

## **Examining The Influence of Fintech Adoption on Customer Behavior from The Perspective of Service Providers in Jordanian Bank: An Empirical Study**

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**Abstract.** This quantitative study investigated how specific fintech adoption factors influence customer behavior in Jordanian banks from the perspective of service providers. A questionnaire was administered to 100 bank employees assessing the impact of convenience/accessibility, personalization, efficiency, security, and cost-effectiveness on customer behavior. Statistical analysis found that all five factors positively influenced customer behavior, with convenience exhibiting the strongest effect. The results provide novel empirical evidence that fintech adoption components like seamless access and personalization drive greater customer engagement, satisfaction, and digital transaction activity within Jordan's banking sector based on service provider insights. This research contributes much-needed context on fintech adoption dynamics in banks within emerging economies in the Middle East. The findings will assist banks in enhancing fintech strategies and digital financial services that align with local customer preferences. Further studies can build on the analysis of service provider viewpoints to enrich understanding of customer behaviors in digital finance across cultural setting

**Keywords:** Financial Technology Fintech, Technology Acceptance Model TAM, Convenience and Accessibility, Personalization and Customization, Speed and Efficiency, Enhanced Security and Trust, Cost-Effectiveness

## 1. Introduction

Technological development in the banking and financial services sector has brought about wide changes to consumer behavior and trends. It became possible to access remote banking services through smart phones and the Internet, which increased accessibility and facilitated banking operations (Ntwiga, 2020). According to Lien et al. (2020), the emergence of electronic and mobile banking services has also changed the expectations and behavior of consumers, who have come to expect a seamless and integrated banking experience through mobile applications. As for Legowo et al. (2021). As a result, consumers have become more dependent on digital channels compared to branches, and have increased their use of online and telephone banking services. Technological development has also contributed to enhancing transparency and consumer control over their financial affairs (Zveryakov et al. 2019; Alkhazaleh and Haddad, 2021).

Mulyana et al. (2020) aimed to identify customer behavior towards the use of financial technology by looking at UTAUT. The quantitative approach was used among (132) customers in Indonesia, and the study concluded that performance expectancy had a positive effect on the intention to use, and that social factors and ease of use did not affect consumer behavior. The study confirmed that the **expected benefit and ease of use perceived** by the customer determines their intention to adopt financial technology services.

Dixit et al. (2022) aimed to analyze the extent of financial technology acceptance based on the Technology Acceptance Model (TAM). Through the survey, the response of (150) individuals in India was analyzed. The study concluded that the perceived benefit and perceived ease of use had a positive impact on the attitudes of individuals towards the use of financial technology.

Aggarwal et al. (2023) aimed to investigate the factors that would influence the adoption of FinTech services for Generation Y in India based on the TAM model. By distributing a questionnaire to a sample of (380) respondents from Generation Y, the study reported that the perceived usefulness and perceived ease of use had a positive impact on the intention to adopt financial technology services. In addition, the study found that perceived risk negatively affected adoption intent. In general, as for the study, it was demonstrated that Gen Y consumers viewed financial technology services based on their **functionality and ease of use**.

Rani (2021) aimed to identify the factors of customer satisfaction and the intention to use financial technology services in India. A questionnaire was distributed to a sample of 300 financial technology savvy customers. The study demonstrated that most of the respondents were satisfied with financial technology services due to **ease of use and perceived benefit** compared to traditional banking services. The study also found that the majority of financial technology services were safe in the minds of younger customers, which affected their behavior towards these services.

Al Rubaii and Pria (2022) aimed to understand customer behavior towards the adoption of technological services in the Sultanate of Oman based on the TAM model. An online survey was conducted with a distribution of a questionnaire on a sample of 300 individuals in terms of consumer behavior towards financial technology services in terms of **perceived benefit, ease of use**, intention to use and actual use of fintech products. The study concluded that the perceived usefulness and ease of use had a positive impact on consumer behavior towards fintech and increased their intention to use it.

Gopal et al. (2023) aimed to identify the financial technology and the developments related to increasing the demand for it. Literature on recent trends in financial technology technologies and services as well as security threats faced by banks was reviewed. The study concluded that Fintech was the strongest in terms of payments, lending and wealth management based on technologies such as blockchain, AI and cloud computing. There are also many challenges, including **security challenges** such as data breaches, account seizures and **identity theft** due to the increase in digital financial transactions and complex regulations. The study also reported that consumer behavior towards fintech is coupled with **enhanced authentication, encryption, access control, and error detection** to secure

the integrated financial technology infrastructure and ensure customer trust.

Modi et al. (2023) aimed to evaluate fintech on consumer finance behavior based on current case studies on fintech adoption trends, applications, opportunities and challenges in consumer finance. The study concluded that digital lending services, payments and investments caused a lot of disturbances in the financial environment and affected consumer behavior. Consumer behavior was also affected by **safety and compliance with regulations, legislation and regulatory support**.

Fermansayeh et al. (2022) aimed to identify the most influential factors on the adoption of fintech in organizations and financial institutions, and this idea was studied by reviewing the previous literature on the subject. The study concluded that there are major factors that are considered when adopting fintech and directing its services to consumers, and the most frequent ones are (**perceived usefulness, ease of use, safety and trust**, awareness, social influence, and **personal characteristics**).

Raval (2023) argued in their study that cash is rapidly being replaced by digital and contactless modes facilitated by devices such as digital wallets and wearables that enable instant cashless transactions anywhere, anytime. These technologies also allow for **personalized authentication** and value-added services to be integrated into payment experiences. Cryptocurrencies and stable coins pose both opportunities and challenges for existing financial systems globally. Governments and central banks are working on modernizing national payment infrastructure through real-time systems and CBDCs. The ecosystem is transforming into collaborative platforms connecting fintechs, banks and other stakeholders for unified omnichannel services. Ultimately, data analytics and AI are anticipated to optimize cross-border transactions through ultra-personalized frictionless experiences according to the trends highlighted in the article.

Based on the previous studies that were reviewed, it was noticed that most of the studies focused on addressing, studying and examining consumer behavior and its relationship with fintech through the consumer themselves and away from service providers, observers and specialists in the field. In addition, the adoption of the technology acceptance model was fully coupled with consumers' opinion and their evaluation of the nature of technological financial services provided to them. In the current study, fintech and its impact on consumer behavior will be viewed from the perspective of service providers themselves who are specialists in banks and financial institutions. In other words, the impact on consumer behavior will be studied from their point of view as service providers and specialists in the field, in addition to being first class consumers and dealing in financial technology in managing their financial affairs. In addition to that, examining customer behavior towards fintech services from perspective of service providers has the ability to draw service providers' attention towards the missing points in the services, how to develop these services, and what are the expected gap that might take place in the process such services.

It is worth mentioning that the current study was launched from the theoretical basis of **Technology Acceptance Model (TAM)**. Burgess and Worthington (2021) indicated that TAM has a close relationship with technology acceptance, as it helps to understand how and why users adopt technological solutions in banking services. In addition, TAM suggested that perceived usefulness and perceived ease of use are among the major determinants of the direction of adoption of any new technology. Mugo et al. (2017) confirmed the same statement, adding that when applying TAM, it helps to assess the extent to which clients and consumers benefit from technological financial services, and the model provides insights about whether financial technology tools that bridge traditional service gaps are considered useful innovations by customers. Following figure presented TAM related to customer behavior.

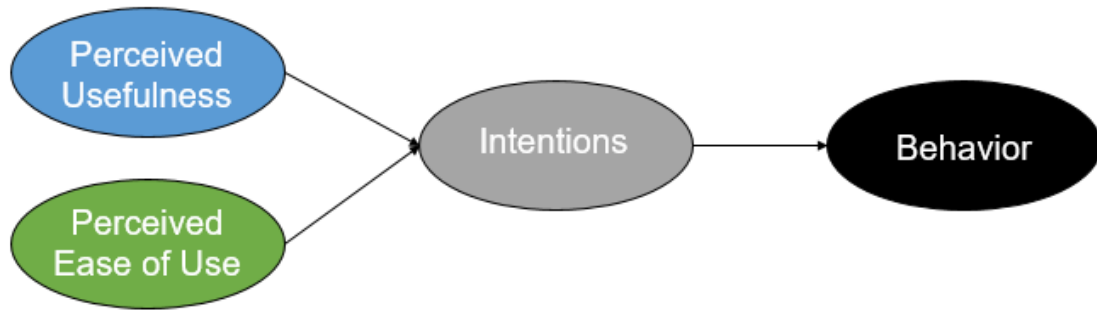


Fig.1: Technology Acceptance Model TAM (Burgess and Worthington, 2021)

Launching from what was mentioned earlier, and based on the presented related studies, this current research sought to examine the how fintech has the ability to influence customer behavior through mobile payment systems. Reaching the aim of research will be done through answering the following questions:

- A) *How can Fintech influence customers' behavior towards banks' services?*
- B) *How are mobile payments systems involved in the process of fintech services within banking environment?*

Highlighting the relationship between variables was formulated into the following model:

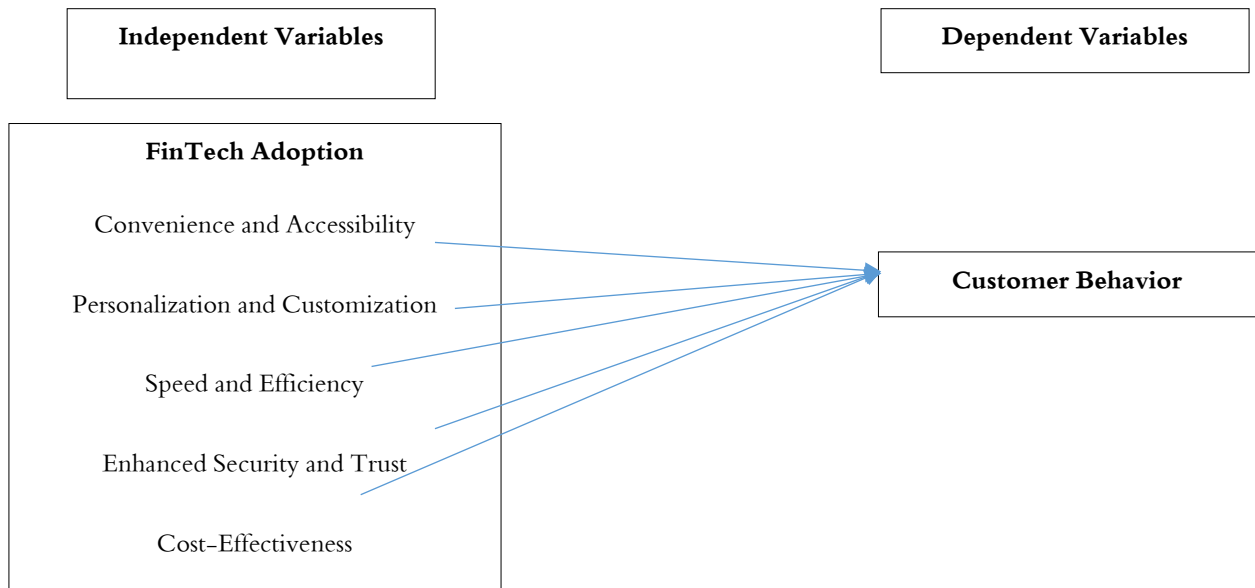


Fig.2: Study Model (Gopal et al., 2023; Bhagamma et al., 2023; Zalan and Toufaily, 2017; quresh et al., 2023; Rabbani, 2022)

From above model, researcher was able to extract the following set of hypotheses:

**H: Fintech adoption has a statistically positive influence on customer behavior within banking sector in Jordan**

**H1:** Convenience and Accessibility have a statistically positive influence on customer behavior within banking sector in Jordan

**H2:** personalization and customization have a statistically positive influence on customer behavior within banking sector in Jordan

**H3:** Speed and efficiency have a statistically positive influence on customer behavior within banking sector in Jordan

**H4:** Enhanced security and trust have a statistically positive influence on customer behavior within banking sector in Jordan

**H5:** cost effectiveness have a statistically positive influence on customer behavior within banking sector in Jordan

## 2. Literature Review

### Financial Technology (Fintech) and Mobile Payments

Fintech is an acronym for the words "**financial technology**", and refers to the use of modern technology in the financial and banking services sector to facilitate and develop the provision of these services (Bhagamma et al., 2023). Zalan and Toufaily (2017) argued that fintech includes many types of technology such as: (electronic payments via smart phones, online banking services and smart phones, investments and financial services provided through electronic platforms, financing small and medium businesses online, digital insurance services and blockchain technologies used in cryptocurrency trading. Quresh et al. (2023) argued that fintech aims to improve access to financial services and increase their efficiency by taking advantage of the capabilities of modern technology. It also enables financial institutions to develop new products and services. See image below.



Fig.3: FINTECH Services (Howat, 2020)

According to Daraghmeh et al. (2021) mobile payment systems are the total services that are dealt with and operated through mobile devices such as smart phones, tablets and laptops. These services allow users to deal with various financial services such as payment and money transfer through mobile devices without the need to be present in a branch of banking institutions or banks.

Rabbani (2022) confirms that fintech has contributed to the emergence of many financial services through mobile devices based on various applications, including Paytm, Google Pay, and PhonePe and many others. These applications provided consumers with the service of dealing with money without contact or dealing with the competent authorities. Alam et al. (2021) argues that the significant growth in the use of mobile devices for the purposes of financial transactions made mobile phones digital payment platforms, and led to the growth of remote payment systems, in addition to the advantages of convenience, ease, and accessibility.

At the level of organizations, financial organizations have noticed the rush of consumers towards financial transactions through mobile devices, which encouraged organizations to consider fintech services as a way to expand access to customers, increase the volume of financial transactions and reduce their costs, and promote digital commerce.

According to Bai et al. (2017) mobile payment systems rely on many modern technologies to facilitate electronic payment operations efficiently and easily. Where the Internet is connected with wireless communications technology such as 4G networks or Wi-Fi networks. Special applications such as Google Pay or Apple Pay are also installed on the smartphone to support payment operations.

Payment data such as credit card or bank account is recorded within these applications. Bluetooth or NFC wireless technology is also used to connect to payment devices. Then the transaction is confirmed and processed electronically and a notification of its result is sent to the user.

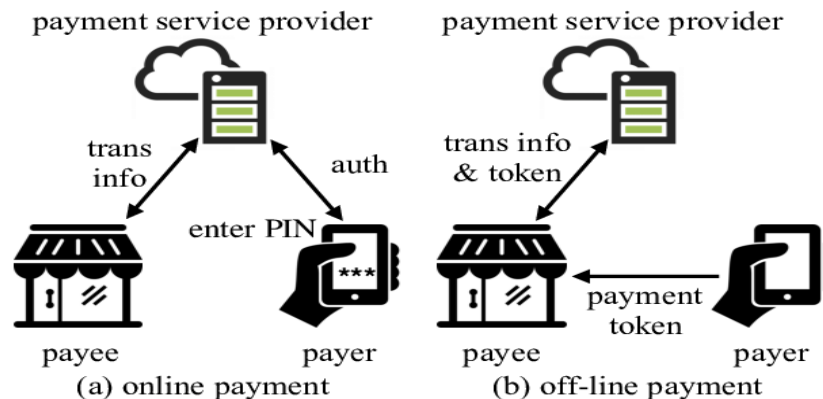


Fig.4: Mobile Payment Systems Integration (Bai et al., 2017)

### Customer Behavior

According to Lau et al. (2019) it is clear that the adoption of financial technology solutions by banks has had a significant impact on customer behavior. With the introduction of various features including mobile banking applications, digital payments, and AI-powered financial tools, customers have begun to expect seamless, easy, accessible, and personalized digital experiences from their banks. Yeh (2020) argued that it is natural for customers to seek all the time to access banking services on the go, which is based on making payments in one click. While Chakraborty et al (2022) noted that the adoption of fintech services in the banking sector has increased the willingness of customers to experience new types of financial technology products launched by banks.

Sun et al. (2020) stated that at the same time, customers have noticed that using fintech has increased the level of transparency and control of financial affairs in their hands. Phuong et al. (2020) argued that in order for banks to benefit from financial technology, there must be a thorough understanding of customer preferences and build strong trust. These include data privacy, security, and customer support, which influence positive customer behaviors such as greater engagement, higher transactions, and lifetime loyalty in a competitive financial technology ecosystem.

Many studies have shown that there is a positive attitude by individuals towards payment systems through mobile phones, as mentioned by Alwi et al. (2019), Laksamana et al (2023) and Almuhammadi (2020). As for Agarwal (2020), author linked individuals' acceptance of these systems to the idea that they provide convenience and shorten the time for individuals to complete their financial transactions, given that these operations are done with just a click without the need for actual cash or moving from one place to another to complete these operations.

On the other hand, Li et al. (2020) indicated that apart from convenience, ease of use has an effective role in accepting these technologies and building a positive attitude towards them. However, there is still a lot of fear regarding the method of payment through mobile phones, which is related to security and privacy. Flavián et al. (2020) emphasized that banks and financial organizations today start from the idea of enhancing security within electronic payment platforms with features such as biometrics and encryption in order to ensure that risk perceptions among individuals diminish.

As for Gupta and Arora (2020), it was found that usually younger individuals are more willing to deal with these platforms because they see it as a wonderful innovation that saves time and effort and provides a complete analysis of the expenses that they make. As for older consumers, they usually tend to accept these technologies very conservatively, and they start to think about safety, ease of use, and the impact of these platforms on an individual's lifestyle and spending habits.

### Fintech in Jordanian Banking Context

It became clear, through reviewing a group of previous studies related to the application of fintech services in the Jordanian banking environment, that there is a clear and undeniable application of many fintech services by Jordanian banks. It has also been proven that there is acceptance by individuals to use fintech as part of their financial practices, and a clear harmony between the financial services provided and the extent to which individuals are convinced of using them (Alkhazaleh and Haddad, 2021). Jordanian banks have adopted fintech in order to improve their internal operations and manage risks in a high way, in addition to improving customer experience and gaining their loyalty and satisfaction. On the other hand, previous studies related to the keywords (Jordan Fintech) found that Jordanian banks met with great success in offering fintech to individuals of different ages and cultural backgrounds.

One of the services most accepted by individuals in the Jordanian banking environment was banking applications through mobile devices, as mobile banking applications provided customers with easy and convenient access to their bank accounts via smart phones. Customers can view their balance, track transactions, make money transfers, pay bills, manage personal budget and other banking services easily and securely (Al-Dmour et al., 2020).

In addition, Jordanian banks have been able to provide other fintech services that have received wide public acceptance, such as digital wallets and electronic payment applications. On another level, Al Smadi et al. (2022) and Bashayreh and Wadi (2021) affirmed that the Kingdom of Jordan today is one of the Arab countries that relies on electronic banking services in managing its operational processes such as massive analytics, artificial intelligence, crowdfunding, and digital banks. Such e-services innovative and independent services based on technology Finance, as these banks allow customers to easily open digital bank accounts and manage their money online without the need to visit traditional bank branches (Al-Naimi and Yousef, 2021).

### 3. Methods and Materials

#### Methodological Approach

Getting numerical insights was seen to be the best option in order to achieve the main aim of current study. For that sake, quantitative methodology was adopted.

#### Tool of Study

Primary data was gained through utilizing questionnaire, the questionnaire was built by researcher through the aid of previous studies and was scaled according to liker 5-point scale ranging between 1 strongly disagree and 5 strongly agree. The questionnaire contained two main sections; the first took into perspective demographics of study sample (gender, age, qualification and experience). While the other section contained statements related to study’s sub-variables including (Convenience and Accessibility, Personalization and Customization, Speed and Efficiency, Enhanced Security and Trust, Cost-Effectiveness). Distributing the questionnaire was done online through Google Forms and it was uploaded online for total of (4) consecutive weeks for the purpose of data collection. In order to make sure that the questionnaire is valid, researcher presented the questionnaire on a group of specialized academics in the field for purposes of arbitration. Statements which they agreed on were left in the questionnaire, other statements were either modified or deleted. The questionnaire in its final version – after arbitration – consisted of (36) statements distributed on (6) variables as the following table:

Table 1. Distribution of Statements on Variables

Variable	# of Statements
<b>FinTech Adoption</b>	
Convenience and Accessibility	5
Personalization and Customization	5
Speed and Efficiency	5

Enhanced Security and Trust	5
Cost-Effectiveness	5
<b>Customer Behavior</b>	11

### Population and Sampling

Population of study consisted of all individuals within customer services department in banks in Jordan (commercial, Islamic, and foreign). A convenient sample of (100) individuals was chosen to represent the study’s population and respond to the online questionnaire. Distribution of the sample appeared as in 4 individuals from the 25 banks operating in Jordan. After application process, data were extracted from Google Forms website and it appeared that (100) responded to the questionnaire in a properly approach that suits statistical analysis. This indicated that the response rate was (100%) and it was statistically accepted.

### Tackling Primary Data

Dealing with primary data was done depending on statistical package for social sciences SPSS. Testing the reliability and consistency of study tool was done through Cronbach’s Alpha as according to table below. Other statistical tests included frequency and percentage, mean and standard deviation, multiple and linear regression, and multicollinearity test.

Table 2. Alpha Value

Convenience and Accessibility	0.734
Personalization and Customization	0.793
Speed and Efficiency	0.746
Enhanced Security and Trust	0.762
Cost-Effectiveness	0.773
Customer Behavior	0.91

## 4. Results and Discussion

### Demographic Results

Frequency and percentage were used to indicate the distribution of the sample demographics answering the questionnaire. As in the table below, it was seen that majority of the sample were males forming (82%) of the sample who were within age range of 31-41 years old forming (37%) of the total sample. In addition to that, it was seen that majority of respondents held BA degree forming (66%) and had an experience of 9-13 years forming (44%) of the sample.

Table 3. Demographic Results

	f	%
<b>Gender</b>		
Male	82	82.0
Female	18	18.0
<b>Age</b>		
Less than 30	28	28.0
31-41	37	37.0
+42	35	35.0
<b>Educational Level</b>		
BA	66	66.0
High studies	34	34.0
<b>Experience</b>		
Less than 3	13	13.0
4-8	33	33.0
9-13	44	44.0



+14	10	10.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

### Questionnaire Analysis

Mean and standard deviation were used in order to analyze responses to questionnaire statements. Following table indicated that all statements were positively received as they all scored higher than mean of scale 3.00. The highest mean was scored by the variable (**Customer Behavior**) 4.03/5.00 compared to the lowest mean but still positive which was (**Enhanced Security and Trust**) 3.89/5.00.

Table 4. Questionnaire Analysis

Statement	Mean	Std. Deviation
FinTech solutions offer customers greater convenience and accessibility to financial services	3.900	.718
Mobile banking apps, digital wallets, and online payment platforms provide users with 24/7 access to their accounts	3.940	.839
Fintech enable customers to perform transactions and manage their finances anytime and anywhere.	3.890	.886
The convenience and ease of use of fintech technologies influence customer behavior by encouraging more frequent and efficient financial interactions.	3.990	.927
The accessibility of financial services are favored by customers	3.810	.918
<b>Convenience and Accessibility</b>	<b>3.906</b>	<b>.599</b>
FinTech allows for personalized and tailored financial services.	3.840	.929
Data analytics and machine learning algorithms in FinTech analyze customer preferences and spending patterns	4.050	.903
Through fintech, financial goals to offer personalized product recommendations, budgeting advice, and investment options.	3.980	.829
The ability to customize financial services influences customer behavior by creating a more engaging and relevant experience	4.030	.881
Customers feels adapted to the financial services presented by fintech	3.970	.858
<b>Personalization and Customization</b>	<b>3.974</b>	<b>.652</b>
FinTech solutions are known for their speed and efficiency in executing financial transactions.	4.070	.956
Real-time payments, instant fund transfers, and quick loan approvals are examples of how FinTech enhances the speed and efficiency of financial processes.	4.130	.884
The ability to conduct transactions quickly and seamlessly influences customer behavior	4.160	.873
Speed and efficiency encouraging customers to choose FinTech options over traditional methods that may be slower and more cumbersome.	3.960	.931
Customers feel that fintech services don't require a lot of time and effort	3.850	1.077
<b>Speed and Efficiency</b>	<b>4.034</b>	<b>.667</b>
Trust and security are crucial in the financial industry	3.930	.868
FinTech prioritize advanced security measures such as encryption, biometric authentication, and fraud detection systems	3.760	.806
Security in fintech is able to protect customer data and transactions.	3.910	.805
Fintech provide secure and trustworthy platforms that influence customer behavior	3.930	.987
Security and trust lead to an increased adoption and usage of FinTech services.	3.930	.902
<b>Enhanced Security and Trust</b>	<b>3.892</b>	<b>.627</b>
FinTech often offers cost-effective alternatives to traditional financial services.	3.880	.988
Fintech is known for its lower fees, reduced transaction costs, and competitive interest rates.	3.950	.957
The cost-effectiveness of FinTech solutions influences customer behavior by attracting them with potential cost savings and value for money.	4.030	.846
FinTech solutions can significantly influence how customers engage with financial services	4.110	.886
Fintech financial services are attainable by any individual	3.820	.925

<b>Cost-Effectiveness</b>	<b>3.958</b>	<b>.667</b>
The digital experience in fintech positively influence customer behavior	4.040	.942
Fintech enables banks to leverage data analytics and AI algorithms to offer personalized financial services	4.090	.877
Fintech in banks offers customers a seamless and user-friendly digital experience	4.150	.947
This enhanced digital experience influences customer behavior by encouraging them to engage more frequently with their bank and perform transactions through digital channels.	3.970	.937
This personalization influences customer behavior by creating a more engaging and relevant banking experience, increasing customer satisfaction, and fostering long-term relationships.	3.910	.944
Fintech in banks opens doors to innovative financial products and services	4.090	.933
Fintech solutions often include educational resources and tools to improve financial literacy.	4.100	.893
Budgeting apps, financial planning calculators, and educational content help customers better understand their finances and make informed decisions.	4.050	.857
Fintech solutions in banks prioritize robust security measures to protect customer data and transactions.	3.850	.989
Customers can gain a deeper understanding of their spending patterns, savings goals, and investment performance.	4.090	.944
The enhanced security and trustworthiness of fintech solutions influence customer behavior by increasing their trust in digital banking and encouraging them to embrace digital channels for their financial needs	4.070	1.057
<b>Customer Behavior</b>	<b>4.037</b>	<b>.681</b>

### Multicollinearity Test

The Variance Inflation Factor (VIF) and Tolerance were computed for each independent variable in order to assess the presence of multicollinearity among the variables. The following findings have been determined to be accurate:

Table 5. Multicollinearity Test

<b>variable</b>	<b>Tolerance</b>	<b>VIF</b>
Convenience and Accessibility	.573	1.746
Personalization and Customization	.541	1.848
Speed and Efficiency	.952	1.050
Enhanced Security and Trust	.736	1.360
Cost-Effectiveness	.702	1.425

There is no evidence of multicollinearity, as shown by the VIF values being below 10 and the Tolerance values above 0.10 (Gujarati & Porter,2009).

### Hypotheses Testing

The hypothesis indicated above is evaluated using multiple regression analysis, and the obtained F value of 20.969 is statistically significant at the 0.05 level. This suggests that Fintech adoption has a statistically positive influence on customer behavior within banking sector in Jordan. The strong correlation coefficient ( $r=0.726$ ) further indicates that the independent variables account for a substantial proportion (52.7%) of the variability seen in the dependent variable.

Table 6. Main Hypothesis Testing

		Coefficients					R	R Square
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.		
Model		B	Std. Error	Beta	t	Sig.		
1	(Constant)	.005	.453		.011	.991	.726 <sup>a</sup>	.527
	Convenience and Accessibility	.482	.107	.424	4.527	.000		
	Personalization and Customization	.175	.101	.168	1.738	.086		
	Speed and Efficiency	.077	.074	.075	1.031	.305		
	Enhanced Security and Trust	.094	.090	.087	1.046	.298		
	Cost-Effectiveness	.197	.086	.193	2.277	.025		
<b>H: Fintech adoption has a statistically positive influence on customer behavior within banking sector in Jordan</b>								

Testing sub-hypotheses was done depending in linear regression. It was found that all variables had a correlation with the independent variable and results indicated the following:

For the first sub-hypothesis, F value of 76.464 was statistically significant at the 0.05 level which confirmed that “Convenience and Accessibility have a statistically positive influence on customer behavior within banking sector in Jordan”. The **strong correlation coefficient** ( $r=0.662$ ) further indicated that the independent variable accounts for a substantial proportion (**43.8%**) of the variability seen in the dependent variable.

Second sub-hypothesis presented an F value of 47.849 as statistically significant at the 0.05 level. This suggested that “personalization and customization have a statistically positive influence on customer behavior within banking sector in Jordan”. The **medium correlation** coefficient ( $r=0.573$ ) further indicates that the independent variable accounts for a substantial proportion (**32.8%**) of the variability seen in the dependent variable.

F value for the third sub-hypothesis was 4.929 as statistically significant at the 0.05 level. This suggested that “Speed and efficiency have a statistically positive influence on customer behavior within banking sector in Jordan”. The **weak correlation** coefficient ( $r=0.219$ ) further indicated that the independent variable accounted for a substantial proportion (**4.8%**) of the variability seen in the dependent variable.

The fourth sub-hypothesis resulted with an F value of 21.499 as statistically significant at the 0.05 level. This suggested that “Enhanced security and trust have a statistically positive influence on customer behavior within banking sector in Jordan”. The **medium correlation** coefficient ( $r=0.424$ ) further indicates that the independent variable accounts for a substantial proportion (**18%**) of the variability seen in the dependent variable.

The fifth and final sub-hypothesis indicated that F value of 33.525 was statistically significant at the 0.05 level. This suggested that “cost effectiveness has a statistically positive influence on customer behavior within banking sector in Jordan”. The **medium correlation** coefficient ( $r=0.505$ ) further indicates that the independent variable accounts for a substantial proportion (**25.5%**) of the variability seen in the dependent variable.

Table 7. Sub-Hypotheses Testing

		Unstandardized Coefficients		Standardized Coefficients			R	R Square
Model		B	Std. Error	Beta	t	Sig.		
1	(Constant)	1.099	.340		3.232	.002	.662 <sup>a</sup>	.438
	Convenience and Accessibility	.752	.086	.662	8.744	.000		
<b>H1: Convenience and Accessibility have a statistically positive influence on customer behavior within banking sector in Jordan</b>								
		Unstandardized Coefficients		Standardized Coefficients			R	R Square
Model		B	Std. Error	Beta	t	Sig.		
1	(Constant)	1.659	.348		4.761	.000	.573 <sup>a</sup>	.328
	Personalization and Customization	.599	.087	.573	6.917	.000		
<b>H2: personalization and customization have a statistically positive influence on customer behavior within banking sector in Jordan</b>								
		Unstandardized Coefficients		Standardized Coefficients			R	R Square
Model		B	Std. Error	Beta	t	Sig.		
1	(Constant)	3.135	.412		7.617	.000	.219 <sup>a</sup>	.048
	Speed and Efficiency	.224	.101	.219	2.220	.029		
<b>H3: Speed and efficiency have a statistically positive influence on customer behavior within banking sector in Jordan</b>								
		Unstandardized Coefficients		Standardized Coefficients			R	R Square
Model		B	Std. Error	Beta	t	Sig.		
1	(Constant)	2.244	.392		5.729	.000	.424 <sup>a</sup>	.180
	Enhanced Security and Trust	.461	.099	.424	4.637	.000		
<b>H4: Enhanced security and trust have a statistically positive influence on customer behavior within banking sector in Jordan</b>								
		Unstandardized Coefficients		Standardized Coefficients			R	R Square
Model		B	Std. Error	Beta	t	Sig.		
1	(Constant)	1.998	.357		5.596	.000	.505 <sup>a</sup>	.255
	Cost-Effectiveness	.515	.089	.505	5.790	.000		
<b>H5: cost effectiveness has a statistically positive influence on customer behavior within banking sector in Jordan</b>								

## Discussion

The main goal of current research was to explore how fintech in banking industry was able to positively influence customer behavior from perspective of service providers. The main idea was launched based on customers' attitudes towards mobile payment systems in terms of (Convenience and Accessibility, Personalization and Customization, Speed and Efficiency, Enhanced Security and Trust, Cost-Effectiveness). For that sake, quantitative methodology was utilized through adopting a questionnaire, the questionnaire was distributed and self-administered by (100) individuals within (25) bank in Jordan. SPSS was employed to mitigate primary data, and results indicated the following:

- Fintech was adopted by Jordanian banks, especially in the field of mobile payment systems, in order to improve customer experience and enhance operational efficiency.
- Respondents appeared to have high awareness of customer behavior within the banking industry
- Respondents seemed to understand the items of questionnaire which were presented as drivers of customer behavior
- The main hypothesis of study was accepted, and it appeared that "Fintech adoption has a statistically positive influence on customer behavior within banking sector in Jordan".
- Sub-variables of study (Convenience and Accessibility, Personalization and Customization, Speed and Efficiency, Enhanced Security and Trust, Cost-Effectiveness) were all influential on customer behavior and the highest in influence was

Study proved that service providers do have the ability to evaluate customer behavior towards using a new technology when examined from certain angles. Those angles were taken as sub-variables of current study including (Convenience and Accessibility, Personalization and Customization, Speed and Efficiency, Enhanced Security and Trust, Cost-Effectiveness). Results of study indicated that all sub-variables were influential in changing customer behavior in terms of banking industry.

Study was able to prove that mobile payment systems – as a type of fintech – managed to influence customer behavior in many aspects including their intention to use, continuous usage, and acceptance of such technologies. The main drivers behind the ability to fintech to influence customer behavior is attributed to its characteristics which were found to be of value for customers. From that point, current study analyzed responses related to each variable adopted including (Convenience and Accessibility, Personalization and Customization, Speed and Efficiency, Enhanced Security and Trust, Cost-Effectiveness). It appeared that all of the variables were influential on customer behavior from perspective of fintech service providers in bank environment. In addition to that, it was seen that each variable had a certain level of influence which was related to behavior as following:

The highest variable in influence was (convenience and accessibility) with an R-value of ( $r=0.662$ ) and a strong correlation with the independent variable that was explained by the variance of (**43.8%**). This indicated that convenience and accessibility contributed to enhancing the adoption of fintech services in banks, facilitating banking dealings, and reducing the time that a bank employee might spend in providing service to customers. In addition, operational costs have been reduced through the satisfaction of individuals with the services provided through mobile phones without the need to visit the bank's branches. This met results of Mulyana et al. (2020) and Aggarwal et al. (2023) when they argued that convenience and accessibility contributed positively to directing customers' behavior towards accepting the idea of fintech and making it part of their daily lives.

In the second rank, results of study presented (personalization and customization) as an influential variable with a medium correlation of  $R= (0.573)$  and a variance of (**32.8%**). Results indicated that personalization and customization were among the factors that encouraged individuals to engage and integrate into adopting fintech as part of their daily lives. They have come to view electronic financial services as services that have been customized for their convenience, and that they are services that

understand their needs and analyze their personal visions and desires. This result agreed with Raval (2023).

In the third rank appeared that variable of cost effectiveness which is a very important aspect when it comes to adopting a new service stemming from a new technology. This variable scored an R-value of (0.505) with a variance of **(25.5%)** with a medium correlation. It was proved through the study that low financial transaction fees are something that attracts customers towards dealing with this service. The study confirmed that it is the duty of banks to search for ways to increase the control of fees in exchange for financial transactions. This can achieve the satisfaction and admiration of customers, given that the customer here receives a service they like for a small financial cost, and this is considered attractive to many customers, as pointed out by Modi et al. (2023) and Fermansayeh et al. (2022).

In terms of enhanced security and trust, results of study indicated that this variable scored the fourth rank with R-value (0.424) and a variance of **(18%)** with a medium correlation. Study indicated that usually, an individual feels positive about a particular service when it is associated with confidence and lack of a sense of danger or fear. The existence of a lot of biometric measurements contributed to enhancing the individuals' sense of security and their tendency towards fintech to complete their daily financial transactions, and this is considered one of the positive things at the level of customer behavior, as indicated by Gopal et al. (2023) and Modi et al. (2023).

The variable of speed and efficiency came in last rank with R= (0.219) and a variance of **(4.8%)** with a weak correlation. The results showed that speed and efficiency are among the factors that, if positive, can match customers' perceptions and expectations and win their satisfaction and loyalty. This coincided with what was reported by Rani (2021); Al Rubaiai and Pria (2022) and Fermansayeh et al. (2022) when they indicated that the behavior of individuals is affected by the direction of any service by the extent to which it conforms to their expectations. Individuals expect technological services to shorten time, and to be at a high level of efficiency and speed. This leads to a positive behavior by customers towards fintech, considering that it is a service that shortened their time and provided them with the required in an efficient and acceptable manner.

## 5. Conclusion

This empirical study makes an important contribution by examining how fintech adoption influences customer behavior in Jordanian banks from the perspective of service providers. The results substantiate five dimensions of fintech adoption including convenience, personalization, efficiency, security, and cost as significant positive drivers of customer behavior. The findings provide novel evidence that contextual factors like accessibility and personalization strongly impact digital financial engagement in Jordan's banking sector. These insights can assist banks in fostering fintech ecosystems and services tailored to local needs. This research also highlights the value of incorporating service provider viewpoints, in addition to customer perspectives, when investigating reactions to new financial technologies across cultural contexts. Further studies can build on this quantitative analysis by qualitatively exploring service provider perceptions or comparing different demographics. Overall, this work advances understanding of fintech adoption dynamics in Middle Eastern banking and offers practical implications for banks aiming to meet customers' digital financial preference.

## Recommendations

From discussion and conclusion, author of current research recommended the following:

- Encouraging banks to improve the user interface/user experience of digital/mobile banking applications.
- Employ data analytics to deliver customized financial products
- Encouraging banks to invest in emerging technologies such as artificial intelligence and blockchain.
- Strengthening partnerships with financial technology startups and technology service providers

- Funding marketing campaigns to promote the convenience, security and control that digital platforms provide over traditional methods.

### **Practical and Theoretical Implications**

Current study carried both theoretical and practical implications. From a theoretical perspective, the current study stands clearly on the principle of technology acceptance model and its role in determining consumer behavior towards financial technologies. The study also demonstrates perceived utility and ease of use as useful constructs for predicting fintech adoption intentions. These build on empirical evidence to support the relationships assumed in the modified TAM frameworks. As for the practical perspective, current study may direct the attention of decision-makers towards improving payment systems through smart phones and promoting their use more. In addition, banks can benefit from the current study in strengthening partnerships with fintech service providers and developing marketing campaigns that address the benefit and ease of use for potential users.

### **Future Studies**

Based on aim and results of current research, author suggested the following future studies:

- Carry out qualitative research (interviews) to examine the insights of fintech providers regarding drivers and obstacles.
- Build a comparison account between different demographic groups adoption of fintech including young adults and seniors
- Carry out evidence-based research on how to support and boost adoption rates and promote positive customer behaviors regarding fintech in banking industry.
- Carry out a longitudinal study that is based on linking intentions with real usage behaviors of fintech.

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