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Financial Technology in the Banking Industry-Challenges and Opportunities Empirical Study

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Abstract
This study is aimed to discuss how financial technology (Fintech) influences financial inclusion along with pricing and cost reduction of banking services. It then examines how financial inclusion mediates this Fintech reduced banking cost relationship. Using an inductive approach, the study has reviewed and analysed prior research on financial inclusion, Fintech and banking cost efficiency to develop a solid theoretical framework. Here the analysis is both inductively derived through the empirical analysis data, as well as deductively created through the application of accredited theories and general principles that lead to specific conclusions or validate hypotheses. These findings show that Fintech increases financial inclusion by facilitating easier access to finances for different social groups, as well as increasing transparency, reducing information asymmetry and providing for security and privacy. Moreover, Fintech also diminishes the banking cost in Saudi banks by creating cheaper and more efficient financial transactions in addition to assisting faster and safer trade finance operations. Fintech also fosters financial inclusion minimizing costs further by excluding intermediaries, cutting the infrastructure cost and directly utilizing the digital wallet for transactions without any extra charges levied.

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1. Introduction

Financial inclusion seems to be a key driver of financial inclusion in developing countries where individuals can access financial services in new ways using financial technology (Fintech). The Fintech ideally enhances e-commerce and e-learning, and it has 'globalized' those important services of the financial ecosystem by making sure they are included within the economy either in the developing or the developed economy. The significance of this expansion becomes clear especially where traditional financial services have not yet fully taken off. The proliferation of innovations in mobile phones and smart devices have pushed this transformation in a big way and opened new channels for the interaction of finance. Hamdi (2020) [5] states that Fintech has become a cornerstone for the financial and banking services industry using a blend of emerging technologies and financial infrastructure to integrate services of financial institutions, which are also aligned with the demands of users.

Due to this technological change, most banks have adopted digital transformation which allows them to use digital payment and money transfer method examples such as mobile payment, ATMs, smart cards, and internet banking, which are safe and effective. These technologies have made simple things like money transfers and electronic bill payments fundamentally simpler and simpler, and they have achieved that in a way that reduces costs and serves their customers in an efficient and efficient (the technical) way. These advancements also have boosted financial inclusion by providing more available, more affordable and more often financial services to individuals and businesses, including those in low-income communities.

Banks have grown from the age-old traditional banking operations to contemporary and modern ones favouring the growing and diverse needs of their customers.

Fintech is an unparalleled opportunity to drive financial inclusion and tackle financial illiteracy, especially among low-income populations. Fintech fill the gaps in financial literacy, connecting marginalized groups to formal financial system sectors and crucial for overall inclusive growth of the economy. According to Zawaid (2021), optimal use of Fintech can be instrumental to align financial inclusion with the desires of several communities resulting in the development of the financial sector as well as overall economic development. Through this integration, it becomes possible to turn financial education, arising as a complement to monetary resources, not an embellishment, but instead a necessity to the advancement of society.

Financial institutions have made banking services increasingly important in contributing to normal day to day life. Improving the convenience and efficiency also help services such as ATMs, bill payments and person to person payments. The services have also sparked increased interest for restaurants in banking products and how those products are priced, as banks compete for customers and strive to keep their industry competitive in a quickly changing technological setting. However, these services have underutilised potential in many developing societies where there is still not enough translation of the benefits and accessibility of these services among the public. This article also adds to earlier studies by Hamdi (2020) [5] and Zawaid (2021) that, in addition to Fintech and banking innovations, efforts to raise awareness and educate individuals, especially in underserved areas, are essential in fully harnessing the integration potential of financial and digital banking services. The topic of financial inclusion has recently topped the attention of researchers, politicians and international organizations, as one of the most important trends that support the achievement of sustainable development goals, and focuses attention on the development of international, regional and local programs and initiatives aimed at achieving financial inclusion and integrating all sectors of society into the formal financial system, with special attention to studying the dimensions, objectives and advantages of financial inclusion, and how to benefit from technological developments and digital solutions as pillars for the application of financial inclusion, and financial inclusion is one of the most important measures Financial development and economic development where financial systems based on financial inclusion are more beneficial to the poor and disadvantaged groups, by encouraging investment in productive activities, while financial systems that provide services to certain groups in society cause individuals to resort to relying on informal finance. (Anzi 2020: 241) [15], and this study comes to show the impact of financial inclusion as an intermediate variable on the relationship between financial technology and reducing the cost of banking services.

Methodology

Problem of the study

Financial inclusion is considered a basic principle of economic growth and in integration of individuals and institutions in the informal economy within the structure of the formal economic system of a state. Interlinked, the integrated development services of financial institutions become more competitive thus enhancing the standard of living. By targeting vulnerable strata such as the poor, women, youth, financial inclusion ensures broader economic participation and benefits (Hosni, 2018:25). Financial inclusion is very much closely related to Fintech, and it appears almost impossible to achieve financial inclusion without the support of Fintech. Likewise, economies that continue to have a relatively large slum of society and the economic sector valued out of the financial realm find themselves on an ever-shorter lease to financial stability. This being the case, central banks have actualized the need to put policies and strategies that boost financial inclusion as their priority.

Enhancing financial inclusion improves access to financial services for a wider range of individuals and enterprises and operates on two key dimensions (Zawayed, 2021:15) [7]. The supply side first deals with widening the availability of innovative financial services and widening remittances. On the second side of demand, they respond to the financial service need by taking advantage of the newest technological advances in financial services, combined with national strategies for financial education. This approach contributes to bridging information gaps and to surmounting some challenges for small and micro enterprises, to integrate to the formal financial sector and access to important financial resources.

Considering this context, the study's central problem can be articulated as the following research question: What is the influence of the effect of financial inclusion as an intermediate variable on the effect of financial technology on the decline of the banking service cost in Saudi banks? To explore this primary question, the study further investigates:

- What do finance tech have to do with financial inclusion?
- How does financial technology reduce the cost of these banking services in Saudi banks?
- What difference does financial inclusion make to banking cost reduction in Saudi banks?

Importantly part of the reason is that it correlates strongly with national economic growth, as well as aligns (or nearly so) with broader sustainable development goals like those in Vision 2030. Governments and central banks have increasingly taken note on the promotion of financial inclusion programs and have provided legislative and regulatory frameworks for those efforts. Second, the research extends the current body of technical literature in accounting and finance by analysing the conjunction of financial inclusion and financial technology. Hamdy (2020) [4], Emad (2019) [10], Hussein (2020) [2], Zahra (2019), and Abdel Dayem (2019) [9] have supported the relevance of these areas as they suggested pursuing additional studies on how to apply financial technology and inclusion in Saudi Arabia and other contexts to decrease costs of banking service delivery.

Objectives of the study

Intellectual objectives

- Clarify what financial technology is, its characteristics, the challenges facing its application, and the areas that will be affected by it.
- The nature of financial inclusion and the role of financial technology in promoting it.
- The nature of banking services, and the role of financial

technology and financial inclusion in reducing them.

Applied objectives

- Demonstrate the role of financial technology applications in supporting the elements of financial inclusion.
- Demonstrate the impact of the use of financial technology applications on the pricing of banking services and thus on reducing the costs of these services.
- Statement of the impact of financial inclusion on reducing the costs of banking services.

Previous studies

Previous studies that dealt with the subject of the current study can be divided into two parts as follows:

A. Studies focused on financial inclusion

A study by Iqbal and Sami (2017) has been done to assess the effects of financial inclusion on economic growth in India. They then found that increase in gross national product (GNP) is positively correlated to the expansion of bank branches and that financial inclusion does positively impact economic growth. Zili (2018) also probed regarding use of digital technology in the financial inclusion and its effects on financial stability. The study stressed the possible benefits of digital technology while it warned of enhanced security vulnerabilities, which can jeopardize customer trust in financial inclusion programs. Zili (2018) also pointed out that there are many insufficient legislative and regulatory frameworks that lack the mechanism to allow digital technology to be widely adopted as a tool for financial inclusion.

Opportunities, risks, and challenges of financial inclusion in Ukraine have been explored by Zachosova *et al*., (2018). Various levels of risk at the individual, institutional and the state level were identified. The risks for banks included that they might face greater potential for fraud, a heightened level of competition, and pressure to improve service quality while lowering its costs. In another study, Shehata (2019) [8] suggested how the accounting model can measure and disclose innovations in financial technology as a key of financial inclusion. Results showed that fulfilling the requirements of financial inclusion had positively contributed to the banking performance in Kuwaiti banks through boosting profitability, liquidity and asset quality.

Investigating various factors affecting the disclosure of financial inclusion indicators and the impact of such indicators on the performance of Saudi banks is (Abdel Dayem 2019) [9]. The study further showed that bank characteristics, effectiveness in corporate governance and the disclosure of financial inclusion were positively related to one another. Besides, these disclosures improved performance of Kuwaiti banks. Financial inclusion, financial stability and the performance of banking sector: a theoretical and empirical analysis have been reviewed by Ahmed and Malick (2019). They studied 86 countries and found that higher levels of financial inclusion go hand in hand with greater bank stability, lower transaction costs, a greater deposit base, and better quality and safety of banking services.

Financial inclusion effects on financial efficiency and stability were assessed by Le *et al*. (2019) in Asian countries. They find that although financial inclusion broadening made the financial system better at withstanding macro shocks, it also had deleterious effects on financial efficiency. At the same time, Yalaman (2019) [19] examined the nexus between financial inclusion and tax revenues among 137 countries. The study found that financial inclusion is a key determinant of a country's fiscal capacity and one of the most significant factors of the country's tax revenue generation. Finally, Lee *et al*. (2020) [18] examined the influence of financial inclusion on corporate sales growth in 47 developing economies. Financial inclusion had a positive effect on the sales growth in the normal conditions, but only in the non-Asian countries (they found).

B. Studies focused on financial technology

A study conducted by Christian and Lars (2016) examined the determinants that encouraged the spread of financial technology in 64 countries, and the study found that the United States has the largest market for financial technology followed by the United Kingdom, Canada, India and Germany, and that countries are witnessing the increasing use of financial technology when the money markets are developed, and the study also classified the types of financial technology services in line with the financial value chain in traditional banks into financing activities, asset management, payments and other financial activities, and it was found Finance is the most active activity offered through financial technology followed by payments and asset management, due to the traditional financing gap faced by medium and small enterprises around the world and the financing restrictions imposed by strict banking regulations after the global financial crisis, as indicated by a study (Maja, 2018) that the use of financial technology in investment banking services includes asset management services and automated financial advisory services. Financial planning, and these services are provided with increased accessibility and transparency of banking business models, this type of financial services attracts digital citizens, especially in emerging financial markets, and the most obvious services are alternative payment methods as a basic financial service that enables customers to manage and receive payments quickly and at an affordable cost based solely on digital channels.

A study Chang and Kuan (2017) indicated that due to the development of financial technology, the traditional financial supply chain managed through banks has shifted to an online model, and consequently the characteristics of the financial supply chain have changed as it has become faster, and it is also carried out through platforms that operate with operational standards, financial services along the supply chain are integrated with each other to become more flexible and clear. Cost of credit Low through lower requirements for collateral as the technological financial supply chain takes advantage of the possibilities of analysing big data online, and addressing information asymmetry, as a study (Emily, 2017) showed that banks need to keep, analyse and process information about customers to address requirements of combating money laundering and illegal activities, with a huge number of customers, the processing of this information is not possible without the use of information technology, as the need for technology to compile and analyse increases. Information storage and the use of technology to collect, analyse and store information and thus the use of financial technology enables the efficient management of this large amount of information, and one example of financial

technology used in this area is the automated system of suspicious transaction control technology, which is used as a standard for detecting and reporting illicit transaction activities.

A study examined whether Fintech lending platforms can expand credit by penetrating areas deprived of traditional banking services, using data from 2014 to 2016 from one of the largest traditional platforms, using publicly available data, in terms of a database on loans (interest rates, loan creation date, maturity date).) and the characteristics of borrowers' risk (job, debt-to-income ratio, age, and asset ownership), data on traditional lending channels through banks were also collected, using monthly credit card data from large banks, characteristics of customers with a credit history, data on deposits, branches, and economic variables such as local unemployment, average income, and population density, and the study found that customer lending activities through financial technology penetrated areas deprived of banking services, especially areas that It has fewer bank branches and a few service branches and a large number of local borrowers, and Fintech has a high market share in regions where economic variables point to a challenging environment (Peterson, 2018).

Hypotheses of the study

- Some argue that Juan and Sergio (2018) [16] argue that Fintech applications can contribute to increasing the efficiency and effectiveness of banking services in a way similar to the way the Internet has changed the media industry, and it can allow people and banks to obtain better financial services without the necessity of financial intermediaries, the so called "Internet of Value", or as it is also known, "narrow banking.".
- A study (Shihadeh and Liu, 2019) [21] proved that financial inclusion increases the profitability of banks and reduces the risks to which they are exposed. In addition, financial inclusion supported by financial technology improves financial intermediation between savers and investors, as the expansion of the bank's customer base leads to an increase in the degree of optimism in the bank's balance sheet indicators regarding the orientation towards new investment activities, diversification and flexibility in the risk portfolio to face unexpected losses and thus a decrease in costs. Services provided.

Applied hypotheses

Main hypothesis: Financial inclusion as an intermediate variable does not provide statistically significant effect in relation between financial technology technologies and reduction of the cost of banking services. It does not have a significant impact of financial technology in diminishing the cost of banking service provided by Saudi banks. First, we find that there is no statistically significant impact of financial inclusion on the reduction of the cost of banking services in Saudi banks. Relationship between financial technology technologies and reducing the cost of banking services.

It is divided into a set of sub-hypotheses

- There is no statistically significant impact between financial technology and supporting and enhancing financial inclusion in Saudi banks.
- There is no significant impact between financial technology and reducing the cost of banking services in Saudi banks.
- There is no statistically significant impact between financial inclusion and reducing the cost of banking services in Saudi banks.

Methodology

In achieving the objectives of the study and testing its hypotheses, a contemporary approach was used combining the inductive and the deductive methodologies. Inductively, I studied and evaluated previous financial inclusion, financial technology and reduction of banking service costs related studies. The goal was to obtain the data required to build a theoretical framework showing the relationship between financial technology and reduced banking service costs where financial inclusion was a mediator variable. It helped understand previous findings, and indicated some potential contributions of the current study. Moreover, hypotheses were formulated through the inductive approach, and corresponding methodologies for testing such hypotheses were chosen.

Drawing conclusions to the study, the deductive approach did so based on established general principles and theories. This made it possible to derive specific insights and partial findings out of the results we got from the inductive process. The combination of approaches in a study of this kind allowed for a comprehensive analysis of relevant literature, supplemented by theoretical reasoning to answer the research questions in a concrete way.

Study Model

- The study model aims to determine the relationship that links the variables to each other, which was extracted from previous studies, and the basic variables are represented in financial technology as an independent variable, the costs of banking quality are the dependent variable, while financial inclusion is an intermediate variable for the relationship between financial technology and reducing the cost of banking services, financial technology is one of the most important elements of financial inclusion as it is one of the most important reasons for reducing the costs of banking services in Saudi banks.

To prove the previous relationship, you must make sure of

- The independent variable (Fintech) affects the dependent variable (reducing the cost of banking services)
- The independent variable (financial technology) affects the intermediate variable (financial inclusion).
- The intermediate variable (financial inclusion) affects the dependent variable (reducing the cost of banking services).

Second Theme: Financial Technology and Enhancing Financial Inclusion

The concept of financial technology

Fintech, short for financial technology, is a combination of the words 'financial' and 'technology' and refer to the technologies that undertaken to deliver or enhance financial services. This term has gained significant prominence in recent years and is widely recognized in contemporary discourse (Baumud *et al*., 2020: 335). The term Fintech can

be defined as a broad concept of modern digital services in the financial sector, including financial advisory, finance, investments, payments and financial planning. These services facilitate collaboration between customers and financial or banking institutions, enabling more efficient and seamless financial interactions (Alt *et al*., 2018: 235).

Financial technology refers to financial services that have become available thanks to digital technological advancement, with a vital impact on the services provided by traditional financial institutions, especially banks, and this impact comes through low costs and advanced financial services that suit the needs of customers, and financial technology also uses innovative information systems and automation technology in financial services, a modern digital technology that provides more cost-efficient financial services in parts of the financial sector extending from Lending to asset management, from portfolio advisory to alternative payment systems, big data analysis and transforming the way banking and brokerage are delivered. (Xavier V., 2019:6)

Fintech is also defined as "a variety of electronic financial services that are more affordable than traditional ones, and that contribute to serving low-income people and improve their economic situation (Haider, 2018, :2).

Fintech are those innovative services and products offered by technology such as mobile phone and the use of cryptocurrencies such as Bitcoin and Blockchain as an alternative to traditional currencies. (Chuen & Ernie G.S., 2015:7)

Financial technology means "the economic sector that includes most companies that use modern technologies in order to offer innovative services and solutions related to financial services similar to those provided by traditional financial institutions such as banks and insurance companies, such as electronic payment services (electronic wallets), money transfer, insurance, borrowing and financing (similar to crowdfunding),savings, in addition to investment and trading services (online trading platforms and applications). (ZhouAwaid and Hajjaj, 2018: 64)

The third axis: Financial inclusion (nature, importance, dimensions, challenges)

The nature of financial inclusion

Recently, following the recent financial crisis, financial inclusion has become a critical global policy priority. Formal recognition of financial inclusion as a cornerstone of global financial stability and consumer protection was formalised at the G20 Summit in Seoul, South Korea, in November 2010. Within the GPFI's framework that identified it as one of the nine pillars of the global development agenda, Ahmed and Malick (2019) discovered that it was. Since then, policymakers around the world have put access to essential financial services for marginalized and disadvantaged populations as a central focus. Financial inclusion is considered broadly accepted as a powerful means of reducing poverty and stimulating growth (Xu, 2019). Financial inclusion is achieved when all financial products and services and the use of these are available to all persons in a society. Furthermore, these financial products and services are tailored to respond specifically to the needs of all members of society, while being equally accessible and affordable while striving to maintain the highest possible quality and utility. Fourth Theme: Banking Services.

Banking Service Concept

The Banking is a service type activity, basically concerned with the acceptance of various types of deposits from customers and uses these deposits for the purpose of lending loans. By this core function, deposit acceptance is directly linked to the loan disbursement. Besides these fundamental operations, banks provide several other services to make them different from rivals and thereby obtain a competitive advantage in the financial market. (Abu Musa, 2020: 52).

The concept of banking service does not stray far from the concept of service in general, as service is defined as "work or facilities that lead to help complete business in return for a certain fee" (Al-Sumaidi and Youssef, 2011: 19).

The services offered by the bank in association with its associated activities and operations, tangible and intangible is called banking services. Beneficiaries recognize these services for their functional and utilitarian value, which satisfy their immediate and long term financial and credit needs. Simultaneously, these services serve as a source of profit for banks, facilitated through a reciprocal relationship between the bank and its customers (Al-Ajarma, 2015: 32).

It has also been defined as "a set of intangible activities and benefits offered by the bank for sale, including current accounts, term savings, transfers, loans of all kinds, and currency exchange" (Jabr, 2017: 80), when talking about services, intangible things are dealt with, and not necessarily accompanied by a physical transfer of the thing or its possession, but rather obtaining the benefit or benefit in an intangible way (Al-Dmour, 2019: 18), banking service can also be defined as activities provided by the bank with the aim of meeting the needs and desires of customers and achieving returns from providing those activities.

Fifth Theme: Field Study

First: Field Study Procedures

The study tool, the population and sample of the study, the statistical methods used, as well as the evaluation of the study tool, are as follows:

Study tool: Where researchers use the study tool to collect the information that was essential about the phenomenon that they were investigating. Different tools are being used in scientific research to get the required data, according to the type and goals of the study that are being researched. The questionnaire was selected as the primary tool of data collection because of the relevance and its current nature to the study's subject matter. The ability to capture this information from the study sample made this choice necessary.

Population and sample: Due to the extreme modernity of technology, its application in Saudi Arabia was limited to (National Bank of Saudi Arabia - Banque Misr - CIB Bank - Arab African Bank) and a group of small nascent companies, in addition to academic interest, so we only tried to communicate with those parties to find out their experiences in that field, in order to answer inquiries The survey, which the researchers relied on as the main means of data collection

- Which was imposed by the nature and novelty of the subject
- Was designed to cover the hypotheses of the study.

Sample: The vocabulary of the research sample was selected from the study population as follows.

Table 1: Study Sample

Statement	Distributed lists	Lists received	Non-received lists	Lists that are not valid for analysis	Valid lists for analysis
Number	120	90	30	20	70
Rate %	100	75	25	22.2	77.3

Statistical method used

The method of frequencies and percentages were used to analyse personal and basic data with the Statistical Package for Social Sciences (SPSS). Each axis was then assessed for directional trend of statements within each axis and whether the axis was valid or invalid and the degree of similarity between a statement and the hypothesis, through the application of descriptive statistics, such as arithmetic mean. Further, simple linear regression was used to quantify how the independent variable affected the dependent variable, and to gain more insight on how they related to each other.

Stability test

The stability of a test is the capacity of the given test to produce stable results under similar conditions. Stability means that if a group of people is tested, their results recorded and the test repeated with the same group, the results are the same. This accuracy and reliability arises from the measurements taken. Validity, which can be referred to as truthfulness, is the extent to which the test really measures what it intends to measure out. There are many ways to calculate the validity but the simplest is the square root of the stability coefficient. The stability and validity numbers range between 0 and 1, with stability and validity the higher the better. The Cronbach's alpha coefficient was used to assess the reliability of all features of questionnaire in use. Results of this reliability analysis are summarized in the following table, showing the consistency and accuracy of the measurement instrument.

Table 2: Stability (Cronbach alpha coefficient) and honesty for the study sample

Axes	The first	Second	Third	Fourth
constancy	0.884	0.851	0.825	0.883
Honesty	0.940	0.906	0.908	0.939

The stability (Cronbach alpha coefficient) for the statements of the first axis amounted to 0.884, i.e. 88%, and for the statements of the second axis, it amounted to 0.851, i.e. 85%, while the stability for the statements of the third axis amounted to 0.825, i.e. 82%, while the stability for the statements of the fourth axis amounted to 0.883, i.e. 88%, and this means that the scale gives the same results if used more than once under similar conditions.

The truthfulness of the phrases of the first axis 0.940, i.e. 94%, and the statements of the second axis 0.906, i.e. 90%, and the truthfulness of the statements of the third axis 0.908, i.e. 90%, while the truthfulness of the phrases of the fourth axis 0.939, i.e. 93%, and this means the validity of the questionnaire for measurement.

Second: Analysis of personal data: The personal data of the sample members includes:

1. Lifetime

Table 3: Shows the frequency distribution of the sample members according to age

Lifetime	30 years and under	31-40 years	41 – 50 years	51 years and above	Total
Iteration	16	17	15	32	70
Rate %	22.9	24.3	21.4	31.4	100

It is clear that most of the sample members are from the age group (51 years and over), where their number reached 22, i.e. 31.4%, followed by the age group (31-40 years), where their number reached 17, i.e., 24.3%, while the age group (30 years and less) reached 16, i.e. 22.9%, while the age group (41-50 years) reached 15, i.e. 21.4% of the total sample members.

2. Education

Table 4: Shows the frequency distribution of the sample members according to the academic qualification

Education	Bachelor	diploma	Master's degree	Doctorate	Other	Total
Iteration	32	13	19	5	1	70
Rate %	45.7	18.6	27.1	7.1	1.4	100

Most of the sample members were bachelor's holders, where their number reached 32 by 45.7%, followed by master's holders, where their number reached 19 by 27.1%, while the holders of higher diploma reached 13 by 18.6%, while the doctorate holders reached 5 by 7.1, while those who have other professional qualifications amounted to 1 by 1.4 of the total sample members.

3. Scientific Specialization

Table 5: Shows the frequency distribution of the sample members according to scientific specialization

Total	Other	Telecommunications Engineering	Computer Science	Business Administration	Administrative costs	Accounting & Auditing	Specialization
70	4	11	9	23	5	18	Iteration
100	5.7	15.7	12.9	32.9	7.1	76.8	Rate *%*

It is clear that most of the respondents whose scientific specialization is business administration, where their number reached 23 by 32.9%, followed by the specialization of accounting, where their number reached 18, by 76.8%, followed by the specialization, followed by the specialization of communications engineering, where their number reached 11 by 15.7%, while the specialization of computer science reached 9 by 12.9%, while the specialization of costs and management accounting amounted to 5 by 7.1%, and the other disciplines amounted to 4 by 5.7% of the total sample members.

4. Job Title

Table 6: Shows the frequency distribution of the sample members according to the job title

Function	Faculty Member	accountant	Auditor	Technology Specialist	Total
Iteration	10	12	29	19	70
Rate *%*	14.3	17.1	41.4	27.1	100

Most of the respondents occupy the position of auditor numbered 29 by 41.4%, while those who have the position of technology specialist reached 19 by 27.1%, while those who occupy the position of accountant reached 12 by 17.1%, followed by those whose job is a faculty member where their number reached 10 by 14.3% of the total sample members.

5. Years of Experience

Table 7: Shows the frequency distribution of the sample members according to years of experience.

Years of Experience	5 Years & Under	6-10 years	11-15 years	16-20 years	21 years and above	Total
Iteration	24	14	20	5	7	70
Rate *%*	34.3	20	28.6	7.1	10	100

It is clear from the above table that most of the sample members have experience (less than 5 years), where their number reached 24 and amounted to 34.3%, followed by those whose years of experience (11-15 years), where their number was 20 by 28.6, while those whose years of experience (6-10 years) reached 14 by 20%, while those whose years of experience (21 years and more) reached 7 by 10%, while those whose years of experience (16-20 years) amounted to 5 by 7.1% of the total sample members.

Third: Basic Data Testing

Frequency distribution and percentage of interlocutor statements: The first axis: The impact of financial technology in supporting and promoting financial inclusion.

Table 8: Frequency Distribution and Percentage of First Axis Phrases

Statement	I strongly agree		I agree		neutral		Disagree.		Strongly disagree	
	Iteration	Ratio	Iteration	Ratio	Iteration	Ratio	Iteration	Ratio	Iteration	Ratio
Banks adopt financial technology to enhance the growth of financial markets and promote financial inclusion. It achieves this by removing barriers to reaching various market segments and also providing ways to learn more about customers.	56	80	10	14.3	3	4.3	1	1.4	0	0
Therefore, Fintech has been instrumental in expansion of access to financial services and products allowing the entire segments of the society, particularly underserve and marginalized, to use these financial resources as efficiently and inclusive as possible.	44	62.9	18	25.7	6	8.6	2	2.9	0	0
Fintech should be part of national strategies for financial inclusion, financial and digital literacy, while encouraging knowledge sharing among public and private sector actors, civil society, and other stakeholders.	38	54.3	25	35.7	4	5.7	3	4.3	0	0
Financial technology contributes to documenting all preventive measures with a digital fingerprint that is difficult to imitate or penetrate.	28	40	26	37.1	9	12.9	6	8.6	0	0
Financial technology adoption promotes financial inclusion, expands and deepens the financial markets and enhances cross border payments and remittances	24	34.3	27	38.6	8	11.4	11	15.7	1	1.4

processes.										
Fintech helps protect the basic rights of citizens by not allowing transactions to be reversed after they are completed.	28	40	18	25.7	8	11.4	16	22.9	0	0
Fintech helps facilitate individuals 'access to financial services in terms of geographical area and proximity to service delivery venues	27	38.6	23	32.9	8	11.4	12	17.1	0	0
Fintech helps all individuals, households and businesses access financial services	30	42.9	22	31.4	7	10	11	15.7	0	0
Fintech makes it easier for people to get the financing they need the way they need it, easy for an account to be opened, and offers a host of critical financial services for users' convenience and convenience.	34	48.6	20	28.6	7	10	8	11.4	1	1.4
Total	309	49.6	189	30.4	52	8.3	70	11.4	2	0.3

It is clear from the previous table the following

- The total answers about the role and importance of Blockchain technology in supporting financial inclusion indicate that the percentage of (strongly agree and agree) represents 80%, the percentage of (neutral) 8.3%, and the percentage of (disagree and strongly disagree) 7. 11% of the sample size of the study.
- The most agreed element of the study sample is that blockchain technology helps to encrypt all data, which improves data security, improves decentralization and cancels third-party intermediaries, which reduces the time and cost of completing transactions (agree and strongly agree) 94.3%, and the second element Blockchain technology helps to remove asymmetry in information between all parties and achieve transparency, security and enhance privacy, as the percentage of (strongly agree and agree) is 90%.

The second theme: The impact of financial technology on the cost of banking services in Saudi banks

Table 9: Frequency Distribution and Percentage of Second Axis Phrases

Statement	I strongly agree		I agree		neutral		Disagree.		Strongly disagree	
	Iteration	Ratio	Iteration	Ratio	Iteration	Ratio	Iteration	Ratio	Iteration	Ratio
Save and confirm customer data and reduce the cost of the (Know Your Customer) system	58	82.9	11	15.7	1	1.4	0	0	0	0
Facing competition in light of transfers By facing competition from crypto currency companies that use electronic payment services, the low cost of transfers makes banks gain a competitive advantage and not resort to informal methods of making transfers.	46	65.7	17	24.3	6	8.6	1	1.4	0	0
Complete transfers in remote areas the requirement of novel digital infrastructure	38	54.3	25	35.7	6	8.6	1	1.4	0	0
Complete payments and transfers quickly	28	40	30	42.9	10	14.3	2	2.9	0	0
Used in trade finance, financial technology will contribute tofaster and safer ways to transport goods across borders and provide real-time transfer services.	24	34.3	35	50	7	10	2	2.9	2	2.9
Reduce time and indirect costs for the financing institutions and its clientele	24	34.3	34	48.6	8	11.4	3	4.3	1	1.4
Achieving transparency and security and reducing fraud and cybercrime	27	38.6	25	35.7	13	18.6	4	5.7	1	1.4
Secure, transparent, and cost-effective financial transactions	28	40	26	37.1	10	14.3	6	8.6	0	0
Enhancing and upgrading banking services by helping banks conduct financial operations faster and more accurately, contributing to increasing administrative efficiency, providing and exchanging data	30	42.9	21	30	14	20	3	4.3	2	2.9
Total	275	45.8	224	37.2	75	12.4	22	3.6	6	1.00

It is clear from the previous table the following

- The total answers on the impact of the use of Blockchain technology on accounting practices indicate that the percentage of (strongly agree and agree) represents 83%, the percentage of (neutral) 12.4%, and the percentage of (disagree and strongly disagree) 6. 4% of the study sample size.
- The most agreed upon element of the study sample is to save and confirm customer data and reduce the cost of the (Know Your Customer) system, as the percentage of (agree and strongly agree) is 98.6%, and the second element is to face competition in light of transfers by facing competition from cryptocurrency companies that use electronic payment services, the low cost of transfers makes banks gain a competitive advantage and not resort to informal methods to make transfers, as the percentage of (strongly agree and agree) is 90%.

Third Theme: The Impact of Financial Inclusion on the Cost of Banking Services in Saudi Banks

Table 10: Frequency Distribution and Percentage of Third Axis Phrases

Statement	I strongly agree		I agree		Neutral		Disagree.		Strongly disagree	
	Iteration	Ratio	Iteration	Ratio	Iteration	Ratio	Iteration	Ratio	Iteration	Ratio
Digital wallets are preferred by most transfer companies, since they save transfer costs because intermediaries are no longer involved. These are wallets that allow one to make these direct transaction without the extra fees.	52	74.3	13	18.6	5	7.1	0	0	0	0
Reducing the cost of foreign trade financing operations for import, import and money transfer operations.	44	62.9	17	24.3	8	11.4	1	1.4	0	0
Reducing infrastructure costs resulting from making financial transfers in remote areas without the need to establish new infrastructure with no need to apply know-your-customer systems, and then cost.	36	51.4	24	34.3	7	10	3	4.3	0	0
Reduce costs for banks and enhance the efficiency of banking infrastructure by eliminating the need for a data matching process.	33	47.1	25	35.7	8	11.4	4	5.7	0	0
Meet the needs of international trade for import and export operations very quickly and facilitate electronic payment operations for international trade related to import and export operations.	30	42.9	28	40	9	12.9	3	4.3	0	0
Saving the cost of transfers related to import and export operations. Facing competition from cryptocurrency companies that use electronic payment services.	27	38.6	28	40	13	18.6	0	0	2	2.9
Accelerating import and export operations resulting from the provision of real-time payments and the speed of transfers through this technology.	29	41.4	27	38.6	10	14.3	2	2.9	2	2.9
The low cost of transfers makes banks gain a competitive advantage and the customer does not resort to informal methods.	22	31.4	31	44.3	12	17.1	2	2.9	3	4.3
Work without intermediaries, which reduces the operational expenses resulting from the use of papers, and eliminate financial corruption by making data visible and the absence of an intermediary to complete transactions.	33	47.1	23	32.9	10	14.3	1	1.4	3	4.3
Total	306	48.6	216	34.2	82	13.1	16	2.5	10	1.6

As per the table above, it can mentioned that

- The total answers about the impact of using blockchain technology on the accounting and auditing profession indicate that the percentage of (strongly agree and agree) represents 82.8%, the percentage of (neutral) 13.1%, and the percentage of (disagree and strongly disagree) 1. 4% of the study sample size.
- The most agreed element of the sample is to reduce the cost of financial transfers resulting from the lack of an intermediary, by preparing digital wallets and dealing with them to transfer funds without additional fees, as the percentage (agree and strongly agree) is 92.9%.

Descriptive statistics (arithmetic mean and standard deviation) for the statements of the axes

Table 11: Descriptive statistics of the phrases of the first axis

Phrases	Arithmetic mean	Standard deviation	Coefficient of variation
The Bank's adoption of financial technology aims to encourage financial inclusion and the development of financial markets by overcoming challenges related to access to market segments and customer information.	4.7	0.61	12.98
Fintech helps enhance access to financial services and products for all segments of society	4.4	0.77	17.5
Fintech should be part of national strategies for financial inclusion financial and digital literacy, while encouraging knowledge sharing among public and private sector actors, civil society and other stakeholders.	4.4	0.78	17.73
Financial technology contributes to documenting all preventive measures with a digital fingerprint that is difficult to imitate or penetrate.	4	1	25
The adoption of financial technology already contributes to a number of benefits such as increasing financial inclusion and inclusion, deepening financial markets, and improving cross-border payment and remittance systems.	3.9	1	25.6
Fintech helps protect the basic rights of citizens by not allowing transactions to be reversed after they are completed.	3.8	1.1	28.9
Fintech helps facilitate individuals' access to financial services in terms of geographical area and proximity to service delivery venues	3.9	1	25.6
Fintech helps all individuals ,households and businesses access financial services	4	1	25
Fintech helps ease access for all individuals to financing appropriate to their needs, ease of opening an account and other services that individuals need	4.1	1	24.4
Total	4.1	1.1	26.8

It is clear from the previous table the following

- The general arithmetic meaning categorically indicates (strongly agree), meaning that the opinions of the study sample on the role and importance of Blockchain technology in supporting financial inclusion, strongly agreed with the role of Blockchain technology in supporting financial inclusion.
- The general difference coefficient (26.8) indicates a decrease in the percentage of dispersion in the opinions of the respondents (there is a great homogeneity in opinions) about the role and importance of blockchain technology in supporting financial inclusion and digital transformation.
- By analysing the coefficient of variation for each element, it is noted that the element (Blockchain technology helps to encrypt all data, which improves data security, improves decentralization and cancels third-party intermediaries, which reduces the time and cost of completing transactions) indicates the lowest dispersion rate of 12.98% among the sample, meaning that the opinions are homogeneous by 87.02%, and the next element is an element (Blockchain technology helps To enhance the access of all segments of society to financial services and products (refers to the lowest percentage of dispersion and difference of 17.5% among the sample, meaning that the opinions are homogeneous by 82.5%, and in the last place comes (Blockchain technology helps to protect the basic rights of citizens, by not allowing reversal in transactions after their completion) a percentage of dispersion and difference of 28.9% among the sample, meaning that the opinions are homogeneous by 71.1%.

The second theme: The impact of financial technology on the cost of banking services in Saudi banks

Table 12: Descriptive statistics of the phrases of the second axis

Phrases	Arithmetic mean	Standard deviation	Coefficient of variation
Save and confirm customer data and reduce the cost of the (Know Your Customer) system	4.8	0.42	8.75
Facing competition in light of transfers By facing competition from cryptocurrency companies that use electronic payment services, the low cost of transfers makes banks gain a competitive advantage and not resort to informal methods of making transfers.	4.5	0.71	15.75
Complete transfers in remote areas the requirement of novel digital infrastructure	4.4	0.71	16.1
Complete payments and transfers quickly	4.2	0.79	18.8
Used in trade finance as financial technology will contribute to faster and safer ways to transport goods across borders and provide real-time transfer services.	4.1	0.90	21.9
R Reduce time and indirect costs for the financing institutions and its clientele	4.1	0.87	21.2
Achieving transparency and security and reducing fraud and cybercrime	4	0.97	24.25
Secure, transparent, and cost-effective financial transactions	4	0.94	23.5
Enhancing and upgrading banking services by helping banks conduct financial operations faster and more accurately, contributing to increasing administrative efficiency, providing and exchanging data	4	1	25
Total	4.2	0.82	19.5

- The general coefficient of difference (19.5) indicates a decrease in the percentage of dispersion in the opinions of the respondents (there is a great homogeneity of opinions) about the impact of financial technology on the quality of banking services in Saudi banks.
- Through the analysis of the coefficient of variation for each element, it is noted that the element of saving and confirming customer data and reducing the cost of the (Know Your Customer) system indicates the lowest dispersion and difference of 8.75% among the sample, meaning that the opinions are homogeneous by 91.25%, and the next element is to face competition in light of transfers by facing competition from cryptocurrency companies that use electronic payment services, the low cost of transfers makes banks gain a competitive advantage and not resort to informal methods to make transfers It indicates the lowest percentage of dispersion and difference of 15.75% among the sample, meaning that the opinions are homogeneous by 84.25%, and in the last place comes the promotion and upgrading of banking services by helping banks to conduct financial operations faster and more accurately and contribute to increasing administrative efficiency and providing and exchanging data with a dispersion rate and a difference of 25% between the sample, meaning that the opinions are homogeneous by 75%.

Third Theme: The Impact of Financial Inclusion on the Cost of Banking Services in Saudi Banks

Table 13: Descriptive Statistics of the Third Axis Phrases

Phrases	Arithmetic mean	Standard deviation	Coefficient of variation
Reduce the cost of money transfers resulting from the lack of an intermediary, by setting up and dealing with digital wallets to transfer funds without additional fees	4.6	0.60	13.1
Reducing the cost of foreign trade financing operations for import, import and money transfer operations.	4.4	0.75	17.1
Reducing infrastructure costs resulting from making financial transfers in remote areas without the need to establish new infrastructure with no need to apply know-your-customer systems, and then save their cost.	4.3	0.82	19
Reduce costs for banks and enhance the efficiency of banking infrastructure by eliminating the need for a data matching process.	4.2	0.87	20.7
Meet the needs of international trade for import and export operations very quickly and facilitate electronic payment operations for international trade related to import and export operations.	4.2	0.83	19.8
Saving the cost of transfers related to import and export operations. Facing competition from cryptocurrency companies that use electronic payment services.	4.1	0.91	22.2
Accelerating import and export operations resulting from the provision of real-time payments and the speed of transfers through this technology.	4.1	0.96	23.4
The low cost of transfers makes banks gain a competitive advantage and the customer does not resort to informal methods.	3.9	0.99	25.4
Work without intermediaries ,which reduces the operational expenses of using papers, and eliminate financial corruption by making data visible and the lack of an intermediary to complete transactions.	4.1	1	24.4
Total	4.2	0.86	20.5

It is clear from the previous table the following

- The general arithmetic mean categorically indicates (strongly agree), meaning that the opinions of the study sample on the impact of financial technology on the cost of banking services in Saudi banks tend strongly to agree that there is a clear impact of financial technology on the cost of banking services in Saudi banks.

The general coefficient of difference (20.5) indicates a decrease in the percentage of dispersion in the opinions of the respondents (there is a great homogeneity of opinions) about the impact of financial technology on the cost of banking services in Saudi banks.

Table 14: Statistical Analysis of Financial Technology and Financial Inclusion

Axis phrases	Arithmetic mean	Standard deviation	Coefficient of variation
First: The impact of financial technology in supporting and promoting financial inclusion.	4.1	1.1	26.8
Second: The impact of financial technology on the cost of banking services in Saudi banks	4.2	0.82	19.5
Third: The impact of financial inclusion on the cost of banking services in Saudi banks	4.2	0.86	20.5
Total	4.61	0.93	20.1

Through the analysis of the coefficient of variation for each element, it indicates the lowest percentage of dispersion and difference of 13.1% among the sample, meaning that the opinions are homogeneous by 86.9%, and the next element is to reduce the cost of foreign trade financing operations for import, import and money transfer operations, which indicates the lowest percentage of dispersion and difference of 17.1% among the sample That is, the opinions are homogeneous by 82.9%, and in the last place comes the low cost of transfers makes banks gain a competitive advantage and the customer does not resort to informal methods a percentage of dispersion and difference of 25.4% among the sample, meaning that the opinions are homogeneous by 74.6%.

The fourth axis: The impact of financial inclusion as an intermediate variable on the relationship between financial technology and reducing the cost of banking services.

The general coefficient of difference (20.1) indicates a decrease in the percentage of dispersion in the opinions of the respondents (there is a great homogeneity in opinions) on the impact of financial inclusion as an intermediate variable on the relationship between financial technology and reducing the cost of banking services in Saudi banks.

- Through the analysis of the coefficient of variation for each element, it is noted that the phrases of the second axis The impact of financial technology on the cost of banking services in Saudi banks indicates the lowest percentage of dispersion and difference of 19.5% among the sample, meaning that the opinions are homogeneous by 80.5%, and the next element is the statements of the third axis The impact of financial inclusion on the cost of banking services in Saudi banks indicates the lowest percentage of dispersion and difference of 20.5% among the sample, meaning that the opinions are homogeneous by 79.5%, and in the last place The phrases of the first axis come from the impact of financial technology in supporting and enhancing financial inclusion, a percentage of dispersion and difference of 25.4% among the sample, meaning that the opinions are homogeneous by 74.6%.

Third: Testing of Hypothesis

Using the simple and multiple linear regression method to test hypotheses to find out the hypothesis of the significance of the differences in the answers of the study sample on the statements of each hypothesis, and the extent of the impact of the independent variables on the dependent variable.

Table 15: Relationship between Variables

Independent variables X1)	Intermediate variable (Z 1)	Dependent variable (Y 1)
Fintech	Financial Inclusion	Reduce the cost of banking services

To prove the previous relationship, you must make sure of: -

- The independent variable (financial technology) affects the dependent variable (reducing the cost of banking services)
- The independent variable (financial technology) affects the intermediate variable (financial inclusion).
- The intermediate variable (financial inclusion) affects the dependent variable (reducing the cost of banking services).
- The independent variable (financial technology) affects the dependent variable (reducing the cost of banking services) with the presence of the intermediate variable (financial inclusion).

The first sub-hypothesis: There is no statistically significant moral effect between financial technology and supporting and enhancing financial inclusion in Saudi banks.

Table 16: Simple linear regression model for the first hypothesis

Prototype	Correlation coefficient	Coefficient of determination	Adjusted coefficient of determination
1	0.224	0.050	0.036

It is clear from the above table that the value of the correlation coefficient reached 0.224, which means that there is a weak direct correlation between the intermediate variable (financial inclusion support) and the independent variable financial technology, and we also find that the value of the coefficient of determination is 0.050, which means 5% of the changes that occur in the intermediate variable (financial inclusion support) have the effect and the independent variable financial technology, while 95% is due to other factors not included in the model.

Table 17: Analysis of variance for the first hypothesis

Source of variation	Sum of squares	Degrees of freedom	Average squares	(F)	Morale level
Regression	1.185	1	1.185	3.601	0.062
Errors	22.381	68	0.329		
Total	23.566	69			

It is clear from the above table that the level of morality is 0.062, which is greater than (5%), and this leads us to reject the imposition of nothingness, accept the alternative hypothesis and the lack of significance of the regression model, which means that there are no significant differences between the independent variable financial technology and the intermediate variable (supporting financial inclusion).

Table 18: Regression coefficients for the first hypothesis

Regression variables	Value of transactions	Value (T)	Morale level
B 0	3.535	8.573	0.000
B 1	0.185	1.898	0.062

It is clear from the above table that the value of the fixed limit of the model reached (3.535), which is the value of the intermediate variable (financial inclusion support) estimated when the values of the independent variable is 0, and we find that the tendency of the independent variable financial technology is equal to 0.185 and this means increasing the independent variable Financial technology leads to an increase in the intermediate variable (financial inclusion support) by 0.185 and we note that the level of morality is less than 0.05. H1 accepts the alternative hypothesis that "there is a statistically significant moral impact between financial technology and supporting and enhancing financial inclusion in Saudi banks."

The second sub-hypothesis: There is no statistically significant effect between financial technology and reducing the cost of banking services in Saudi banks.

Table 19: Simple linear regression model for the second hypothesis

Prototype	Correlation coefficient	Coefficient of determination	Adjusted coefficient of determination
2	0.411	0.169	0.157

Value of the correlation coefficient amounted to 0.411, and this means that there is a weak direct correlation between the dependent variable (reducing the cost of banking services in Saudi banks) and the independent variable financial technology, and we also find that the value of the coefficient of determination is 0.169, which means 16% of the changes that occur in the dependent variable (reducing the cost of banking services in Saudi banks), the effect of the independent variable is financial technology, while 84% is due to other factors not included in the model.

It is clear from the above table that the level of morale is 0.000, which is greater than (5%) and this leads us to reject the imposition of nothingness and accept the alternative hypothesis and the lack of significance of the regression model, which means that there are no significant differences between the independent variable financial technology and the dependent variable (reducing the cost of banking services in Saudi banks).

Table 20: Analysis of variance for the second hypothesis

Source of variation	Sum of squares	Degrees of freedom	Average squares	(F)	Morale level
Regression	3.978	1	3.978	13.809	0.000
Errors	19.589	68	0.228		
Total	23.566	69			

Table 21: Regression coefficients for the second hypothesis

Regression variables	Value of transactions	Value (T)	Morale level
B 0	2.399	4.639	0.000
B 1	0.447	3.716	0.000

It is clear from the above table that the value of the fixed limit of the model amounted to (2.399), which is the value of the dependent variable (reducing the cost of banking services in Saudi banks) estimated when the values of the independent variable touch to zero, and we find that the tendency of the independent variable financial technology is 0.447 and this means increasing the independent variable financial technology, leading to an increase in the dependent variable (reducing the cost of banking services in Saudi banks) at a rate of 0.447 and it is noted that the level of morality is less than 0.05.

Accordingly, he rejects the non-existent assumption that "there is no statistically significant moral effect between financial technology and reducing the cost of banking services in Saudi banks."

He accepts the alternative hypothesis that "there is a statistically significant moral impact between financial technology and reducing the cost of banking services in Saudi banks."

The third sub-hypothesis: There is no statistically significant effect between financial inclusion and reducing the cost of banking services in Saudi banks.

Table 22: Simple linear regression model for the third hypothesis

Prototype	Correlation coefficient	Coefficient of determination	Adjusted coefficient of determination
1	0.338	0.114	0.101

Correlation coefficient amounted to 0.338, and this means that there is a weak relationship between the intermediate variable (financial inclusion) and the dependent variable (reducing the cost of banking services in commercial banks), and we also find that the value of the coefficient of determination is 114, and this means 11% of the changes that occur in the dependent variable (reducing the cost of banking services in commercial banks) The effect of the intermediate variable (financial inclusion), while %89 is due to other factors not included in the model.

Table 23: Analysis of variance for the third hypothesis

Source of variation	Sum of squares	Degrees of freedom	Average squares	(F)	Morale level
Regression	2.690	1	2.690	8.763	0.004
Errors	20.876	68	0.307		
Total	23.566	69			

Table 24: Regression coefficients for the third hypothesis

Regression variables	Value of transactions	Value (T)	Morale level
B 0	2.818	5.557	0.000
B 1	0.350	2.960	0.004

The results show that the fixed limit value of our model is 2.818 which is the estimated value of the dependent variable. In addition, the coefficient of financial inclusion is 0.350, which keeps meaningful that an increase in financial inclusion will melt with an increase in the reduction of banking service costs at a rate of 0.350. Null hypothesis is rejected and alternative hypothesis is accepted, when the significance level is below.

The main hypothesis that expects no significant impact of financial inclusion as an intervening variable on the relationship between financial technology and reduction of banking service cost is also rejected. Instead, these findings suggest that financial inclusion mediates this relationship, strongly.

The results of the study

Through the theoretical framework and analysis of the field study data, the following results were reached:

Financial technology contributes to supporting and enhancing financial inclusion mechanisms through:

1. This data is encrypted and thus makes data securities, decentralization and freedom from intermediaries and at the same time reduces the cost and time of undertaking the transaction.
2. The application of adequate formulated laws, statutes and regulatory guidelines designed to improve access to financial services and products for all societal segments by eliminating information asymmetries, achieving transparency, the adherence to security and privacy suffices to reduce they develop between financial service providers and targeted beneficiaries.
3. It helps in bringing financial services to easy reach for individuals, anywhere, anytime, making there easier access to the service, irrespective of their place.
4. It simplifies access to financing (and other essential financial services) to meet specific needs and enhances the process of opening accounts.

The use of financial technology affects the reduction of the cost of banking in Saudi banks through

- Save and confirm customer data and reduce the cost of the (Know Your Customer) system.
- Used in trade finance, financial technology will contribute to faster and safer ways to transport goods across borders and provide real-time transfer services.
- Facing competition considering remittances by facing competition from cryptocurrency companies that use electronic payment services, the low cost of transfers makes banks gain a competitive advantage and not resort to informal methods of making transfers.
- Enhancing and upgrading banking services by helping banks conduct financial operations faster and more accurately, contributing to increasing administrative

efficiency, providing, and exchanging data.
- Reduce operational risks, improve efficiency for banks and contribute to achieving greater transparency for the bank and privacy for the customer.

Financial inclusion has an impact on of banking costs in Saudi banks through
- Reducing the cost of remittances resulting from the lack of an intermediary, by preparing and dealing with digital wallets to transfer funds without additional fees.
- Reducing infrastructure costs resulting from making money without the prerequisite to apply know-your-customer systems, and then save their cost.
- Reduce costs for banks and enhance the efficiency of banking infrastructure by eliminating the need for data matching, reducing the cost of foreign trade financing operations for import, import and money transfer operations.
- Meet the needs of international trade for import and export operations very quickly and facilitate electronic payments for international trade related to import and export operations.
- Saving the cost of transfers related to import and export operations. Facing competition from cryptocurrency companies that use electronic payment services.
- Work without intermediaries, which reduces the operational expenses of using papers, and eliminate financial corruption by making data visible and the lack of an intermediary to complete transactions.
- The low cost of transfers makes banks gain a competitive advantage and the customer does not resort to informal methods.

Recommendations
1. The need for banks to develop a strategy through which to improve their contribution to financial inclusion, by working to optimize the financial resources available to them and expand the delivery of modern financial services, taking advantage of the margin of confidence they have with the public.
2. Issuing a detailed report - like the World Bank report - quarterly on the financial inclusion procedures applied in Saudi banks, and the results of the application on the performance of the applied banks, provided that this report is issued by the Central Bank.
3. The need for strong financial stability, through coordination between fiscal and monetary policies, achieving financial integrity and transparency in banking transactions and combating money laundering.
4. Spreading the culture of financial inclusion among small and micro enterprises so that they can integrate into the formal economy. There must also be a clear direction, within the framework of clear support from the banking sector, to stimulate and finance small enterprises as the backbone of the national economy.
5. Considering the application of the financial inclusion initiative at the level of all sectors and that there should be a unified definition of financial inclusion at the level of these sectors, because different concepts hinder the effective application of financial inclusion goals.
6. Opening small branches of banks in the capitals of centres, countryside, remote areas and cities far from provincial capitals, while reducing procedures and documents to grant loans to small manufacturers and farmers, and paying attention to financing industry, agriculture and exporters to achieve sustainable development.

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