

Factors Influencing Fintech Adoption Among Tertiary Institutions' Students in Abia State, Nigeria

¹Ahaiwe, Emmanuel O. Ph.D; ²Nto Chioma Philip Ph.D; ³Nwachukwu Chima Peter Ph.D; & ⁴Uwaoma Ugochukwu G. A.

^{1,2}Department of Marketing, College of Management Sciences,
Michael Okpara University of Agriculture, Umudike, Abia State

³Department of Marketing, Entrepreneurship & Procurement
Faculty of Management Sciences, Federal University, Otuoke, Bayelsa State

⁴Department of Marketing, College of Management and Social Sciences,
Rhema University, Aba, Abia State

**For correspondence, email: trustedemma@yahoo.com*

Abstract

The study explored the factors influencing Fintech adoption among university students in Abia State, Nigeria. A descriptive survey research design was employed, targeting undergraduate students from two tertiary institutions in the region. The sample consisted of 320 respondents, determined based on the minimum sample size calculations recommended by Hair et al. (2010). An online survey method using Google Forms was utilized for data collection. The data were analyzed using SPSS and AMOS version 23. The results for all the hypotheses tested were significant. These findings indicated that perceived ease-of-use positively affects the intention to use Fintech, perceived ease-of-use positively affects perceived usefulness of Fintech, perceived usefulness also positively affects the intention to use Fintech, while social influence positively influences the intention to also use Fintech. Furthermore, the study revealed that perceived risk negatively impacts the intention to use Fintech, perceived convenience positively affects the intention to use Fintech, perceived trust positively affects both the intention to use Fintech and actual usage of Fintech, while intention to use Fintech positively impacts on actual usage of Fintech. The study concluded that the key factors driving the actual use of Fintech among tertiary institutions students in Abia State include perceived ease-of-use, perceived usefulness, social influence, perceived risk, perceived convenience, perceived trust, and intention to use Fintech. It was recommended that, to fully leverage the advantages of Fintech-driven financial inclusion, policies on online banking should aim to improve digital literacy among consumers, particularly in areas with limited access to traditional banking services.

Keywords: Fintech, perceived ease-of-use, perceived usefulness, social influence, perceived risk

INTRODUCTION

Advancements in information technology, especially the emergence of financial technology (Fintech), have significantly changed how banking services are delivered. Fintech includes a range of technologies that support financial services, such as peer-to-peer lending, online financial planning, and digital payment transfers (Kyari & Akinwale, 2020). Purnomo and Khaldi (2019) noted that these systems combine technology with trading mechanisms across various marketplaces.

In Nigeria, the banking sector is a profitable industry, with value pools surpassing \$9 billion. However, despite intense competition, many customers report dissatisfaction due to poor service experiences, security and privacy issues, and limited access particularly in rural regions. This gap offers a substantial opportunity for Fintech companies, which are working on innovative banking solutions to tackle these challenges, especially in areas like flexible savings, quick loans, and affordable payment options (Frost et al., 2019). The conditions for a flourishing Fintech industry are taking shape, driven by a young population, rising smartphone usage, and government efforts to boost financial inclusion and encourage cashless transactions. Currently, there are over 200 independent Fintech companies operating in Nigeria, in addition to Fintech products provided by traditional banks and mobile network operators. From 2014 to 2019, Nigeria's dynamic Fintech sector attracted nearly \$600 million in funding, accounting for 25% (\$122 million) of the total \$491.6 million raised by African tech firms in 2019, with Kenya trailing at \$149 million (Kola-Oyeneyin, Kuyoro & Olanrewaju, 2020).

Mobile payment services such as Kuda, Palmpay, Opay, and Moniepoint are becoming increasingly popular among Nigerian bank customers, especially the younger generation due to their perceived ease of use and perceived usefulness. These mobile platforms link consumers, payment providers, and merchants, making transactions easier through smartphone apps or QR codes while ensuring secure authentication (Hasan, Ashfaq & Shao, 2021). The Fintech revolution is advantageous for both banks and consumers, as it lowers transaction costs and improves convenience, providing financial services that are quick, accessible, and available at any time and place (Gomber et al., 2018; Kotarba, 2016; Kaplan & Mikes, 2016). Customers now have the freedom to perform digital transactions whenever and wherever they want (Rehncrona, 2018; Zhang et al., 2018). Research shows that several factors drive technological innovations in Fintech. Access and convenience are key motivators for customer acceptance, while trust is also essential. User experience has become a significant focus, examining the systems' efficiency, perceived usefulness, and ease of use (Chiriac et al., 2018). Moreover, the perceived risks that customers associate with adopting innovations like Fintech services greatly affect their acceptance (Hu et al., 2019; Meyliana et al., 2019). However, existing literature often highlights the technical aspects of Fintech strategies, service quality, and supply-side risks, frequently neglecting the consumer perspective in the adoption of these services. Various studies have pointed out obstacles that prevent customers from fully or partially embracing Fintech services (Senyoya & Osabuteyb, 2020; Meyliana et al., 2019; Hu et al., 2019).

As Fintech continues to advance, user and market acceptance is still evolving. Research indicates that not all new technologies achieve widespread consumer adoption (Yoon & Lim,

2020; Meyliana et al., 2019; Ryu, 2018). Both the banking sector and researchers are increasingly focused on understanding how to motivate customers to adopt Fintech services and anticipate future adoption trends among those who have not yet engaged (Senyola & Osabuteyb, 2020; Meyliana et al., 2019; Hu et al., 2019; Mutahar et al., 2017). With the rapid growth of Fintech services, it remains uncertain whether consumers will fully embrace this emerging technology. In conclusion, Fintech services offer a transformative opportunity to enhance the banking experience and raise operational standards to new heights. However, there is a significant gap in research regarding the factors that influence Fintech service adoption behavior (Senyola & Osabuteyb, 2020; Meyliana et al., 2019). Recent studies on Fintech adoption have primarily focused on developing countries (Chawla & Joshi, 2019; Inegbedion et al., 2019; Jain & Gabor, 2020). Thus, there is a strong need for further research in developing countries like Nigeria. This study aims to investigate the drivers of Fintech adoption in Nigeria.

REVIEW OF LITERATURE

Financial Technology (FinTech)

Fintech, short for financial technology, refers to the software and technological tools that help deliver financial and banking services to customers (Schüffel, 2016). This innovation has led to the emergence of new business models, processes, applications, and products that significantly influence the financial market and services (Derfleitner et al., 2017). In essence, it involves leveraging financial technology to improve operations within the financial sector (Schüffel, 2016).

More specifically, Fintech encompasses innovative financial solutions that utilize technology (Kammoun et al., 2020). It is believed that financial technology is transforming the financial services landscape by introducing new business models in areas such as capital markets, crowdsourcing, lending, wealth management, and payments (Auwalu et al., 2022). Research indicates that Fintech represents a revolutionary innovation where companies merge financial services with technological advancements (Dorfleitner et al., 2017). Fintech firms can be both start-ups and established companies, with the goal of either replacing or enhancing the financial services provided by traditional institutions. They operate within three main categories of the financial market: payment, asset management, and financing.

Theoretical Underpinning and Hypotheses Development

The Technology Acceptance Model (TAM)

Davis (1989) developed the Technology Acceptance Model (TAM) to explain why individuals opt for specific technologies for their tasks. According to TAM, a user's intention to use a system, shaped by their perceptions of that system, influences their decision to adopt new technology (Davis, 1989). Researchers often rely on TAM in the field of technology acceptance because it effectively predicts user intention or motivation to embrace technology through two key constructs: perceived ease of use (PEoU) and perceived usefulness (PU) (Venkatesh et al., 2003; Venkatesh & Davis, 2000). Furthermore, Davis (1989) emphasized that TAM's main objective was to clarify how external factors impact internal attitudes, beliefs, and intentions.

Many studies have built upon TAM by integrating variables from various models, such as online shopping (Ahaiwe et al., 2024; Oloveze et al., 2022), motivational factors (Siegel et al., 2017), diffusion of innovation theory variables (Lee et al., 2011), and self-efficacy (Joo et al., 2018). These studies applied TAM in contexts where participants had easy access to technology, aiming to tackle specific issues with theoretical backing. However, like many TAM studies, factors such as social influence, perceived risk, perceived trust, and perceived convenience regarding the technology were often assumed rather than thoroughly investigated. This adapted TAM by incorporating these constructs derived from other researches.

Perceived Ease of Use

Perceived ease of use (PEOU) refers to the level of personal trust that using a system does not require significant effort to achieve desired outcomes (Davis, 1989). A system that is considered user-friendly is likely to see increased usage and greater acceptance among users (Venkatesh & Morris, 2000). The extent to which users feel comfortable and eager to learn how to use Fintech is what we define as perceived ease of use (Hu et al., 2019). Previous studies suggest that perceived ease of use often plays a crucial role in the adoption of digital technologies (Kar, 2020).

When Fintech is straightforward, intuitive, and demands minimal effort, users may find it easier to grasp and utilize (Bashir & Madhavaiah, 2015). Leong et al. (2020) argued that perceived ease of use in financial technology pertains to the time, effort, and understanding that customers associate with financial services being simple, which in turn boosts user adoption. Therefore, despite the numerous benefits of this innovation, customers are unlikely to adopt Fintech if they perceive it as complicated (Hassan & Wood, 2020). Research has consistently shown that perceived ease of use positively and significantly influences the intention to adopt Fintech (Setiawan et al., 2021; Hu et al., 2019; Lien et al., 2020; Phuc et al., 2020). Furthermore, a positive correlation has been established between perceived usefulness and perceived ease of use (Nagy, 2018; Song et al., 2017). Through perceived usefulness, PEOU has demonstrated a significant effect on the intention to use, whether directly or indirectly (Davis, 1989; Venkatesh, 2000; Venkatesh & Davis, 1996). Based on this, we propose the following hypotheses;

H1: Perceived ease-of-use is negatively related to intention to use Fintech

H2: Perceived ease-of-use is negatively related to perceived usefulness of Fintech

Perceived Usefulness

One of the key constructs in the Technology Acceptance Model (TAM) and a significant factor in the adoption of new technologies is perceived usefulness (Liébana-Cabanillas et al., 2020). When individuals believe that a new technology can help them fulfil a specific need, they are more likely to embrace it (Shankar & Datta, 2018). Perceived usefulness, as defined by Davis (1989), refers to the degree to which a person believes that using a particular system would enhance their work performance. Research indicates that perceived usefulness (PU) is one of the most critical factors influencing users' acceptance of technology (Jeong & Yun, 2013; Gefen & Straub, 1997; Hsu & Lu, 2004; Venkatesh & Davis, 2000). Oloveze et al. (2022)

asserted that this new technology must deliver significantly greater satisfaction than what was previously possible. Sharma (2017) highlights that perceived usefulness is the most important and commonly referenced indicator of technology adoption, including in the Fintech sector.

Kim, Shin, and Lee (2009) found that consumers perceive Fintech as a means to save time and money, as it allows them to complete various banking tasks such as bill payments, balance inquiries, and money transfers without needing to visit a physical branch. Lin et al. (2020) suggest that perceived usefulness implies that users expect Fintech to enhance their transactional efficiency. Users are more inclined to adopt Fintech if they believe it will facilitate quicker and more convenient transactions, as they anticipate it will save them time and effort (Kalinic & Marinkovic, 2015; Kalinic et al., 2019). Perceived usefulness is a significant factor influencing the use of Fintech services (Puspita & Kusumawati, 2019). Numerous studies (Cheng, Lam, & Yeung, 2006; Safari, Bisimwa, & Buzera, 2020; Youssef, Youssef, & Anadol, 2017; Riza, 2019; Shrestha et al., 2020) have shown that perceived usefulness also positively impacts the intention to use online banking services. Based on this, we propose the following hypothesis;

H3: Perceived usefulness is negatively related to intention to use Fintech

Social Influence

Social influence, subjective norms, or normative pressures refer to the ways in which the presence or actions of others shape an individual's attitudes, beliefs, or behaviours (Du, Zhu, Lv, & Sun, 2012; Koksal, 2016; Tran, 2021). The core idea behind social influence is that individuals can be swayed by the advice of others and their social networks, especially regarding the adoption of disruptive and new technologies (Singh et al., 2020).

Previous research on Fintech adoption indicates that users' behaviours are significantly influenced by those close to them, such as peers, family, co-workers, and friends, who play a crucial role in shaping their attitudes and preferences towards specific Fintech services (Patel & Patel, 2018). The impact of social influence has been recognized in the context of Fintech (Najib et al., 2021) and the uptake of open banking services (Chan et al., 2022). Venkatesh et al. (2003) identified it as a key factor in the voluntary adoption of new technologies. People often seek guidance from their surroundings, which can directly affect their willingness to embrace new technology (Giovanis et al., 2019).

Customers who have previously utilized traditional banking services are increasingly attracted to Fintech offerings due to their innovative technological solutions, often seeking advice from other Fintech users (Tran, 2021). Research has demonstrated that social influence positively impacts the intention to use digital banking services, including Fintech (Tran, 2021; Mufarih, Jayadi, & Sugandhi, 2020; Arora & Sandhu, 2018; De Leon, 2019), as well as online shopping (Ahaiwe et al., 2024; Oloveze et al., 2022). Zhao and Bacao (2021) found that social influence can enhance users' adoption of Fintech, while Schilirò (2021) noted its positive effect on the intention to use Fintech. Based on these findings, we propose the following hypothesis;

H4: Social influence is negatively related to intention to use Fintech

Perceived Risk

Perceived risk is a major factor that prevents consumers from adopting a product or service. Perceived risk is the expectation of suffering losses throughout the buying process (Dowling & Staelin, 1994; Grewal et al., 2007). In every action, the customer perceives a degree of risk. The level of knowledge and attitude toward the risk determines the degree of risk. It addresses consumers' behavioural uncertainty on the kind and extent of losses they may experience while engaging in particular behaviours (Oloveze et al., 2023). In the context of digital banking, perceived risk has been referred to as "a prominent barrier to customers' acceptance of online banking" (Lee, 2009). Moreover, different risks will impede the tendency of the customer to make steps more complete toward actual adoption because customers feel several key perceived risks for wide adoption by making people averse, mainly due to virtual connections to traditional banking (Yang et al. 2015, Thomas et al., 2016) than services involved in the nature of use or access (Rodrigo et al. 2019; Bhowmik 2017).

Additionally, perceived risk is believed to be perceived as a sign of distrust. Most researchers believe that a perceived risk acts as the major inhibitor to the adoption of a particular technology (Hu et al., 2019; Sikdar, 2015; Kesharwani et al., 2012). Bansal et al. (2010) believed that consumers using Fintech services were concerned about the release of their personal information, which might involve great consequences. Khedmatgozar and Shahnazi (2018) are of the opinion that the degree of risk perception is highly effective in adopting e-services. Besides, perceived risk was found to not impede the disposition of consumers to adopt Fintech services (Hu et al., 2019; Meyliana et al., 2019). Wu and Wan, (2005) found that the intention to use Fintech services, such as mobile banking, was significantly related to perceived risk. Hence, perceived risks of adopting Fintech services may influence customers' propensity to accept Fintech services enormously (Bansal et al., 2010). We therefore hypothesize that;

H5: Perceived risk is negatively related to intention to use Fintech

Perceived Convenience

Convenience has been researched in a range of different industries and it is fundamental to Fintech adoption (Bi & Kim, 2020; Duarte et al., 2018; Mehmood & Najmi, 2017; Mpinganjira, 2015). Convenience is a significant driver for Fintech. It is considered to save time and effort (Duarte et al., 2018). A number of scholars have studied the concept of convenience and its impact on consumer behaviour. Perceived convenience is one of the elements that influence consumers' intentions to keep making purchases online (Ahaiwe et al., 2024; Diao, 2015; Pham et al., 2018; Meixian, 2015). Ademe-Godwin and Akpan (2023) found a significant positive relationship between the intention to patronize Fintech companies and perceived convenience. Convenience is noticed to significantly affect users' adoption intentions (Shankar & Rishi, 2020). Furthermore, Khare et al. (2012) have found that perceived convenience influences the adoption of technology-enabled services. Therefore, perceived convenience may be considered one of the important factors for the adoption of Fintech. Based on the above we hypothesize thus;

H6: Perceived convenience is negatively related to intention to use Fintech

Perceived Trust

Trust plays a crucial role in the adoption of new technologies (Ahaiwe et al., 2024). Gefen, Karahanna, and Straub (2003) along with Nguyen, Nguyen, and Vo (2019) suggest that trust reflects a person's comfort level when using a service, allowing them to engage without worrying about risks or other concerns. Furthermore, a strong sense of trust is essential for deciding to utilize Fintech services (Page & Luding, 2003). Since many Fintech services are offered by companies without physical storefronts, potential users may hesitate due to privacy or security worries (Laforet & Li, 2005; Lee, McGoldrick, Keeling, & Doherty, 2003). This reluctance to try the service, stemming from a lack of trust, is a significant obstacle to the growth and advancement of Fintech (Burucuoglu & Endorgan, 2016; Lee & Chung, 2009).

The acceptance of mobile services is often significantly influenced by perceived trust. Research has shown that customers' intentions to use (Oloveze et al., 2023) and their adoption of Fintech services (Hu et al., 2019; Stewart & Jurjens, 2018; Zhang et al., 2018; Lien et al., 2020; Fathollahzadeh et al., 2011; Akhter et al., 2011) are shaped by their perception of trust. Additionally, Nangin, Barus, and Wahyoedi (2020) highlighted that the level of customer trust greatly affects the decision to use Fintech for financial services. Based on this, we have formulated the following hypotheses:

H7: Perceived trust is negatively related to intention to use Fintech

H8: Perceived trust is negatively related to actual usage of Fintech

Intention to use and actual usage

According to Jogiyanto (2008), intention to use is a measure of a person's desire to perform the behaviour. It can be said that behavioural intention acts as a predictor of actual behaviour; hence, interest in using the technology will show its actual use. TAM captures behavioural intention as a precursor to the adoption of technology. Many previous studies have found a relationship between intention to use (adoption) and actual adoption (Senyo & Osabutey, 2020; Alwi et al., 2019; Lee, 2018). Furthermore, intention to use may be defined as the probability that a person will be willing to utilize a particular technology (Hanafizadeh et al., 2014), hence expressing the intention to keep utilizing a particular technology (Raza et al., 2017; Chang et al., 2016), and in this case, adoption of Fintech.

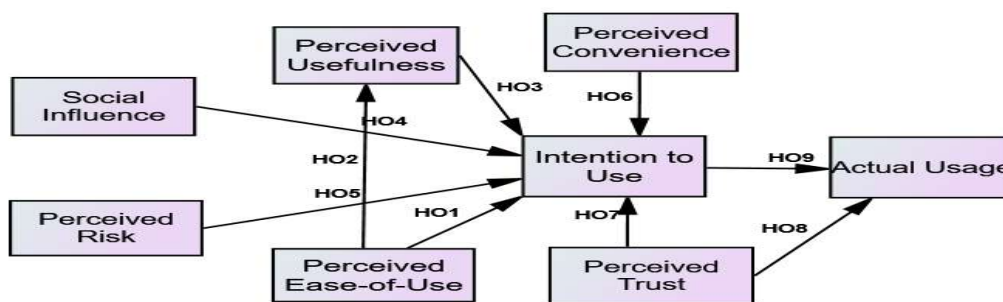
In fact, the direct benefits of Fintech, the ease of using it, and its legitimacy will determine an intention to use. As Maharsi & Mulyadi (2007) explained, the effect of perceived ease of use works implicitly, not directly. According to Davis (1989), actual usage is defined based on the intention to adopt the behaviour. Thus, the intention to adopt the use of Fintech services determines actual usage (Yoon & Lim, 2020; Kim et al., 2015; Hanafizadeh et al. 2014). Several empirical researches in recent literature have shown that the use of Fintech services and behavioural intention are positively correlated (Senyo & Osabutey, 2020; Thusi & Maduku, 2020). However, Singh et al. (2020) could not find any significant relationship between Fintech use and behavioural intention. We therefore hypothesized thus;

H9: Intention to use Fintech is negatively related to actual usage of Fintech

METHODOLOGY

This was a cross-sectional study that adopted a descriptive survey research design. The population of the study consisted of undergraduate students of two tertiary institutions in Abia State of Nigeria, namely Abia State Polytechnic, Aba and Michael Okpara University of Agriculture, Umudike Umuahia. These institutions were chosen because of their locations at the heart of the two major cities in Abia State, Aba and Umuahia. Furthermore, the issue of proximity to the researchers as well as the rate of adoption of Fintech by the students of these institutions were also considered. Previous studies on technology adoption were based on current undergraduate or graduate students from a pool of universities (Belanger et al., 2002; Borchers, 2001). Students from tertiary institutions are usually used in the studies of technology adoption because students are more willing to try new things (Kumar, 2021). For the purpose of this study, a total of 320 respondents were used, obtained based on the minimum sample calculations suggested by Hair et al., (2010).

Hair et al. (2010) postulate that with the premise that nx 5 observed variables (indicators) to nx 10 observed variables (indicators) are used in the questionnaire, the number of respondents to be utilized as samples in a study has to be adjusted to the number of indicators employed. The method used for the study includes an online survey (google form). The online questionnaire contained 5-point likert scale ratings. These questionnaire items were adapted from empirical works of previous authors on the same or similar subjects. The online questionnaire was sent to the students' WhatsApp groups through their various course representatives where it was completed. Guided against getting responses from unqualified respondents, there is a filtering question like "Do you have an account with any Fintech providers such as moniepoint, Kuda, Palmpay, Opay, etc.", to screen the irrelevant responses without the experience related to Fintech for a student. Care was taken in designing the online questionnaire and the researchers ensured the questionnaire captured all the aspects of the study variables. Convenience sampling was used in this study since the online questionnaires were only sent to student groups that were accessible during this period of data collection. Such a sampling procedure is in line with what has been done by previous researchers (Coomber, 1997; Berson et al., 2002). Data collection spanned a period of three (3) months from May to July, 2024.



Measurement Model Analysis

The study utilized Microsoft Excel and the Statistical Package for the Social Sciences (SPSS). As noted by Hulland (1999), the research examined the measurement model from three perspectives: discriminant validity, convergent validity, and individual item reliability. Individual item reliability assesses the factor loadings of measurable variables on latent variables. Hulland (1999) suggested that the factor loadings of measured variables should exceed 0.7, as a low factor loading implies a weak explanatory power of the model. Overall, the variables evaluated in the study demonstrated strong reliability, as indicated in Table 1, with every factor loading in the latent variables being above 0.7.

Table 1. Confirmatory Factor Analysis for Cronbach Alpha (CA), Average Variance Extracted (AVE) and Construct Reliability (CR)

Constructs	Items	Factor Loading	CA	AVE	CR
Perceived Usefulness	PU1	0.867	0.967	0.730	0.915
	PU3	0.784			
	PU4	0.916			
	PU5	0.846			
Perceived ease-of-use	PEoU2	0.961	0.927	0.709	0.906
	PEoU3	0.707			
	PEoU4	0.846			
	PEoU5	0.837			
Perceived trust	PT1	0.847	0.885	0.632	0.837
	PT2	0.719			
	PT3	0.814			
Perceived risk	PR1	0.773	0.902	0.610	0.824
	PR3	0.846			
	PR4	0.720			
Social influence	SI2	0.803	0.896	0.643	0.844
	SI3	0.811			
	SI4	0.793			
Perceived convenience	PC1	0.738	0.928	0.715	0.909
	PC2	0.892			
	PC3	0.916			
	PC4	0.826			
Intention to use	IU1	0.849	0.934	0.685	0.896
	IU3	0.916			
	IU4	0.744			
	IU5	0.791			
Actual usage	AU2	0.892	0.861	0.706	0.906
	AU3	0.863			
	AU4	0.792			
	AU5	0.811			

For measuring the reliability in this study, AVE, Cronbach Alpha, and CR (Chin 1998; Fornell & Larcker 1981; Hair et al., 2014) were the reliability indices considered. The greater a latent variable's composite reliability, the higher its internal consistency. According to Fornell and Larcker (1981), the CR is considered better than 0.7. As all latent variables of the study were above 0.8, Table 1 shows high internal consistency. Table 1 also presents the average variance extracted (AVE) of the latent variables of the study. The higher the average variance extracted (AVE), the higher the convergent validity. According to Fornell and Larcker (1981), the average extracted variance should be greater than 0.5. From Table 1, AVE for all latent variables under study was > 0.6. From the results of analysis, convergent validity in the latent variables of the study appears very strong.

Fornell and Larcker (1981) indicate that the correlation coefficient between latent variables and the square root of the average variance extracted of each latent variable are ways in which to establish discriminant validity. Where the AVE square root value is "greater than the correlation of the variables", discriminant validity exists (Fornell & Larcker, 1981). Table 2 depicted that discriminant validity among latent variables is present within the study, or the root square of AVE is bigger than the correlation coefficient between the latent variable and the other latent variables.

Table 2. Discriminant Validity

Latent Variable	PU	PEoU	PT	PR	SI	PC	IU	AU
PU	0.854							
PEoU	0.673	0.842						
PT	0.528	0.619	0.795					
PR	0.581	0.481	0.676	0.781				
SI	0.611	0.713	0.552	0.621	0.802			
PC	0.601	0.461	0.330	0.612	0.381	0.846		
IU	0.481	0.419	0.583	0.361	0.281	0.632	0.828	
AU	0.264	0.512	0.225	0.423	0.501	0.612	0.371	0.840

Note: The bold numbers along the diagonal represent the square root of the average variance extracted (AVE) for each latent variable, while the numbers outside the diagonal indicate the correlation coefficients between each latent variable and the others. The analysis of the indicators demonstrated that the latent variables in the research model exhibited strong reliability and validity, making them suitable for hypothesis testing regarding the correlations among the latent variables and the model's explanatory power.

Structural Model Analysis

The structural model implemented in this study was evaluated using AMOS 23. Each path's coefficient is displayed, with significance levels marked by asterisks. The goodness-of-fit statistics for the measurement model indicated a good fit, as detailed in Table 3.

Table 3. Goodness of Fit (GOF)

Model Indicators	Recommended thresholds	Model Results
CFI	≥ 0.90	0.969
RMSEA	< 0.08	0.064
CFI	≥ 0.90	0.923
NFI	≥ 0.90	0.962
IFI	≥ 0.90	0.985
RFI	≥ 0.90	0.939
PNFI	≥ 0.90	0.977

Table 4 shows the path coefficients and the results of the hypothesis test.

Table 4: Path coefficients and results of the hypothesis test

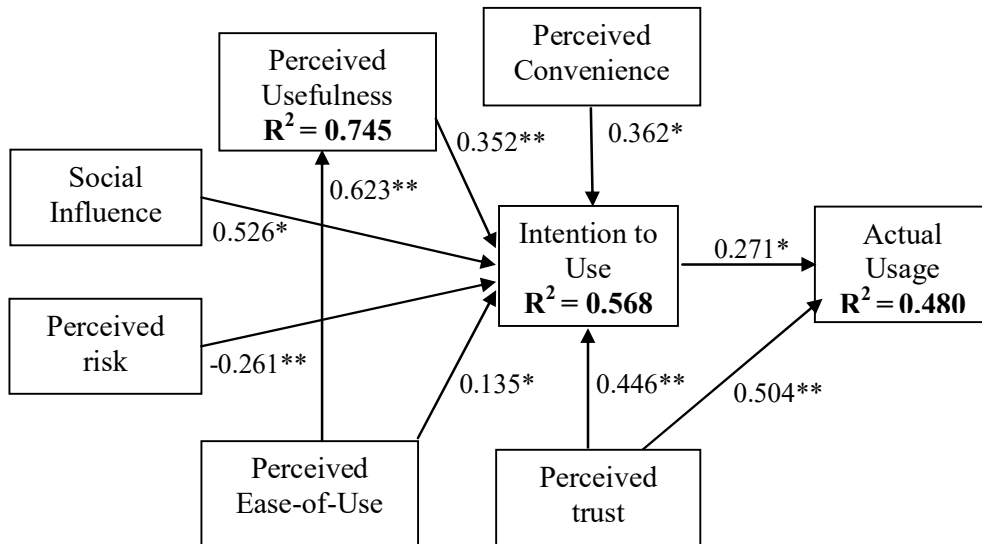
HO	Path	B	S.E	C.R	Result
1	Perceived ease-of-use → Intention to use	0.135	0.031	4.342*	Accepted
2	Perceived ease-of-use → Perceived usefulness	0.623	0.084	7.442**	Accepted
3	Perceived usefulness → Intention to use	0.352	0.061	5.768**	Accepted
4	Social influence → Intention to use	0.526	0.107	4.882*	Accepted
5	Perceived risk → Intention to use	-0.261	0.074	3.491**	Accepted
6	Perceived convenience → Intention to use	0.362	0.053	6.826*	Accepted
7	Perceived trust → Intention to use	0.446	0.099	4.481**	Accepted
8	Perceived trust → Actual usage	0.504	0.174	2.882**	Accepted
9	Intention to use → Actual usage	0.271	0.037	7.371*	Accepted

*p<0.001, **p<0.05

Discussion of Results

Table 4 reports the test results of Hypotheses 1 to 9, which were all significant. The significant results are: perceived ease-of-use positively affects intention to use, $\beta=0.135$, $t = 4.342$, $p<0.001$; perceived ease-of-use positively affects perceived usefulness, $\beta=0.623$, $t = 7.442$, $p<0.05$; perceived usefulness positively affects intention to use, $\beta=0.352$, $t = 5.768$, $p<0.05$; social influence positively affects intention to use, $\beta=0.526$, $t = 4.882$, $p<0.001$; perceived risk negatively affects intention to use, $\beta= -0.261$, $t = -3.491$, $p<0.05$; perceived convenience positively affects intention to use, $\beta=0.362$, $t = 6.826$, $p<0.001$; perceived trust positively affects intention to use, $\beta=0.446$, $t = 4.482$, $p<0.05$; perceived trust positively affects actual usage, $\beta=0.504$, $t = 2.882$, $p<0.05$; intention to use positively affects actual usage, $\beta=0.271$, $t = 7.371$, $p<0.001$. The R-square value of 0.745 reveals that perceived ease-of use explained almost 75 percent of the variance in perceived usefulness of Fintech in Nigeria.

The resulting R-square value of 0.568 to explain the intention to use shows that the constituent variables of perceived ease of use, perceived usefulness, perceived convenience, perceived trust, perceived risk, and social influence explain 57% of the variance. Also, the value of 0.480 explained that the intention to use and perceived trust explained almost 48 percent of the variance in the actual usage of Fintech in Nigeria.



***p <0.001, **p <0.05**

The study found that perceived ease-of-use has a positive impact on the intention to use Fintech ($\beta=0.135$, $t = 4.672$, $p<0.001$). This means that people are more inclined to use Fintech if they think it is easy to navigate. This aligns with findings from previous research (Setiawan et al.,

2021; Hu et al., 2019; Lien et al., 2020; Phuc et al., 2020). It indicates that when Fintech services are seen as user-friendly and straightforward, individuals are more likely to adopt and continue using them in the long run.

Additionally, perceived ease-of-use was shown to positively influence the perceived usefulness of Fintech ($\beta=0.623$, $t = 7.442$, $p<0.05$). This supports earlier studies (Nagy, 2018; Song et al., 2017). The implication here is that if individuals find Fintech easy to use, they are more likely to feel confident in their ability to learn how to use it effectively without investing too much time or effort. This perception can reduce barriers to adoption and increase the chances of individuals trying and eventually using Fintech. When Fintech is user-friendly, it can seamlessly fit into people's daily routines, enhancing their overall experience and leading to a greater appreciation of its value as they recognize the benefits it offers in an accessible way.

The perceived usefulness positively affected the intention to use Fintech at $\beta=0.352$, $t = 5.821$ and $p<0.05$. This is in agreement with previously conducted studies (Cheng, Lam, & Yeung, 2006; Safari, Bisimwa, & Buzera, 2020; Youssef, Youssef, & Anadol, 2017; Riza, 2019; Shrestha, Wenan, Rajkarnikar, & Jeong, 2020). This means the users of Fintech perceive that the technology will be useful and enable them to reach their financial goals or satisfy their needs. In other words, perceived usefulness will have a positive impact on the intention to actually use Fintech. Perceived ease of use and perceived usefulness of Fintech will result in a higher motivation to adopt and use technology since it is viewed as an enabling tool that will enhance their financial performance or make life easier. Indeed, they can be keener in investing time, effort, and resources to learn how to use Fintech and eventually incorporate Fintech into daily life. Social influence has been found to positively influence intention to use Fintech, $\beta=0.526$, $t = 4.882$, $p<0.001$.

This is also in line with previous research studies (Zhao & Bacao, 2021; Schilirò, 2021). The student tends to act and do as their social group appears to act or do. If Fintech is the norm for others in their networks, then they feel compelled to be able to use Fintech like them in order to fit into the group. In addition, when they find others within their social networks using Fintech and see good outcomes from that use, the motivation for their use, to some extent, could increase to get similar benefits. The social influence may be due to the direct or indirect pressures coming from the individuals of the social network by means of either the adoption or usage of Fintech. The recommendations or endorsements of friends and peers act as social cues that might pressurize the people to develop a certain intention toward using Fintech.

Perceived risk negatively affects intention to use Fintech ($\beta = -0.261$, $t = -3.491$, $p<0.05$). Negative impact of risk on intention to use a new technology has been found by previous studies (Hu et al., 2019; Sikdar, 2015; Kesharwani et al., 2012). Perceived risk can have several negative implications on intention to use Fintech. High perceived risk would reduce the intention to use due to perceived privacy, security, and reliability concerns. Thus, users are reluctant to use Fintech because when they realize that such services have major risks associated with them or are injurious, perceived risk results in delayed adoption of Fintech services among students. Perceived risk may be lowered when users decide to wait and see how others experience the technology before deciding on using it. In this study, perceived

convenience was also significantly found influencing the intention to use Fintech: $\beta = 0.362$, $t = 6.826$, $p < 0.001$.

This therefore would mean that a high level of perceived convenience could enhance the intention to use Fintech. Similar results have been observed by previous works (Ademe-Godwin & Akpan, 2023; Shankar & Rishi, 2020). That would also imply that when perceived convenience is well felt, it would increase the intention of use among Fintech users since the handling and usage are easy. The higher the perceived convenience, the lower the barriers to adoption are perceived, such as complexity, learning curve, or technical difficulties. This can lead to a greater effectiveness and efficiency in performing tasks, which may further enhance intention to use Fintech. Perceived trust was found to be positively related to intention to use Fintech, with $\beta=0.446$, $t = 4.482$, $p<0.05$.

It means that with an increase in perceived trust, the intention to use Fintech increases. This is in agreement with literature (Oloveze et al., 2023; Lien et al., 2020; Nangin et al., 2020). This result further indicates that the studied students are most likely to develop a positive intention to use Fintech when they perceive a high level of trust in Fintech or the organization providing the service. The perceived trust in Fintech reduces feelings of uncertainty and risk; thus, people are able to feel more comfortable and confident in using the technology. The perceived trust in Fintech also facilitates positive user experience, possibly leading to higher levels of satisfaction, which in turn influences one's intention to continue using Fintech.

Perceived trust was found to positively affect actual usage of Fintech ($\beta=0.504$, $t = 2.882$, $p<0.05$). This suggests that as perceived trust increases, actual usage of Fintech also rises. This aligns with existing literature (Nangin et al., 2020; Fathollahzadeh et al., 2011; Akhter et al., 2011). Essentially, when individuals feel a high level of trust in Fintech, they are more inclined to adopt and utilize it. Believing that their personal information is secure, the product is dependable, and the provider is trustworthy can lead to higher adoption rates. Additionally, an increase in perceived trust can impact long-term usage behaviors regarding Fintech. If users maintain a positive trust relationship with Fintech and its providers, they are more likely to continue using it over time.

Intention to use was also found to positively influence actual usage of Fintech ($\beta=0.271$, $t = 7.371$, $p<0.001$). This indicates that individuals who intend to use Fintech are more likely to engage with it in practice. This finding is consistent with previous studies (Senyo & Osabutey, 2020; Thusi & Maduku, 2020). A positive relationship between intention to use and actual usage suggests that if individuals perceive Fintech as user-friendly, they are more likely to use it consistently over time. Therefore, when individuals have a strong intention to use Fintech, they are more likely to navigate any challenges that may arise during its use. They may actively look for opportunities to engage with it, dedicate time and resources to learn how to use it effectively, and incorporate it into their daily lives.

Policy/managerial Implication

The findings of this study emphasize the need for Fintech firms to create products and services that are straightforward, user-friendly, and easy to navigate in order to enhance user acceptance

Ahaiwe, Nto, Nwachukwu & Uwaoma. Factors influencing fintech adoption

and adoption. It also highlights the necessity of offering user training and support to assist individuals in overcoming any perceived complexities or usability challenges. In summary, the factors driving the actual use of Fintech among university students in Abia State, Nigeria include perceived ease of use, perceived usefulness, social influence, perceived risk, perceived convenience, perceived trust, and the intention to use Fintech. Therefore, user experience and usability are essential elements that can significantly impact the adoption and success of Fintech offerings.

To promote innovation while addressing risks such as fraud, cyberattacks, and financial instability, Nigeria should adopt appropriate regulations. Given that data is often a crucial factor for Fintech, policies concerning data privacy and security will be vital. The government needs to enforce stricter regulations on how Fintech companies manage data. Additionally, to fully leverage the advantages of Fintech-driven financial inclusion, policies should aim to enhance digital literacy among consumers, particularly in regions with limited access to traditional banking services.

REFERENCES

- Ademe-Godwin, D., & Akpan, G. D. (2023). Perceived convenience and customer patronage of fintech firms in Port Harcourt. *European Scholar Journal*, 4(4), 106-115
- Ahaiwe, E., Nwachukwu, C. Peter., & Nto, C. P. (2024). Effect of Perceived convenience and perceived trust on Facebook marketplace patronage in Nigeria. *UNIZIK Journal of Marketing (UJofM)*, 1(1), 50-65
- Ahaiwe, E. O., Nwachukwu, C. P., & Nto, C. P. (2024). E-commerce Dynamics: What drives Nigerian consumers to use Facebook marketplace? *Journal of Research in Management and Social Sciences (JORMASS)*, 10(2), 53-63
- Akhter, W., Abbasi, A. S., Ali, I., & Afzal, H. (2011). Factors affecting customer loyalty in Pakistan. *African Journal of Business Management*, 5(4), 1167-1174.
- Alwi, S., Rabiatal, M. A., Masrina, N. M. S., & Irfah, N. (2019). An empirical study on the customers' satisfaction on FinTech mobile payment services in Malaysia. *International Journal of Advanced Science and Technology*, 28, 390-400.
- Arora, S., & Sandhu, S. (2018). Usage-based upon reasons: The case of electronic banking services in India. *International Journal of Bank Marketing*, 36(4), 680-700.
- Auwalu, I., Musa, S. K., Bichi, G. B., Rahma, S. U., & Yahaya, S. U. (2022). Effect of Financial Technology (FinTech) on Nigeria's Development Amid Covid-19 Recovery. *Baze University Journal of Entrepreneurship and Interdisciplinary Studies*, 1(2), 74-85
- Bansal, K., Bansal, A. & Blake, B. (2010). *Trust-Based Dynamic Web Service Composition Using Social Network Analysis*. In Proceedings of the IEEE International Workshop on Business Applications of Social Network Analysis, Bangalore, India.

- Bashir, I., & Madhavaiah, C. (2015). Consumer attitude and behavioral intention towards Internet banking adoption in India. *Journal of Indian Business Research*, 7(1), 67–102. <https://doi.org/10.1108/JIBR-02-2014-0013>
- Bélanger, F., Janine, H., & Wanda, S. (2002). Trustworthiness in electronic commerce: The role of privacy, security, and site attributes. *Journal of Strategic Information Systems*, 11, 245-270.
- Berson, I. R., Berson, M. J., & Ferron, J. M. (2002). Emerging risks of violence in the digital age: lessons for educators from an online study of adolescent girls in the United States. *Journal of School Violence*, 1(2), 51–72.
- Bhowmik, S. (2017) *Cloud computing*. Cambridge, UK: Cambridge University Press.
- Borchers. S. A. (2001). Trust in Internet shopping: A test of a measurement instrument. *Proceedings of the Association for Information Systems*, Atlanta, GA. August 2001.
- Burucuoglu, M. & Erdogan, E. (2016). An empirical examination of the relation between consumption values, mobile trust, and mobile banking adoption. *International Business Research*, 9(12), 131-142.
- Chan, R., Troshani, I., Rao Hill, S., & Hoffmann, A. (2022). Towards an understanding of consumers' FinTech adoption: The case of open banking. *The International Journal of Bank Marketing*, 40(4), 886–917. <https://doi.org/10.1108/IJBM-08-2021-0397>
- Chang, Y., Wong, S.F., Lee, H., & Jeong, S.P., (2016). *What motivates Chinese consumers to adopt fintech services: a regulatory focus theory*. In: Paper Presented at the Proceedings of the 18th Annual International Conference on Electronic Commerce: Ecommerce in Smart Connected World.
- Chawla, D., & Joshi, H. (2019). Consumer attitude and intention to adopt mobile wallet in India – an empirical study. *International Journal of Bank Marketing*, 37(7), 1590–1618. <https://doi.org/10.1108/ijbm-09-2018-0256>
- Cheng, T. E., Lam, D. Y., & Yeung, A. C. (2006). Adoption of internet banking: an empirical study in Hong Kong. *Decision Support Systems*, 42(3), 1558- 1572.
- Chin, W. W. (1998). Issues and opinion on structural equation modeling. *MIS Quarterly*, 22(1), vii-xvi. <http://aisel.aisnet.org/misq/vol22/i>
- Chiriac, C., Hurduzeu, G., Chiriac, A., & Zavera, L. (2018). Mobile payments and emerging technologies. *Annals of the University of Oradea, Economic Science Series*, 27(2), 129–139.
- Coomber, R. (1997). Using the Internet for Survey Research. *Sociological Research Online*, 2, 14–23.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13, 319-339.

Ahaiwe, Nto, Nwachukwu & Uwaoma. Factors influencing fintech adoption

De-Leon, M. V. (2019). Factors influencing behavioural intention to use mobile banking among retail banking clients. *Jurnal Studi Komunikasi*, 3(2),

Diao, Y. (2015). Online shopping behaviour among Chinese university students. *International Journal of Scientific and Research Publications*, 5, 144-154.

Dorfleitner, G., Hornuf, L., Schmitt, M. & Weber, M. (2017). *Fintech in Germany*. Cham: Springer.

Dowling, G. R., & Staelin, R. (1994). A model of perceived risk and intended risk-handling activity. *Journal of consumer research*, 21(1), 119-134.

Du, H., Zhu, G., Lv, T., & Sun, X. (2012). Factors affecting purchase intention on 3G value added services. *Jindal Journal of Business Research*, 1(2), 139-152.

Duarte, P., e Silva, S. C., & Ferreira, M. B. (2018). How convenient is it? Delivering online shopping convenience to enhance customer satisfaction and encourage e-WOM. *Journal of Retailing and Consumer Services*, 44, 161-169
<https://doi.org/10.1016/j.jretconser.2018.06.007>

Fathollahzadeh, M., Hashemi, A., & Kahreh, M. S. (2011) Designing a new model for determining customer value satisfaction and loyalty towards banking sector of Iran. *European Journal of Economics, Finance, and Administrative Sciences*, 28(1), 126-138.

Featherman, M., & Pavlou, P. (2003). Predicting e-services adoption: A perceived risk facets perspective. *International Journal of Human-Computer Studies*, 59 (4), 451-474.
[https://doi.org/10.1016/S1071-5819\(03\)00111-3](https://doi.org/10.1016/S1071-5819(03)00111-3)

Fornell, C. & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
<http://www.jstor.org/stable/3151312>

Frost, J., Gambacorta, L., Huang, Y., Shin, H. S. & Zbinden, P. (2019). BigTech and the changing structure of financial intermediation. *Economic Policy*, 34(100), 761-99

Gefen, D., & Straub, D. (1997). Gender differences in perception and adoption of e-mail: An extension to the technology acceptance model. *MIS Quarterly*, 21, 389-400

Gefen, D., Karahanna, E., & Straub, D. W. (2003) Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27, 51-90.

Giovanis, A., Athanasopoulou, P., Assimakopoulos, C., & Sarmaniotis, C. (2019). Adoption of mobile banking services. *International Journal of Bank Marketing*, 37(5), 1165-1189.
<https://doi.org/10.1108/ijbm-08-2018-0200>

Gomber, P., Robert J. K., Chris, P., & Bruce, W. W. (2018). On the FinTech revolution: Interpreting the forces of innovation, disruption, and transformation in financial services. *Journal of Management Information Systems*, 35, 220-65.

Hair, J. F., Hult, G. T., Ringle, C. M., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Thousand Oaks, CA: Sage.

- Hanafizadeh, P., Byron, W. K., & Khedmatgozar, H. R. (2014). A systematic review of Internet banking adoption. *Telematics and Informatics*, 31(3), 492-510.
- Hasan, R., Ashfaq, M. & Shao, L. (2021). Evaluating Drivers of Fintech Adoption in the Netherlands. *Global Business Review*, 1-14. <https://dx.doi.org/10.1177/09721509211027402>
- Hsu, C. L. & Lu, H. P. (2004). Why do people play on-line games? An extended TAM with social influences and flow experience. *Information and Management*, 41(7), 853-868.
- Hu, Z., Ding, S., Li, S., Chen, L., & Yang, S. (2019). Adoption Intention of Fintech Services for Bank Users: An Empirical Examination with an Extended Technology Acceptance Model. *Symmetry*, 11, 340.
- Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: a review of four recent studies. *Strategic Management Journal*, 20(2), 195-204
- Jarvenpaa, S., & Todd, P. (1997). Consumers' reactions to electronic shopping on the World Wide Web. *International Journal of Electronic Commerce*, 1(2), 59-88
- Jeong, B. K., & Yoon, T. E. (2013). An empirical investigation on consumer acceptance of mobile banking services. *Business and Management Research*, 2(1), 31-40.
- Joo, Y., Park, S., & Lim, E. (2018). Factors influencing preservice teachers' intention to use technology: TPACK, teacher self-efficacy, and technology acceptance model. *Journal of Educational Technology & Society*, 21(3), 48-59
- Kalinic, Z., & Marinkovic, V. (2015). Determinants of users' intention to adopt m-commerce: An empirical analysis. *Information Systems and E-Business Management*, 14(2), 367-387. <https://doi.org/10.1007/s10257-015-0287-2>
- Kalinic, Z., Marinkovic, V., Molinillo, S., & Liébana-Cabanillas, F. (2019). A multi-analytical approach to peer-to-peer mobile payment acceptance prediction. *Journal of Retailing and Consumer Services*, 49, 143-153. <https://doi.org/10.1016/j.jretconser.2019.03.016>
- Kaplan, R. & Mikes, A. (2016). *Risk Management - the Revealing Hand*. Working Paper, 16(102), 1-26.
- Kar, A. K. (2020). What affects usage satisfaction in mobile payments? Modelling user generated content to develop the "digital service usage satisfaction model. *Information Systems Frontiers*, 23(5), 1341-1361. <https://doi.org/10.1007/s10796-020-10045-0>
- Kesharwani, A., & Singh, S. (2012). The impact of trust and perceived risk on internet banking adoption in India. *International Journal of Bank Marketing*, 30(4), 303-322. <https://doi.org/10.1108/02652321211236923>
- Khare, A., Mishra, A., & Singh, A. B. (2012). Indian customers' attitude towards trust and convenience dimensions of internet banking. *International Journal of Services and Operations Management*, 11(1), 107. <https://doi.org/10.1504/ijssom.2012.044802>

Ahaiwe, Nto, Nwachukwu & Uwaoma. Factors influencing fintech adoption

- Khedmatgozar, R. & Shahnazi, A. (2018). The Role of Dimensions of Perceived Risk in Adoption of Corporate Internet Banking by Customers in Iran. *Electronic Commerce*, 18(2), 389–412.
- Kim, G., Shin, B., & Lee, H. G. (2009). Understanding dynamics between initial trust and usage intentions of mobile banking. *Information Systems Journal*, 19(3), 283-311.
- Kim, Y., Park, Y. J., Choi, J., & Yeon, J. (2015). An Empirical Study on the Adoption of “Fintech” Service: Focused on Mobile Payment Services. *Advanced Science and Technology Letters*. <https://doi.org/10.14257/astl.2015.114.26>
- Knutson, B. J., Beck, J. A., Kim, S. H., & Cha, J. (2007). Identifying the dimensions of the experience construct. *Journal of Hospitality Marketing & Management*, 15(3), 31-47.
- Koksal, M. H. (2016). The intentions of Lebanese consumers to adopt mobile banking. *International Journal of Bank Marketing*, 34(3), 327-346.
- Kotarba, M. (2016). New Factors Inducing Changes in the Retail Banking Customer Relationship Management (CRM) and Their Exploration by the Fintech Industry. *Foundations of Management*, 8(1), 69-78.
- Kyari, A. K. & Akinwale, Y. O. (2020). An assessment of the level of adoption of financial technology by Nigerian Banks. *African Journal of Science Policy and Innovation Management*, 1, 118-130
- Laforet, S. & Li, X. (2005). Consumers’ attitudes towards online and mobile banking in China. *International Journal of Bank Marketing*, 23(5), 362–380.
- Lee, K. C. & Chung, N. (2009). Understanding factors affecting trust in and satisfaction with mobile banking in Korea: A modified DeLone and McLean’s model perspective. *Interacting with Computers*, 21(5), 85–392.
- Lee, M. C. (2009). Factors influencing the adoption of internet banking: An integration of TAM and TPB with perceived risk and perceived benefit. *Electronic Commerce Research and Applications*, 8(3), 130-141.
- Lee, M. S. Y., McGoldrick, P. F., Keeling, K. A., & Doherty, J. (2003). Using ZMET to explore barriers to the adoption of 3G mobile banking service. *International Journal of Retail & Distribution Management*, 31(6), 340–348.
- Lee, W. (2018). Understanding Consumer Acceptance of Fintech Service: An Extension of the TAM Model to Understand Bitcoin. *Journal of Business and Management*, 20(7), 34-37
- Lee, Y. H., Hsieh, Y. C., & Hsu, C. N. (2011). Adding innovation diffusion theory to the technology acceptance model: Supporting employees' intentions to use e-learning systems. *Journal of Educational Technology & Society*, 14(4), 124-137.
- Leong, C. M., Tan, K. L., Puah, C. H., & Chong, S. M. (2020). Predicting mobile network operators users m-payment intention. *European Business Review*, 33(1). <https://doi.org/10.1108/eb-10-2019-0263>

- Liang, C., Wang, W., & Farquhar, J. D. (2009). The influence of customer perceptions on financial performance in financial services. *International Journal of Bank Marketing*, 27(2), 129-149.
- Liébana-Cabanillas, F., Japutra, A., Molinillo, S., Singh, N., & Sinha, N. (2020). Assessment of mobile technology use in the emerging market: Analyzing intention to use m-payment services in India. *Telecommunications Policy*, 44(9), 102009. <https://doi.org/10.1016/j.telpol.2020.102009>
- Liébana-Cabanillas, F., Molinillo, S., & Japutra, A. (2020). Exploring the determinants of intention to use P2P mobile payment in Spain. *Information Systems Management*, 38(2), 165–180. <https://doi.org/10.1080/10580530.2020.1818897>
- Lien, N., Doan, T.-T., & Bui, T. (2020). Fintech and Banking: Evidence from Vietnam. *The Journal of Asian Finance, Economics and Business*, 7(9), 419- 426.
- Lin, W. R., Wang, Y. H., Hung, Y. M., & Gherghina, S. C. (2020). Analyzing the factors influencing adoption intention of internet banking: Applying DEMATEL-ANP-SEM approach. *PLOS ONE*, 15(2), e0227852. <https://doi.org/10.1371/journal.pone.0227852>
- Maharsi, S., & Mulyadi, Y. (2007). Faktor-Faktor yang Mempengaruhi Minat Nasabah Menggunakan Internet Banking dengan Menggunakan Kerangka Technology Acceptance Model (TAM). *Jurnal Ekonomi Akuntansi Universitas Petra*, 18-28.
- Mehmood, S. M., & Najmi, A. (2017). Understanding the impact of service convenience on customer satisfaction in home delivery: Evidence from Pakistan. *International Journal of Electronic Customer Relationship Management*, 11(1), 23–43.
- Meixian L (2015) Convenience and online consumer shopping behaviour: A business anthropological case study based on the contingent valuation method. *Anthropologist*, 21, 8-17.
- Meyliana, M., Fernando, E., & Surjandy, S. (2019). The influence of perceived risk and trust in adoption of FinTech services in indonesia. *CommIT (Communication and Information Technology) Journal*, 13(1), 31–37. <https://doi.org/10.21512/commit.v13i1.5708>
- Mpinganjira, M. (2015). Online Store Service Convenience, Customer Satisfaction and Behavioural Intentions: A Focus on Utilitarian Oriented Shoppers. *Journal of Economics and Behavioural Studies*, 7(1), 36–49. [https://doi.org/10.22610/jebs.v7i1\(j\).561](https://doi.org/10.22610/jebs.v7i1(j).561)
- Mufarikh, M., Jayadi, R., & Sugandi, Y. (2020). Factors influencing customers to use digital banking application in Yogyakarta, Indonesia. *The Journal of Asian Finance, Economics, and Business*, 7(10), 897–907.
- Mutahar, A. M., Daud, N. M., Ramayah, T., Isaac, O., & Alrajawy, I. (2017). Integration of innovation diffusion theory (IDT) and technology acceptance model (TAM) to understand mobile banking acceptance in Yemen: The moderating effect of income. *International Journal of Soft Computing*, 12(3), 164-177.

Ahaiwe, Nto, Nwachukwu & Uwaoma. *Factors influencing fintech adoption*

Nagy, J., McGreal, R., Kennepohl, D., & Blomgren, C. (2018). Evaluation of online video usage and learning satisfaction: An extension of the technology acceptance model. *International Review of Research in Open and Distributed Learning*, 19(1), 160–185

Najib, M., Ermawati, W., Fahma, F., Endri, E., & Suhartanto, D. (2021). FinTech in the Small Food Business and Its Relation with Open Innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7, 88.

Nangin, M. A., Barus, I. R. G., & Wahyoedi, S. (2020). The effects of perceived ease of use, security, and promotion on trust and its implications on fintech adoption. *Journal of Consumer Sciences*, 5(2), 124-138. <https://doi.org/10.29244/jcs.5.2.124-138>

Nguyen, O. T. (2020). Factors affecting the intention to use digital banking in Vietnam. *The Journal of Asian Finance, Economics, and Business*, 7(3), 303–310.

Nguyen, P. N. D., Nguyen, V. T., & Vo, N. N. T. (2019). Key determinants of repurchase intention toward organic cosmetics. *The Journal of Asian Finance, Economics, and Business*, 6(3), 205–214.

Oloveze, A. O., Ugwu, P. A., Okonkwo, R. V. O., Okeke, V. C., Chukwuoyims, K., & Ahaiwe, E. O. (2022). Factors motivating end-users' behavioural intention to recommend m-health innovation: multi-group analysis. *Health Economics and Management Review*, 3, 17-31. <https://doi.org/10.21272/hem.2022.3-02>

Oloveze, A. O., Ahaiwe, E. O., Okeke, D. C., & O, C. (2023). Effect of bank customers' privacy concern on intention to adopt open banking. *Nigerian Journal of Management Sciences*, 24(2b), 116-126

Oloveze, A. O., Ogbonna, C., Ahaiwe, E., & Ugwu, P. A. (2022). From offline shopping to online shopping in Nigeria: evidence from African emerging economy. *IIM Ranchi Journal of Management Studies*, 1(1), 55-68.

Patel, K. J., & Patel, H. J. (2018). Adoption of internet banking services in Gujarat. *International Journal of Bank Marketing*, 36(1), 147–169. <https://doi.org/10.1108/ijbm-08-2016-0104>

Patil, P., Tamilmani, K., Rana, N. P., & Raghavan, V. (2020). Understanding consumer adoption of mobile payment in India: Extending meta-UTAUT model with personal innovativeness, anxiety, trust, and grievance redressal. *International Journal of Information Management*, 54, 102144. <https://doi.org/10.1016/j.ijinfomgt.2020.102144>

Pham, Q. T., Tran, X. P., Misra, S., Maskeliunas, R., & Damasevicius, R. (2018). Relationship between convenience, perceived value, and repurchase intention in online shopping in Vietnam. *Sustainability*, 10, 1-14.

Phuc, L. V., Linh, N. H., & Tuyen, D. Q. (2020). Factors Affecting the intention to Use Fintech Services in Vietnam. *Economics, Management and Business*, 275.

- Puspita, D., & Kusumawati, N. (2019). Consumer acceptance of digital bank in Indonesia: Technology Acceptance Model. *International Journal of Management and Applied Science*, 5, 2394-7926.
- Raza, A., Urner, A. & Shah, N. (2017). New determinants of ease of use and perceived usefulness for mobile banking adoption. *International Journal of Electronic Customer Relationship Management*, 11(1), 44-65.
- Rehncrona, C. (2018). Young consumers' valuations of new payment services. *International Journal of Quality and Service Sciences*, 10(4), 384-399, doi:10.1108/IJQSS-11-2017-0111.
- Riza, A. F. (2019). Customer acceptance of digital banking in Islamic bank: Study on millennial generation. *Conference on Islamic Management, Accounting, and Economics (CIMAE) Proceeding*, 2, 66-74.
- Ryu, H.-S. (2018). What makes users willing or hesitant to use Fintech?: the moderating effect of user type. *Industrial Management & Data Systems*, 118(3), 541-569. doi:<https://doi.org/10.1108/IMDS-07-2017-0325>
- Safari, K., Bisimwa, A., & Buzera, M. (2020). Attitudes and intentions toward Internet banking in an underdeveloped financial sector. *PSU Research Review*.
- Schilirò, D. (2021). Fintech in Dubai: Development and ecosystem. *International Business Research*, 14(11), 61-70. <https://doi.org/10.5539/ibr.v14n11p61>
- Senyo, P. K. & Osabutey, E. L. C. (2020). Unearthing antecedents to financial inclusion through FinTech innovations. *Technovation*, 98, 102155.
- Setiawan, B., Nugraha, D. P., Irawan, A., Nathan, R. J., & Zoltan, Z. (2021b). User Innovativeness and Fintech Adoption in Indonesia. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(3), 188. <https://doi.org/10.3390/joitmc7030188>
- Shankar, A. & Datta, B. (2018). Factors Affecting Mobile Payment Adoption Intention: An Indian Perspective. *Global Business Review*, 19(3), 72–89. <https://doi.org/10.1177/0972150918757870>
- Shankar, A., & Rishi, B. (2020). Convenience Matter in Mobile Banking Adoption Intention? *Australasian Marketing Journal*, 28(4), 273–285. <https://doi.org/10.1016/j.ausmj.2020.06.008>
- Sharma, S. K. (2017). Integrating cognitive antecedents into TAM to explain mobile banking behavioural intention: A SEM-neural network modeling. *Information Systems Frontiers*, 21(4), 815–827. <https://doi.org/10.1007/s10796-017-9775-x>
- Shrestha, D., Wenan, T., Rajkarnikar, N., & Jeong, S. R. (2020). Consumers attitude towards Internet banking services in an underdeveloped country: A case of Pokhara, Nepal. *Journal of Internet Computing and Services (JICS)*, 21(5), 75-85.

Ahaiwe, Nto, Nwachukwu & Uwaoma. Factors influencing fintech adoption

- Siegel, D., Acharya, P., & Sivo, S. (2017). Extending the technology acceptance model to improve usage & decrease resistance toward a new technology by faculty in higher education. *The Journal of Technology Studies*, 43(2), 58-69.
- Sikdar, P., Kumar, A., & Makkad, M. (2015). Online Banking Adoption: A Factor Validation and Satisfaction Causation Study in the Context of Indian Banking Customers. *The International Journal of Bank Marketing*, 33, 760–778.
- Singh, S., Sahni, M. M., & Kovid, R. K. (2020). What drives FinTech adoption? A multi-method evaluation using an adapted technology acceptance model. *Management Decision*, 58(8), 1675–1697. <https://doi.org/10.1108/md-09-2019-1318>
- Song, Y., & Kong, S. (2017). Investigating students' acceptance of a statistics learning platform using technology acceptance model. *Journal of Educational Computing Research*, 55(6), 865–897
- Stewart, H. & Jürjens, J. (2018). Data security and consumer trust in FinTech innovation in Germany. *Information & Computer Security*, 26(1), 109–128. <https://doi.org/10.1108/ICS-06-2017-0039>
- Thomas, L. D. W., Vernet, A. & Gann, D. M. (2016). Adoption readiness in service innovation: the case of digital money. *Industry and Innovation*, 23(4), 353-381, doi: 10.1080/13662716.2016.1156519.
- Thusi, P., & Maduku, D. K. (2020). South African millennials' acceptance and use of retail mobile banking apps: An integrated perspective. *Computers in Human Behaviour*, 111, 106405. <https://doi.org/10.1016/j.chb.2020.106405>
- Tran, N. A. (2021). Intention to use digital banking services of young retail customers in Vietnam. *The Journal of Asian Finance, Economics, and Business*, 8(8), 387–397.
- Venkatesh, V. & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186-204.
- Venkatesh, V. (2000). Determinants of perceived ease of use: Integrating control, intrinsic motivation, and emotion into the technology acceptance model. *Information Systems Research*, 11(4), 342–365. <https://doi.org/10.1287/isre.11.4.342.11872>
- Venkatesh, V., & Davis, F. D. (1996). A model of the antecedents of perceived ease of use: Development and test. *Decision Sciences*, 27(3), 451-481.
- Venkatesh, V., Morris, M., Davis, G., & Davis, F. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27, 425-478.
- Wu, J. H., & Wang, S. C. (2005). What drives mobile commerce?: An empirical evaluation of the revised technology acceptance model. *Information & management*, 42(5), 719-729.
- Yang, Q., Pang, C., Liu, L., Yen, D. C., & Tarn, J. M. (2015). Exploring consumer perceived risk and trust for online payments: An empirical study in China's younger generation. *Computers in Human Behaviour*, 50, 9-24.

- Yoon, C. & Lim, D. (2020) 'An empirical study on factors affecting customers' acceptance of internet-only banks in Korea. *Cogent business & management*, 7(1), 179225
- Youssef, M., Youssef, E., Anadol, Y., & Zahrani, A. (2017). Modeling customer's intention to use e-banking in Saudi Arabia: An empirical study. *International Journal of Business Innovation and Research*, 14, 239.
- Zhang, T., Lu, C., & Kizildag, M. (2018). Banking “on-the-go”: Examining consumers' adoption of mobile banking services. *International Journal of Quality & Service Sciences*, 10(3), 279–295. <https://doi.org/10.1108/ijqss-07-2017-0067>
- Zhao, Y., & Bacao, F. (2021). How does the pandemic facilitate mobile payment? An investigation on users' perspective under the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, 18(3), 1–22. <https://doi.org/10.3390/ijerph18031016>
- Zhou, T., Lu, Y., & Wang, B. (2010). Integrating TTF and UTAUT to explain mobile banking user adoption. *Computers in Human Behaviour*, 26(4), 760-767.