related to using FinTech tools and services to the bank's advantage. It also illustrates how banks differentiate themselves in the market by offering these services as well as the elements that affect banks' increased profitability whether they are public or private. Therefore, this study contributed to the growth of a new model that connects financial technology through financing, money transfers and lending to profitability and it added many topics related to financial accounting technology for increasing profitability in Jordanian commercial banks.

2. LITERATURE REVIEW

2.1. Financial Technology (FinTech)

The technological advancement has given rise to terms like FinTech, digitalization and digital transformation, particularly in the financial sector (Barroso & Laborda, 2022). According to Darolles (2016) FinTech refers to the application of cutting-edge technologies to improve financial services and operations. Digitization is the process of transforming how businesses interact with their consumers and run their internal operations through the use of modern technologies (Nicoletti, 2021). Adopting digital tools and platforms is necessary to boost productivity, simplify processes and enhance customer experiences (Gellweiler & Krishnamurthi, 2020). However, digital transformation entails a thorough integration of digital technology across the whole business which has a

substantial impact on how it operates and generates value (Al-Zaqeba, Al-Khawaja, & Jebril, 2022; Van Veldhoven & Vanthienen, 2022). It calls for a purposeful change in attitude, culture and business processes that goes beyond the simple application of technology (Naimi-Sadigh, Asgari, & Rabiei, 2021). It is difficult and expensive to achieve digitization or digital transformation which necessitates an emphasis on usability and functionality (Nambisan, Wright, & Feldman, 2019). Financial inputs for digitization are crucial digital investments which include costs to enable and install new technologies. Therefore, organisations must actively plan and manage their digital expenditures in order to accomplish the goal of digital transformation and evaluate its advantages (Chanias, Myers, & Hess, 2019). One way for researchers to assess the level of digitization within a company is by examining the hardware and software assets reported on its balance sheets (Bhimani & Willcocks, 2014). These assets typically include computer systems, networking equipment, software and supporting IT infrastructure which represent the company's financial commitments to modern technology. These investments can be helpful for monitoring digitization and financial technology investment because they are frequently made to assist digital transformation, optimize operational efficiency and streamline processes (Zhou, Kautonen, Dai, & Zhang, 2021). Reliable IT infrastructure and software solutions are frequently necessary for financial technology initiatives aimed at automating operations, enhancing procedures and enabling new digital financial services. However, the amount invested in technology can be determined by IT expenses but the scope of financial technology activity may not be entirely captured by them. Some FinTech projects may involve joint ventures, acquisitions or investments in FinTech startups or third-party platforms which might not be reflected solely in a company's IT spending (Chhaidar, Abdelhedi, & Abdelkafi, 2023).

Dong et al. (2020) examine the relationship between banks' profitability, cost-effectiveness and the use of internet platforms. However, when seeking to gauge technology investment or digitization in banks relying exclusively on a straightforward binary dummy variable may not give a complete or nuanced view of the amount of digitization inside various organizations. The amount or breadth of digitization inside a bank is not sufficiently captured by a dummy variable because of its binary nature which takes a value of 1 if the bank employs online channels and 0 otherwise (Batsakis, Theoharakis, Li, & Konara, 2023). Recent work by Kriebel and Debener (2019) employing text mining approaches offered fresh analytical measures. Barnewold and Lottermoser (2020) conducted an analysis of extensive textual data derived from insight reports provided by thirteen international consulting firms. They created a digitization measure exclusively for the mining sector as part of their research to track technological developments. They found that the most widely used technologies in the mining industry were automation, robots, the internet of things, big data and artificial intelligence. The authors contend that data on digital adoption should include information on using technology to build new services, make it easier for customers to access digital financial services and retain competitiveness in addition to typical statistics on hardware and software expenses. Text mining methodology has been considered to be the most appropriate method for retrieving this information because of the wide range of concepts and various data involved (Fan, Wallace, Rich, & Zhang, 2006).

2.2. Financial Technology and Bank Profitability

The adoption of FinTech technologies by banks has led to the automation of tedious processes, faster transactions and the provision of personalized services ultimately enhancing operational efficiency and profitability (Al Zobi & Jarah, 2023). FinTech has also opened up new sources of income for banks, such as commissions from online payment services or partnerships with FinTech firms (Wang, Xiuping, & Zhang, 2021). However, the accelerated growth of FinTech has also increased competition in the banking sector, forcing conventional banks to adjust and invest in technology to remain competitive. Bank profitability may suffer and financial losses may occur if FinTech adoption is not prioritized. As a result, there is a significant relationship between financial technology and bank profitability with progressive institutions using technical breakthroughs to increase profitability in the

digital era (Dong et al., 2020). According to the transaction cost hypothesis, maximizing profit requires efforts to minimize transaction costs (Jarah, Al Jarrah, Al-Zaqeba, & Al-Jarrah, 2022). Businesses need to implement an optimal organizational structure that reduces these costs. For example, they can pursue forward integration or acquire talented individuals (Medyawati et al., 2021). Global connectedness has been made possible by the introduction of the internet and other new technologies allowing companies to connect with reasonably priced suppliers from all over the world. As a result, considerable forward integration is not required. The strategic use of information technology (IT) is essential for boosting profitability because an organization's size cannot always be raised or lowered (Chhaidar et al., 2023). Information technology can reduce agency costs within a company (Gellweiler & Krishnamurthi, 2020). According to the agency theory, a company can be seen as a network of contractual relationships between individuals (Le & Ngo, 2020). Agency costs arise from these contractual agreements such as those with employees, suppliers and customers. Recent technologies such as keystroke logging, internet monitoring and other staff monitoring tools have emerged to aid in cost-saving measures and supervision within agencies. In addition, IT makes it possible for companies to gather and analyze data at a reduced cost which lowers management costs and makes coordination jobs easier especially for complex organizations (Kanapiyanova et al., 2023).

Numerous investigations of how financial technology affects profitability have been done. Hernando and Nieto (2007) focused on the consequences of using the internet channel while looking at 72 commercial banks in Spain between 1994 and 2002. According to their empirical findings, the use of the internet channel by banks increases their return on assets (ROA) and return on equity (ROE). Campanella, Della Peruta, and Del Giudice (2017) examined the profitability of 3,692 banks in 28 European nations in 2013 focusing on the effects of three forms of information technology: retail internet, home banking and corporate internet .They found a strong correlation between the profitability of European banks and all sorts of IT investment. Tunay, Tunay, and Akhisar (2015) investigated the relationship between internet banking and bank financial performance in 30 European countries between 2005 and 2013 using the ROE and ROA standards. Their study revealed a clear relationship between the efficiency and profitability of online banking. According to Cho and Chen (2021) FinTech is viewed as a way to improve banking efficiency in China. According to Kou, Olgu Akdeniz, Dinçer, and Yüksel (2021) FinTech increases the competitiveness of European banks which enhances their financial performance. Dadoukis, Fiaschetti, and Fusi (2021) conducted a study to examine the impact of information technology deployment on bank performance during the COVID-19 pandemic. The research concluded that banks' stability and soundness were improved by using IT during this crisis.

2.3. Previous Studies

The literature on financial technology (FinTech) and its implications for profitability has provided a critical foundation for understanding the evolving landscape of modern banking. This section provides a thorough analysis of the literature that has addressed various FinTech dimensions as the industry undergoes a rapid transformation driven by technological advancements. Chhaidar et al. (2023) examined the relationship between the size of banks, digital transformation (digitization), FinTech investments and financial performance. They found that FinTech has a significant and positive effect on bank profitability indicating that as banks increase their level of digital involvement, their profitability improves. Moreover, the findings indicated that the profitability of digital investments is influenced by the size of the bank which acts as a moderating factor. However, larger banks tend to derive greater benefits from financial technology investments in terms of enhancing their performance. In addition, Medyawati et al. (2021) explored the effect of financial technology on financial performance from 2014 to 2020 by assessing financial technology based on the number of ATM transactions, internet banking transactions and mobile banking transactions. They used Return on Assets (ROA), a metric used to measure bank profitability. With ROA as the dependent variable and ATM transactions, internet banking and mobile banking as the independent

variables, panel data regression analysis was used. Six banks were selected as examples after a careful screening procedure. The results showed that the fixed effect model was the most pertinent model for elucidating the link between financial technology and bank profitability. In this model, ROA is impacted by online and mobile banking but not by ATM transactions. Moreover, Nawafleh (2015) examined the impact of information technology on bank profitability. The study's findings demonstrated that a major factor in the challenges associated with introducing electronic banking is demographic factors. The research also found that the capital of commercial banks significantly influences their expansion. According to Yang's (2023) research, the main goals were to compare the profitability of banks in urban regions with those in the farm sector and to look at the total profitability of commercial banks in both urban and rural areas. The study used panel data analysis to experimentally examine the effects of financial technology using accepted theories and techniques. The results showed that financial technology has the potential to increase profitability for small and medium-sized commercial banks despite the variations between urban and rural banking institutions.

Examining the relationship between financial inclusion and bank profitability in Egypt was the aim of Elkmash (2023). Bank profitability was determined by dividing total loans, ATMs and commercial banks by the number of people in a 1,000. The study used a quantitative approach and took into account several factors that influence economic growth and bank profitability. The Central Bank of Egypt (CBE), the World Development Indicators (WDI) and the yearly reports of the International Monetary Fund (IMF) were among the sources from which the study's data was meticulously collected. The Egyptian banking industry served as the study's sample and it was conducted between 2014 and 2019. The results demonstrated that the number of loan accounts and ATMs had a positive impact on bank profitability in Egypt with Return on Equity (ROE) and Return on Assets (ROA) profitability indicators being statistically significant. On the other hand, the number of branches had a detrimental effect on bank profitability. According to Le and Ngo's (2020) research, the system generalized technique of moments was used to assess the variables affecting bank profitability across 23 countries from 2002 to 2016. The importance of growing these distribution channels was highlighted by the study's finding that increasing the number of issued bank cards, ATMs and point-of-sale (POS) devices may positively affect a bank's profitability. Additionally, the results suggested that market power had a detrimental impact on bank profitability and that competition increased bank profitability. It was discovered that the growth of the capital market and bank profitability work well together as shown by their correlating positive relationship.

3. METHODOLOGY

The aim of this study is to identify the influence of financial technology on profitability in Jordanian commercial banks. This study is unique from other previous studies in that it deals with financial technology (financing, money transfers and lending) and its impact on profitability in Jordanian commercial banks. The convenience sample was surveyed using a descriptive cross-sectional approach and the perception of the impact of financial technology on Jordanian banks' profitability was investigated. The study community and sampling unit have provided explanations regarding the questionnaire that the researchers created and distributed to the bank employees. The questionnaire was based on a five-point Likert scale with 1 being the strongest agreement and 5 being the strongest disagreement. The sample size was determined based on Krejcie and Morgan's (1970) table which provides guidelines for determining the minimum sample size required for categorical variables. The table was designed using a mathematical formula developed by Krejcie and Morgan (1970).

$$n = \frac{z^2 \times \hat{p}(1-\hat{p})}{\varepsilon^2}$$

$$n = \frac{1.96^2 \times 0.5(1-0.5)}{0.05^2} = 384.16$$

Where

Z is the z score.

E is the margin of error.

N is the population size.

p̂ is the population proportion.

Furthermore, this research takes place within Jordanian commercial banks where a survey was conducted to gather data. The collected data was analyzed using Statistical Package for Social Sciences (SPSS) version 24. Various statistical methods and tests were employed to describe the variables and test the study hypotheses to ensure a clear interpretation of the results and explain the findings. These include assessing the reliability of the study instrument using Cronbach's alpha to ensure its consistency, conducting descriptive analysis (such as frequency and percentages) on the study sample and performing simple linear regression analysis to examine the relationship between a continuous dependent variable and a single independent variable. The sample size was determined with a standard error equal to .05 Depending on this formula the sample size will be equal to 381 employees according to the total number of employees in the selected setting and the return value will be equal 783 participants. The researcher's target sample size was not less than 381 participants. Therefore, the tool was sent to employees and students through social media sites like Facebook, Twitter and Email in all Jordanian banks.

The following research framework and hypotheses have been formulated to achieve the aim of this study: The selected design is appropriate to measure this perception of employees according to Figure 1.

3.1. Research Model

A study model was developed to investigate the main components of financial technology (FinTech) and the profitability of Jordanian commercial banks based on a review of previous literature. Figure 1 indicates that there are three basic factors: financing, money transfers and lending. The model below has been tested and is considered a new model to suit the requirements of Jordanian commercial banks.

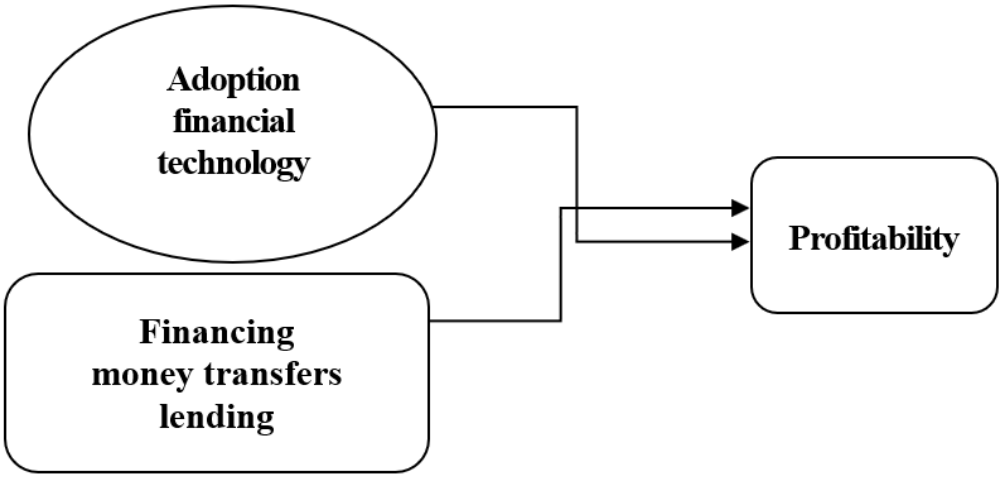

Figure 1. Research model.

The following hypotheses were derived from the previous model.

H_1: There is no statistically significant effect of financing on profitability.

H_2: There is no statistically significant effect of money transfers on profitability.

H_3: There is no statistically significant effect of lending concern on profitability.

3.2. Reliability and Validity

Cronbach's alpha coefficient was relied on to measure the internal consistency between the study variables and their dimensions by measuring the items. Table 1 shows that all values were greater than 70% meaning that the

questionnaire items had internal consistency (Sekaran & Bougie, 2016). The table shows that the coefficient values of the variables were greater than 70%. This suggests internal consistency between variables. A value of 83.6% indicates the validity of the survey and is greater than 70%. This confirms the internal consistency between all variables.

Table 1. Cronbach's alpha values.

Variables	Stability coefficient
Profitability	0.784
Financing	0.767
Money transfers	0.742
Lending	0.700
Overall scale	0.836

3.3. Demographical Data of the Study

Table 2 shows the frequency and percentage of the categorical demographic variable for simple size.

Table 2. Profile of respondents.

Variable	Classification	N	%
Gender	Male	250	31.93
	Female	533	68.07
Age	Less than 25	670	85.57
	26 – 35	80	10.22
	More than 36	33	4.22
Education level	Secondary	63	8.05
	Bachelor	130	16.6
	Postgraduate studies	500	63.86
	Other	90	8.94
Years of experience	Less than 5 years	87	11.49
	6 – 10 years	615	78.54
	More than 10 years	81	10.35

The preceding table presents the calculated percentages and frequencies for the sample. The results indicate that in the gender variable, the highest category which is female has a frequency of 533 accounting for 68.07% of the sample. Conversely, the lowest category is male has a frequency of 250 representing 31.93% of the sample. When it comes to the age variable, the largest category less than 25 accounts for 85.57% of the sample with a frequency of 670."More than 36" is the lowest group with a frequency of 33 making up 4.22% of the sample. As for the education level variable, the highest category, "postgraduate studies," has a frequency of 500 accounting for 63.86% of the sample. On the other hand, the lowest category, "secondary" has a frequency of 63 representing 8.05% of the sample. Lastly, in the years of experience variable, the highest category, "6 - 10 years," has a frequency of 615 making up 78.54% of the sample, while the lowest category, "more than 10 years," has a frequency of 81constituting 10.35% of the sample.

4. RESULTS

4.1. Descriptive Analysis

Table 3 shows the descriptive analysis data for variables. Table 3 shows a high estimate of the variables. The highest arithmetic mean (money transfers) was a high estimate of (3.6365) and standard deviation (0.645) followed by (financing) with a mean amounted to (3.4392) and standard deviation (0.7511) followed by (lending) with an arithmetic mean of (3.2171) and standard deviation (0.7191) and finally (profitability) amounted to (3.6066) and standard deviation (0.6509).

Table 3. Mean and standard deviations of the variables.

Variables	Mean	Standard deviation
Total financing	3.439	0.751
Total money transfers	3.637	0.646
Total lending	3.217	0.719
Total profitability	3.607	0.651

4.2. Hypothesis Testing

According to Table 4, the correlation coefficient between the variable "financing" and the dependent variable profitability is 0.465. The coefficient of determination (R^2) is 0.217 indicating that the model explains 21.7% of the total variance in profitability while the remaining variance is attributed to other factors. Additionally, the sig values in Table 4 are 0.00 indicating that the null hypothesis for the dimension of financing is rejected suggesting a statistically significant effect on profitability. The beta value in the table is also 0.465.

Table 4. Simple linear regression for the relationship between financing and profitability.

Element	B	Std. error	Beta	T	Sig.
(Constant)	2.220	0.097	0.784	22.970	<0.001
Financing	0.403	0.027	0.465	14.692	<0.001
$R^2 = 0.217$					

The correlation coefficient between the independent variable profitability " and the dependent variable money transfer is 0.200 as shown in Table 5. The model may explain 12.5% of the variation in profitability with a coefficient of determination (R2) of 0.125. Other factors will need to explain the remaining variance. Furthermore, Table 5 shows sig values of 0.00 showing the rejection of the null hypothesis for the dimension of money transfers and a statistically significant impact on profitability. The table's beta value is 0.200.

Table 5. Simple linear regression for the relationship between money transfers and profitability.

Element	B	Std. error	Beta	T	Sig.
(Constant)	2.875	0.131	0.457	22.025	<0.001
Money transfers	0.201	0.035	0.200	5.695	<0.001
$R^2 = 0.125$					

Based on Table 6, the correlation coefficient between the independent variable “profitability” and the dependent variable "lending" is 0.205.The model's coefficient of determination (R2) is 0.21 which means that it can explain 21.4% of the variation in "profitability," with additional variables having to explain the remaining variance. Furthermore, Table 6 displays sig values of 0.00 indicating the presence of a statistically significant influence on "profitability" and the rejection of the null hypothesis for the dimension of "lending." The beta value of the table is 0. 205.

Table 6. Simple linear regression for the relationship between lending and profitability.

Element	B	Std. error	Beta	T	Sig.
(Constant)	3.011	0.105	0.436	28.811	<0.001
Lending	0.185	0.032	0.205	5.839	<0.001
$R^2 = 0.214$					

The findings reveal a statistically significant relationship between profitability and the components of financial technology adoption namely financing, money transfers, and lending. The correlation coefficient (R) between profitability and the adoption of financial technology is 0.512 indicating a significant perception. The coefficient of determination (R^2) is 0.262 suggesting that adoption of financial technology explains 26.2% of the variability in

profitability. Additionally, the F-value is 92.405 with a confidence level (Sig) of 0.001, signifying strong statistical significance. However, Table 7 illustrates the results of a multiple linear regression analysis and key coefficients and statistics for the relationship between the adoption of financial technology and profitability.

Table 7. Multiple linear regressions for the relationship between adoption of financial technology and profitability.

Variable	B	Error	T	Sig. T*
Financing	-0.293	0.042	-6.937	<0.001
Money transfers	0.585	0.040	14.720	<0.001
Lending	0.073	0.035	2.124	0.034
$R = 0.512$				
$R^2 = 0.262$				
$F = 92.405$				
Sig. F*= 0.001				

Note: * at a significance level of <0.001.

The financing, money transfer and lending aspects were found to have a statistically significant effect on profitability at a significance level of 0.05 or below ($\alpha \geq 0.05$) in the preceding table. The corresponding beta values (B) were -0.293, 0.585, and 0.073 respectively. The associated t-values were -6.937, 14.720 and 2.124. Moreover, the statistical significance levels for these variables were 0.001, 0.001 and 0.034, all of which are below 0.05 indicating their significant influence on profitability.

5. DISCUSSION AND CONCLUSION

The banking industry has experienced significant transformations in its operations and strategies due to the consequential presence of the FinTech industry. Recent economic events such as financial crises have significantly affected the financial and banking sectors prompting banks to reassess their financial performance in response to various developments and threats. Banks have implemented financial technology solutions to attain financial inclusion and adjust to the evolving market (Jarah et al., 2022). These innovations and advancements have revolutionized the financial services industry leading to continuous development and innovation. The core functions of the banking system such as credit provision and wealth management have been influenced by these technological advancements. Furthermore, this study focused on analyzing the primary FinTech solutions used by banks to enhance their profitability and position as well as examining the genuine impact of such technologies on banks' financial standing and performance. The study discusses the following hypotheses:

H_1: The study challenges the notion that financing does not have a statistically significant impact on profitability. The findings demonstrate a statistically meaningful relationship between financing and profitability. It is widely acknowledged that financial factors significantly influence company outcomes. Various crucial factors such as a firm's financial health have a substantial impact on its profitability (Murniati, Mus, Semmaila, & Nur, 2019). Effective financial management techniques, including budgeting, cost control and cash flow management are crucial to ensuring profitability (Syafrizal, Ilham, & Muchtar, 2023). Effective budgeting facilitates resource allocation, cost control and the identification of potential cost-saving opportunities. Meanwhile, effective cash flow management ensures a company's ability to meet financial obligations and avoid cash flow issues that could harm profitability. These findings align with Murniati et al. (2019) but differ from the Purbaningsih and Fatimah (2014) study. Additionally, Afkar's (2017) study found that mudarabah financing had no significant impact on profitability whereas ward financing did.

H_2: The study challenges the notion that money transfer does not have a statistically significant effect on profitability. The research findings indicate a statistically significant impact of money transfer on profitability. The processes involved in money transfers can directly or indirectly influence a company's profitability. Factors such as cost, convenience, reliability, security, accessibility and the global capabilities of remittances all affect profitability

(Otiso, Simiyu, & Odhiambo, 2013). Addressing these aspects enables companies to enhance profitability, streamline operations and provide customers with a satisfactory money transfer experience. This finding is consistent with studies conducted by Otiso et al. (2013) and Otilah, Nyagol, and Koech (2019).

H_3: The study challenges the notion that lending does not have a statistically significant effect on profitability. The research findings indicate a statistically significant impact of lending on profitability. Issues related to lending, such as obtaining loans from banks or private lenders can significantly influence a company's profitability (Philip & Prasad, 2023). Considerations such as borrowing costs, the amount and terms of borrowed funds, effective utilization of funds, associated risks and the long-term financial health of the company are critical (Marsh & Sharma, 2021). Companies can improve their borrowing practices, maintain strong profit margins and enhance overall profitability by effectively managing these factors. This finding is consistent with studies conducted by Marsh and Sharma (2021).

6. IMPLICATIONS

The role of financial technology in improving profitability in Jordanian commercial banks was underlined in this study. This study also contributed to the growth of a new model that connects financial technology and profitability through financing, money transfers and lending and it added many topics related to financial technology in raising profitability in Jordanian commercial banks.

7. LIMITATIONS AND FUTURE RESEARCH

The study's goals have been effectively fulfilled but it is still an appropriate decision to take into account other aspects that might provide additional information on the ways in which financial technology boosts bank profits. Similarly, incorporating larger sample sizes in subsequent studies will improve the reliability and validity of the findings. The current research focuses on three areas of financial technology (financing, money transfers and lending). The current study suggests that banks should make full use of financial technology in order to access a variety of funding sources through cutting-edge financial accounting technology services and products like equity and accounts receivable finance. As mentioned earlier, the most recent study was consistent with certain previous findings but contradicted others. This work offers numerous noteworthy advances but it has significant flaws. Therefore, admitting these limitations enhances the validity of the current study's conclusions. The current study focused on just 381 workers in order to maintain a fair viewpoint on the diagnostic and interactive usage of the model in Jordanian banks. Therefore, the results may be more accurate if there are more bank replies. Future studies can build upon the established parameters of this research and introduce new variables to gain a more profound comprehension of the impact of financial technology on the financial performance of banks. Future research might build on the parameters of the current study and add new factors to further analyze the effect of financial technology on the enhancement of banks' profitability. This study demonstrates that the adoption of FinTech solutions by banks has a significant impact on their financial performance and position.

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Authors' Contributions: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

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