

Adoption of Fintech in Malaysia: An Analysis of Security, Innovation, and Perceived Benefits

Wan Razazila Wan Abdullah^{1*}, Ili Noor Amalina Binti Hisamudin²

¹Faculty of Accountancy, Universiti Teknologi MARA, Perak Branch, Tapah Campus, 35400, Tapah Road, Perak, Malaysia

²Faculty of Accountancy, Universiti Teknologi MARA, Selanfor Branch, Puncak Alam Campus, 42300, Bandar Puncak Alam, Selangor, Malaysia

*Corresponding Author

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ABSTRACT

The rapid advancements of Industrial Revolution 4.0 have transformed various aspects of daily life, particularly in financial technology (Fintech). While Fintech offers benefits such as time efficiency, transaction flexibility, and service convenience, security risks associated with mobile applications remain a significant concern for both users and innovators. As the demand for secure digital financial solutions grows, driven by a tech-savvy population, innovations such as advanced encryption technologies and the widespread adoption of mobile apps and digital wallets have enhanced the security and trustworthiness of online transactions. This study aims to explore the key factors influencing Fintech usage from the perspective of individuals, with a focus on a youthful, tech-savvy population in Klang Valley, Malaysia. Data was collected through an online survey of 300 respondents and analyzed using SPSS (Version 27) through descriptive and multiple regression methods. The results indicate that security, innovativeness, and perceived benefits are significant predictors of Fintech usage in Klang Valley, Malaysia. These findings suggest that financial institutions play a pivotal role in promoting digital literacy and fostering greater Fintech adoption. Furthermore, the government should accelerate improvements in ICT infrastructure, expand mobile broadband access, support Fintech start-ups, provide regulatory sandboxes, and encourage financial institutions to develop innovative solutions for underserved populations. These insights are valuable for regulators, policymakers, financial institutions, and the public, highlighting the importance of building user trust through enhanced security measures and promoting the practical benefits of Fintech services. Future research should examine additional factors such as financial literacy and regulatory awareness, and longitudinal studies could offer a deeper understanding of the evolving role of Fintech in daily life.

Keywords: Fintech, Digital Literacy, Mobile Application Security, ICT Infrastructure, Financial Innovation

INTRODUCTION

The term Financial Technology (FinTech) encompasses a broad range of technological innovations that aim to enhance, streamline, and revolutionize the delivery of financial services. FinTech has emerged as a transformative force within the global financial landscape, influencing everything from payment processing and lending to investment management and insurance. This sector has witnessed unprecedented growth in recent years, driven by advancements in technology, shifts in consumer behavior, and increasing regulatory support.

Globally, the FinTech industry has expanded rapidly, with investments reaching record levels. According to a report by KPMG (2022), global Fin Tech investment totaled approximately \$210 billion in 2021, with significant contributions from regions such as North America, Europe, and Asia. The rise of digital payments, fueled by the proliferation of smartphones and high-speed internet access, has been a key driver of this growth.

Innovations such as mobile wallets, contactless payments, and blockchain technology have reshaped how consumers and businesses engage in financial transactions, leading to greater convenience and efficiency (Zhao et al., 2022).

The COVID-19 pandemic has further accelerated the adoption of FinTech solutions worldwide. Lockdowns and social distancing measures forced many consumers and businesses to rely on digital services, resulting in a significant surge in online transactions and financial services usage. A survey conducted by McKinsey & Company (2021) found that consumer adoption of digital financial services increased by 20-30% during the pandemic, highlighting the urgent need for innovative solutions in a rapidly changing environment.

Regulatory frameworks have also played a crucial role in fostering FinTech growth. Many countries have embraced regulatory sandboxes, allowing FinTech startups to test their products in a controlled environment while ensuring compliance with financial regulations (Arner et al., 2020). For instance, the UK's Financial Conduct Authority (FCA) has established a regulatory sandbox that has facilitated numerous innovations in areas such as payments, lending, and investment management.

The global FinTech landscape is characterized by a diverse range of services and players. Notable sectors within FinTech include payments, lending, wealth management, insurance, and blockchain technology. Companies like PayPal, Square, and Revolut have disrupted traditional payment systems, while peer-to-peer lending platforms such as Lending Club and Funding Circle have provided alternative financing options for consumers and small businesses. Additionally, the rise of Robo-advisors has transformed investment management, offering automated and algorithm-driven financial planning services to a broader audience (Błach et al., 2021).

Furthermore, the emergence of Reg Tech (regulatory technology) solutions highlights the growing intersection between technology and regulatory compliance. Reg Tech companies leverage technology to help financial institutions comply with regulations more efficiently, reducing costs and improving operational transparency (Deloitte, 2021).

In conclusion, the global FinTech landscape is dynamic and rapidly evolving, driven by technological advancements, changing consumer behaviors, and supportive regulatory environments. As FinTech continues to reshape the financial services industry, understanding its impact on individual users and broader economic trends will be critical for stakeholders across the financial ecosystem.

BACKGROUND ON FINTECH IN MALAYSIA

The Financial Technology (FinTech) industry in Malaysia has experienced rapid growth and transformation over the past decade, positioning the country as a key player in the Southeast Asian financial landscape. Malaysia's FinTech ecosystem is characterized by innovation, diversity, and increasing adoption of digital financial services, driven by a confluence of technological advancements, regulatory support, and evolving consumer preferences.

The rise of FinTech in Malaysia can be attributed to several key developments. Firstly, the proliferation of smartphones and high-speed internet has significantly enhanced access to financial services, enabling a larger segment of the population to engage with digital platforms (Khan et al., 2022). This trend has been further accelerated by the COVID-19 pandemic, which prompted a surge in online transactions as consumers and businesses sought safe and convenient alternatives to traditional banking methods (Hassan et al., 2021).

Regulatory bodies, particularly Bank Negara Malaysia (BNM), have played a pivotal role in fostering a conducive environment for FinTech innovation. BNM's proactive approach includes the issuance of the Financial Technology Regulatory Sandbox, which allows FinTech companies to test their products and services in a controlled environment while ensuring compliance with relevant regulations (Bank Negara Malaysia, 2016). Additionally, the central bank's Digital Economy Blueprint outlines strategies for enhancing Malaysia's digital economy, emphasizing financial inclusion and the promotion of digital payment systems (Bank Negara Malaysia, 2021).

Key players in the Malaysian FinTech ecosystem encompass a range of sectors, including e-wallets, payment systems, peer-to-peer lending, and Islamic FinTech. Notable e-wallet providers such as Grab Pay, Touch 'n Go eWallet, and Boost have revolutionized the way consumers transact, offering seamless and secure payment options for everyday purchases (Cruz & Pereira, 2020). In the lending space, platforms like Funding Societies and Peoplender facilitate access to financing for small and medium-sized enterprises (SMEs), addressing a significant gap in traditional banking services (Zahari et al., 2020).

Furthermore, the emergence of Islamic FinTech reflects Malaysia's unique positioning as a global hub for Islamic finance. Companies such as Ethis and Wahed Invest offer Sharia-compliant investment and crowdfunding solutions, catering to the growing demand for ethical and sustainable financial products among Malaysian consumers (Khan & Sadiq, 2021).

The FinTech industry in Malaysia is thriving, driven by technological advancements, supportive regulatory frameworks, and a diverse range of innovative players. As the sector continues to evolve, understanding individual perspectives on FinTech usage will be essential in leveraging its full potential to enhance financial inclusion and economic growth in the country. The pandemic in March 2020 accelerated the adoption of Fintech applications due to government-imposed movement restrictions, pushing banks and financial institutions to operate virtually and encouraging customers to use digital platforms. This shift allowed banks to expand their digital offerings with enhanced features and security measures. In response to the growing Fintech trend, Bank Negara Malaysia (BNM) and Malaysia Digital Economy Corporation (MDEC) launched the Fintech Booster in August 2020 to support Fintech development. At the end of 2020, BNM issued a Policy Document on Licensing Framework for Digital Banks, paving the way for digital banking and Neobank establishments in Malaysia. In 2021, Money Lion's Foong Chee Mun became the first Malaysian Fintech founder on the NYSE. In April 2022, five digital bank licenses were awarded to consortia under the Financial Services Act 2013 and Islamic Financial Services Act 2013, marking a significant milestone in Malaysian Fintech history. Subsequently, the Prime Minister launched Malaysia Digital initiatives, led by MDEC, to further enhance the Fintech business environment (Hamid, Suria, Jasni, 2024).

Although many researchers and practitioners believe Fintech can revolutionize the financial industry, its adoption remains uncertain. Skepticism persists among users due to significant risks. Key barriers to adoption include financial risks (such as potential losses and additional fees), regulatory uncertainties, security and privacy vulnerabilities, and operational concerns within Fintech companies. Customers weigh the expected value of adopting Fintech by considering both its benefits and risks, ultimately deciding to adopt only if the perceived benefits outweigh the associated risks (Ryu, 2018)

Fintech, encompassing technological innovations applied to the financial sector, has significantly transformed financial services by integrating information and communication technology (Gomber, Koch, & Siering, 2017). Its evolution from the introduction of credit cards in the 1950s to modern applications like mobile banking and digital wallets illustrates a continuous advancement in how financial transactions are conducted. In Malaysia, this evolution is marked by increased adoption of e-payments and digital banking, with a notable surge in Fintech usage driven by advancements in artificial intelligence and the impacts of the COVID-19 pandemic (Alam et al., 2021; Huei et al., 2018; Rafiuddin, 2019). Despite the promising advancements, skepticism persists among users due to perceived risks, including financial uncertainties, regulatory issues, and security concerns (Ryu, 2018).

Research Gap

Despite the substantial advancements in Fintech and its increasing adoption in various regions, particularly in Malaysia, there remains a critical gap in understanding the individual user perspective, especially among tech-savvy populations. Most prior research has focused on technological, regulatory, and institutional factors influencing Fintech adoption (Ryu, 2018; Alam et al., 2021). However, fewer studies have delved into the personal, psychological, and demographic factors driving individual usage, particularly within a rapidly growing market like Malaysia. While Fintech innovations such as e-wallets and digital banking platforms have gained prominence, user concerns about security risks and privacy vulnerabilities remain underexplored (Khan et al., 2022).

Moreover, studies that focus on the Malaysian context are limited in integrating local perspectives with global trends. For instance, previous works often emphasize technical capabilities and innovations (Hassan et al., 2021), but lack comprehensive insights into the behavioral factors—such as perceived benefits, security concerns, and innovation acceptance—that are critical for understanding actual usage. This is particularly important given Malaysia's push towards a digital economy, driven by government initiatives and regulatory support, such as the introduction of digital banking licenses (Hamid, Suria, Jasni, 2024). Yet, the uncertainty around user adoption, especially within Malaysia's diverse demographic segments, presents a crucial gap that this study seeks to address.

This research fills the gap by investigating how security, innovation, and perceived benefits influence individual Fintech adoption in Malaysia's Klang Valley region. It also aims to contribute by linking these factors to broader adoption frameworks and enhancing the understanding of personal attitudes towards Fintech in a region at the forefront of technological and financial integration. Additionally, while some studies (Cruz & Pereira, 2020) highlight Fintech growth globally, the specific cultural and behavioral contexts of Southeast Asia, particularly Malaysia, remain underexplored, presenting an opportunity for this research to provide a more localized analysis.

The remainder of the paper is structured as follows: Section 2 reviews the existing literature on Financial Technology (Fintech), highlighting key trends, methodologies, and research gaps. Section 3 provides a detailed explanation of the research design and methodology. Section 4 presents and discusses the findings from the data analysis, emphasizing significant patterns, correlations, and the impact of Fintech usage on individual financial behaviors. Finally, Section 5 summarizes the results, offers conclusions on the influence of Fintech on personal finance management, and provides recommendations for future research and practical implications for enhancing Fintech applications and user experiences.

LITERATURE REVIEW

The Fintech sector in Malaysia is experiencing rapid development, offering both significant opportunities and challenges. Notably, the number of Fintech startups is increasing, driven by initiatives like those from the Malaysian Digital Economy Corporation (MDEC). MDEC focuses on stimulating investments in digital industries, enhancing digital skills among Malaysians, and supporting technology-driven enterprises (MDEC, 2022). This growth positions Malaysia as a rising hub for Fintech, aligning with global trends. Despite this, traditional banks face internal and external obstacles in adopting Fintech due to entrenched banking cultures and risk aversion, with security concerns remaining a top priority (Yusoff et al., 2022; Mohsin, Ahmad, & Chan, 2022).

Cybersecurity remains a critical concern for both Fintech companies and banks. The country faced an average of 84 million cyberattacks daily in 2022, and incidents of fraud and data breaches are on the rise (Hui, 2023). Institutions such as Cyber Security Malaysia (CSM) and the Malaysian Communications and Multimedia Commission (MCMC) continue to handle thousands of incidents related to phishing, malware, and other cyber threats (NSC, 2022). A major case in 2023 highlighted a business that lost RM1.9 million to hackers, demonstrating the pressing need for robust cybersecurity measures to support Fintech growth (The Star, 2023). Moreover, the ease of launching Fintech firms introduces heightened competition, with traditional banks remaining dominant players in the industry, posing additional barriers for emerging startups (Mohsin, Ahmad, & Chan, 2022).

Fintech's rise in Malaysia, while promising, is also fraught with concerns around consumer protection and data privacy. Issues with Malaysia's legal frameworks not adequately addressing these risks cause hesitation among users (Urus & Mohamed, 2022). In comparison to Western countries, where Fintech adoption has surged (Khraim et al., 2011), Malaysia's Fintech sector is still in its formative stages (Cheah et al., 2011). Even though a study by PricewaterhouseCoopers (2016) indicated openness toward Fintech services in Malaysia, 74% of the population remains cautious about using digital platforms, particularly due to unfamiliarity and security concerns (Venkatesh & Bala, 2008).

One significant challenge to the expansion of Fintech in Malaysia is the digital skills gap. The sector's

development depends heavily on a workforce adept in digital technologies, yet the shortage of skilled personnel presents an ongoing issue (The Edge Malaysia, 2023; Urus & Mohamed, 2021). Moreover, younger Malaysians, who are more frequent users of Fintech, often underestimate the importance of cybersecurity, making them vulnerable to cyberattacks (Muniandy & Samsudin, 2017).

Globally, Fintech has transformed financial services, particularly through the integration of technologies such as blockchain, artificial intelligence (AI), and mobile banking (Musabegovic et al., 2019; Vives, 2017). These innovations streamline services, improve security, and enhance risk management, although they also bring regulatory challenges and concerns about financial stability (Cumming, Johan, & Reardon, 2023; Knewtson & Rosenbaum, 2020). In Malaysia, these concerns are particularly acute, with regulatory frameworks struggling to keep pace with technological advancements (Suryono et al., 2020). Nonetheless, innovations like digital payments and blockchain have shown potential for improving transparency and operational efficiency in financial services (Zeidy, 2022; Anyfantaki, 2016).

Consumer behavior plays a crucial role in Fintech adoption, with millennial users being particularly drawn to its ease of use and convenience (Pertiwi & Purwanto, 2021). In regions with limited banking infrastructure, Fintech provides more accessible financial services, reducing costs and improving efficiency (AlMomani & Alomari, 2021). However, security remains a pressing concern, with users wary of data breaches (Rani, 2021). Countries like Indonesia illustrate how regulatory frameworks and technological advances shape Fintech growth, suggesting that similar strategies could benefit Malaysia (Sartika et al., 2021).

A variety of factors influence Fintech adoption, including financial literacy, perceived convenience, security concerns, regulatory support, and trust in technology and institutions. Financial literacy is particularly important in fostering adoption, with literate individuals better able to comprehend the risks and benefits of Fintech (Rani, 2021; Hamidah et al., 2020). Malaysia continues to grapple with low levels of financial literacy, which stymies broader engagement with Fintech services (Hussein, 2020).

Perceived convenience is another driver of adoption, as users value easy access to financial services via digital platforms. The integration of Fintech into daily financial routines has improved customer experiences and promoted broader usage (Shaikh et al., 2020). However, without adequate data protection and transparent security protocols, consumer trust in these services will remain low, highlighting the importance of security in adoption decisions (Siska, 2022).

Finally, regulatory support and trust in institutions play critical roles in shaping Fintech adoption. Malaysia's regulatory authorities, such as Bank Negara, have introduced initiatives aimed at reducing consumer risks and fostering trust in Fintech services (Lavrinenko et al., 2023; Naifar, 2019). As the sector continues to grow, ensuring that regulatory frameworks support safe and reliable Fintech adoption will be essential. In summary, Fintech adoption in Malaysia is influenced by a complex interplay of factors, including financial literacy, perceived convenience, security concerns, and regulatory support. As Malaysia's Fintech sector continues to evolve, addressing these challenges will be key to fostering an inclusive and secure financial ecosystem.

Hypotheses Development

The emergence of Financial Technology (FinTech) has transformed the financial landscape, prompting extensive research into the factors influencing its adoption and usage. This section presents the hypotheses guiding this study, focusing on the relationships between security, innovativeness, perceived benefits, and the usage of FinTech services.

Security is a paramount concern for consumers engaging with FinTech services. Numerous studies have identified a direct link between perceived security and user adoption of FinTech solutions. Almashhadani and Almashhadani (2022) assert that users often hesitate to utilize digital financial services due to fears of data breaches and fraudulent activities. As users become more aware of potential risks, their trust in these platforms is significantly affected. A strong perception of security enhances this trust, which is crucial for encouraging the adoption of FinTech platforms (Hussein, 2020). Consequently, as security measures become more robust and transparent, users are more likely to engage with FinTech solutions.

Cybersecurity concerns pose a significant challenge for the banking sector, particularly with the widespread adoption of information technology applications in e-banking (Hussain et al., 2020). These concerns encompass various issues, including cyber-attacks on customer data, account hijacking, data message fraud, and breaches of customer privacy and financial transaction secrecy. As technology advances, data security becomes increasingly critical, making cybersecurity a key aspect of information security. The integration of smart devices, mobile technologies, and the internet further underscores the importance of cybersecurity across different contexts.

Building on the previous research that highlights the significance of security in the adoption of financial technology, the following hypothesis is proposed:

H1: There is a significant positive relationship between security and the usage of FinTech.

Innovativeness is another critical driver of FinTech adoption, as the ability of FinTech solutions to provide unique and advanced features significantly influences user engagement. Puschmann (2017) highlights that innovative offerings, such as advanced payment systems and personalized financial services, attract users who seek modern solutions to their financial needs. As consumers become more aware of the capabilities of new technologies, research indicates a growing demand for services that leverage these advancements to enhance their financial experiences (Cumming, Johan, & Reardon, 2023). Therefore, it is posited that a higher level of perceived innovativeness in FinTech services positively correlates with increased usage.

In addition to the general perception of innovativeness, individual user innovativeness plays a pivotal role in the adoption of FinTech services. User innovativeness is defined as an individual's willingness to try out new technologies (Lu et al., 2005). According to Hu et al. (2019), this characteristic reflects each person's acceptance of novel products, technological innovations, or new services. Consumers exhibiting a high degree of innovativeness are typically eager to experiment with FinTech solutions, demonstrating a readiness to embrace new technologies and an aspiration to be early adopters of the latest innovations. Previous studies have shown a positive correlation between user innovativeness and technology adoption (Hu et al., 2019; Morosan & DeFranco, 2014).

Building upon this research, the following hypothesis is proposed:

H2: There is a significant positive relationship between innovativeness and the usage of FinTech.

Perceived benefits associated with FinTech services play a vital role in influencing user adoption. Research consistently demonstrates that users are motivated to adopt FinTech solutions primarily due to their convenience, efficiency, and cost-effectiveness (Knewtson & Rosenbaum, 2020). For instance, Shaikh et al. (2020) found that when users recognize tangible benefits - such as reduced transaction times and enhanced financial accessibility - their likelihood of utilizing FinTech services increases significantly.

Moreover, the ability of FinTech to streamline processes and provide users with greater control over their financial activities contributes to a more favorable perception of these services. As users become aware of the advantages offered by FinTech solutions, such as lower fees and faster service delivery, their willingness to engage with these platforms is likely to grow. Thus, it can be posited that a positive perception of the benefits associated with FinTech services has a significant impact on their usage.

Based on this understanding, the following hypothesis is proposed:

H3: There is a significant positive relationship between perceived benefits and the usage of FinTech.

The development of these hypotheses is grounded in existing literature that emphasizes the significance of security, innovativeness, and perceived benefits as key determinants of FinTech usage. Investigating these relationships will provide valuable insights into enhancing user engagement with FinTech solutions, ultimately contributing to broader financial inclusion and innovation in the sector.

This study significantly contributes to the existing body of knowledge on Fintech adoption by addressing critical gaps identified in the literature. Despite the rapid development of the Fintech sector in Malaysia, there remains a lack of comprehensive understanding regarding the factors influencing its adoption. This research aims to fill this gap by examining the relationships between security, innovativeness, and perceived benefits

with the usage of Fintech. By exploring these factors, the study provides valuable insights into consumer attitudes and behaviors towards Fintech, particularly in the Malaysian context where digital transformation is still in its early stages. Additionally, the research highlights the importance of cybersecurity, user innovativeness, and the tangible benefits of Fintech services in driving adoption. These findings can inform policymakers, financial institutions, and Fintech companies in developing targeted strategies to enhance Fintech adoption, thereby fostering a more inclusive and secure digital economy in Malaysia.

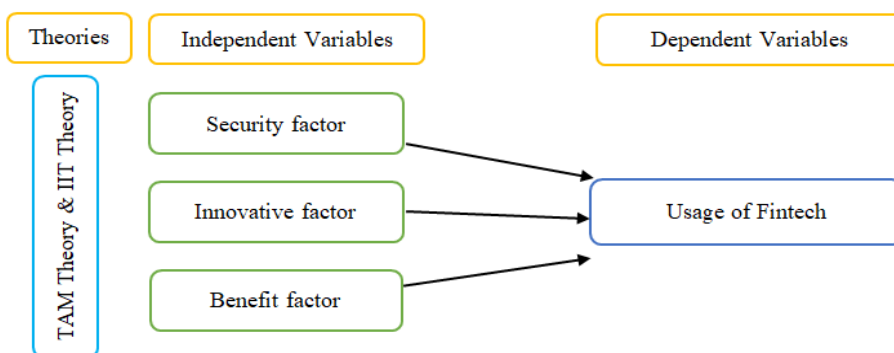
RESEARCH METHODOLOGY

The research framework illustrated in Figure 1 employs a combination of the Technology Acceptance Model (TAM) and the Innovation Integration Theory (IIT) to analyze the factors influencing the usage of Financial Technology (FinTech). This integrated approach allows for a comprehensive examination of how various determinants, such as security, innovativeness, and perceived benefits, impact user engagement with FinTech services. This approach aligns with established research models in the FinTech domain, which emphasize the importance of these constructs in shaping user behavior (Puschmann, 2017; Almashhadani & Almashhadani, 2022).

In this framework, three independent variables are identified: security factor, innovative factor, and benefit factor. These variables were chosen based on their critical influence on FinTech adoption and usage, as supported by prior research. The security factor addresses the importance of perceived safety and trustworthiness in FinTech platforms, as users are more likely to engage with services that they believe protect their personal and financial information (Hussain et al., 2020). Previous studies (e.g., Ryu, 2018; Davis, 1989) have shown that perceived security significantly influences technology adoption, especially in financial sectors where sensitive data is involved. The innovative factor emphasizes the role of cutting-edge technologies and unique features that enhance user experiences, making FinTech services more appealing (Cumming, Johan, & Reardon, 2023). Literature (Kou et al., 2021) on FinTech adoption highlights innovation as a key driver, especially in developing markets where technology adoption is linked to modernity and convenience. Lastly, the benefit factor captures the perceived advantages of using FinTech solutions, including convenience, efficiency, and cost-effectiveness, which can significantly drive user adoption (Shaikh et al., 2020). This aligns with previous research (Chuang et al., 2022) emphasizing the significance of perceived usefulness in technology adoption decisions.

This framework hypothesizes that these independent variables—security, innovation, and perceived benefits - have a positive influence on the dependent variable, FinTech usage. By employing this methodology, the research aims to elucidate the relationships between these factors, thereby providing valuable insights into the dynamics of FinTech adoption.

Figure 1: Research Framework



Source: Developed by authors

Data Collection and Sample Selection

To assess the factors influencing the usage of Financial Technology (FinTech) from an individual perspective, a quantitative approach was adopted to statistically analyze numerical data obtained through survey questionnaires. This method was selected due to its ability to provide empirical evidence of the relationships

between variables, allowing for more robust conclusions (Knewtson & Rosenbaum, 2020). The questionnaire was adapted from prior studies (Ryu, 2018) and tailored to capture the key constructs relevant to FinTech usage in developing markets, including Malaysia. This ensures that the research is grounded in a context-specific understanding of FinTech adoption, where digital transformation is still in its early stages.

Instrument Validation

A two-phase validation process was implemented to ensure the questionnaire's validity and reliability. Initially, content validity was established through expert review. Three experts in FinTech and financial technology evaluated the draft questionnaire, ensuring that the questions adequately covered the study's objectives. Their feedback prompted revisions that improved clarity and relevance, aligning the instrument with existing Subsequently, construct validity was assessed through a pilot study involving 30 participants. The pilot study aimed to identify ambiguities or issues with the items, resulting in further adjustments to enhance the questionnaire's effectiveness in measuring the intended constructs.

Reliability Testing

Reliability testing was conducted using Cronbach's alpha coefficient to evaluate the internal consistency of the questionnaire. A Cronbach's alpha value of 0.70 or higher was considered acceptable, indicating that the items within each section consistently measured the same underlying construct. The results confirmed that the data met this reliability threshold, ensuring consistency across responses (Hu et al., 2019).

Data Collection

The finalized questionnaire was distributed online via Google Forms, utilizing distribution channels such as WhatsApp and email. A five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) was employed to measure respondents' attitudes and perceptions. The questionnaire comprised five main sections: demographic information; the effects of security, innovativeness, and perceived benefits on FinTech usage; and individuals' perspectives on the usage of FinTech. The survey targeted individuals aged 21 and above residing in Shah Alam, Selangor, Malaysia, aligning with the research focus on a developing market where digital financial services are growing rapidly (Puschmann, 2017).

Sample size determination followed Roscoe's (1975) guidelines for quantitative research, ensuring sufficient statistical power for the analyses. A probability sampling method was employed to ensure the representativeness of the sample, targeting respondents from the Klang Valley due to its economic significance and diverse demographic, which is representative of Malaysia's broader FinTech user base.

Data Analysis

Upon collection, the data were assessed for normality, confirming that they were suitable for subsequent statistical analyses. Descriptive statistics, correlation analysis, and regression analysis were employed to test the proposed hypotheses (H1, H2, H3). These statistical methods are commonly used in FinTech adoption research to uncover the relationships between independent variables (security, innovativeness, and perceived benefits) and the dependent variable (usage of FinTech) (Shaikh et al., 2020; Hu et al., 2019).

The results of this analysis will provide critical insights into the determinants of FinTech adoption in Malaysia, helping policymakers and practitioners enhance the security, innovation, and benefits of their platforms to drive greater user engagement.

RESULTS AND DISCUSSION

Descriptive analysis

Descriptive statistics are essential in data analysis, enabling a comprehensive understanding of key characteristics within a dataset. This study uses descriptive analysis to examine the demographic distribution and patterns related to Financial Technology (FinTech) usage among individuals in Shah Alam, Selangor,

Malaysia. This section presents critical insights into how variables such as gender, age, education, employment status, and familiarity with FinTech relate to FinTech adoption.

Table 1: Descriptive Analysis for Presenters

Gender of respondents:	Frequency	Percentage (%)
Male	83	32.5%
Female	172	67.5%
Age of respondent of respondents:		
21 -30 years old	135	52.9%
31- 40 years old	97	38.0%
41 - 50 years old	23	9.0%
51 years old onwards	0	0%
Race		
Malay	177	69.4%
Chinese	31	12.2%
Indian	33	12.9%
Others	14	5.5%
Academic Qualification		
SPM	4	1.6%
Diploma	59	23.1%
Bachelor’s Degree	160	62.7%
Master’s Degree	32	12.5%
Doctor of Philosophy	0	0%
Occupation		
Private Sector Worker	189	74.1%
Public Sector Worker	19	7.5%
Self-Employed	47	18.4%
Unemployed	0	0%
Fintech Familiarity		
Yes	200	78.4%
No	55	21.6%

Source: Developed by authors

Table 1 presents the demographic characteristics of respondents participating in this study on FinTech usage in

Shah Alam, Selangor, Malaysia. The sample consisted of 172 females (67.5%) and 83 males (32.5%), indicating a higher level of engagement among women in FinTech services. The age distribution revealed that 135 participants (52.9%) were aged 21-30, 97 participants (38.0%) were aged 31-40, and 23 participants (9.0%) fell within the 41-50 age range, with no respondents aged 51 and above. This trend suggests that younger individuals are more inclined to engage with FinTech services, consistent with global patterns of tech-savvy younger generations adopting new financial technologies.

In terms of ethnicity, the majority of respondents identified as Malays (177, 69.4%), followed by Indians (33, 12.9%), Chinese (31, 12.2%), and individuals from other racial backgrounds (14, 5.5%). This distribution reflects the general ethnic composition of the Malaysian population, particularly within urban centers like the Klang Valley. Regarding educational qualifications, 160 respondents (62.7%) held bachelor’s degrees, 59 (23.1%) possessed diplomas, 32 (12.5%) had master’s degrees, and 4 (1.6%) held SPM certificates. The high level of education among participants suggests that FinTech users are generally well-educated, which may enhance their ability to understand and utilize complex financial technologies.

Employment status indicated that 189 respondents (74.1%) were employed in the private sector, 19 (7.5%) in the public sector, and 47 (18.4%) were self-employed. This suggests a greater inclination towards using FinTech services among private sector employees and entrepreneurs, likely due to their need for flexible and innovative financial solutions in dynamic business environments. With respect to FinTech familiarity, 200 respondents (78.4%) reported being familiar with FinTech, while 55 (21.6%) were not. This high level of familiarity underscores the growing penetration and acceptance of FinTech within the Klang Valley, highlighting significant opportunities for further growth and adoption.

Overall, the demographic profile indicates that FinTech services in the Klang Valley are predominantly utilized by young, well-educated individuals working in the private sector, who exhibit a high level of familiarity with these technologies. These insights are crucial for stakeholders in the FinTech industry to tailor their products and services effectively to meet the needs of their primary user base.

Regression Analysis

Table 2: Regression Analysis

Variable	Unstandardized Coefficients	Std Error	t-stat	p-value	VIF
Constant	1.938	0.321	6.034	<.001	
Security	-0.122	0.052	-0.2355	0.019	1.038
Innovativeness	0.219	0.067	3.274	0.001	1.092
Benefit	0.420	0.049	8.634	<.001	1.053
R (R ²)	0.543 (0.286)				
F-statistic (p-value)	34.958(0.000)				

Source: Developed by authors

This study investigates the relationships between perceived benefits, security, innovativeness, and the usage of FinTech services. A multiple regression analysis was conducted to determine the strength of these relationships, and the findings are summarized in Table 2. The analysis revealed a moderate positive correlation (R = 0.543) between the predictors (perceived benefits, security, and innovativeness) and FinTech usage. The R² value of 0.295 indicates that approximately 29.5% of the variance in FinTech adoption can be explained by these factors, demonstrating that these predictors have a meaningful impact on Fin Tech usage.

Perceived Benefits

Perceived benefits emerged as the most significant positive predictor of FinTech usage (coefficient = 0.420, p

< 0.001). This finding is consistent with previous studies, such as Shaikh et al. (2020), who demonstrated that the convenience, efficiency, and cost-effectiveness of FinTech services are primary drivers of adoption. Similarly, Knewton and Rosenbaum (2020) emphasize that users are drawn to FinTech because of tangible advantages like faster transaction times and better financial management tools. These studies corroborate the current research, affirming that enhancing users' perceptions of the benefits offered by FinTech services is key to promoting their widespread adoption. This finding aligns with the global push towards digital financial inclusion, where perceived value is critical in overcoming resistance to technological innovations (Venkatesh et al., 2021).

Security

Interestingly, the analysis revealed a negative relationship between security and FinTech usage (coefficient = -0.122, $p = 0.019$). While security is typically seen as a facilitator of FinTech adoption, this study suggests that heightened awareness of cybersecurity risks can lead to hesitation in using FinTech services. This result aligns with research by Hussain et al. (2020), which indicates that consumers often hesitate to adopt digital financial solutions due to concerns about data breaches and fraud. Almashhadani and Almashhadani (2022) also found that as users become more cognizant of security risks, they may become more cautious in adopting new financial technologies. This negative association highlights the importance of addressing security concerns transparently and building user trust to mitigate the barriers posed by fear of cyber threats. Given the rapid evolution of digital finance, this issue must be managed carefully to foster greater consumer confidence.

Innovativeness

The study also found a positive and significant relationship between innovativeness and FinTech usage (coefficient = 0.219, $p = 0.001$). This result is in line with findings from Puschmann (2017) and Hu et al. (2019), which emphasize that individuals who perceive FinTech solutions as innovative are more likely to adopt them. Innovations such as advanced payment systems, personalized financial services, and AI-driven financial management tools attract tech-savvy users eager to explore new financial solutions. The significance of this relationship suggests that fostering a perception of continuous innovation in FinTech services will be instrumental in driving user engagement and adoption. This finding resonates with research by Morosan and DeFranco (2014), who found that higher individual innovativeness leads to earlier adoption of technology, which is critical in competitive digital markets.

Justification of Findings and Comparative Analysis

The findings of this study align with broader trends in FinTech adoption across different contexts. For instance, Cumming, Johan, and Reardon (2023) demonstrated that perceived benefits are crucial in encouraging FinTech usage in Western markets, particularly when these services provide tangible advantages over traditional banking. However, this study's unique contribution lies in its focus on the Klang Valley region, where security concerns seem to play a more significant role in inhibiting adoption. This contrasts with studies conducted in regions like Europe and the US, where strong regulatory frameworks often mitigate such concerns (Gomber et al., 2017). The negative relationship between security and adoption found here underscores the importance of addressing regional variations in user perceptions and the need for more robust local cybersecurity measures.

Additionally, the finding that innovativeness positively influences FinTech adoption is consistent with research from Hu et al. (2019) and Puschmann (2017), suggesting that this driver of adoption is universal across different regions. However, the magnitude of this relationship may vary depending on the technological readiness of the population. In Malaysia, where digital transformation is still in progress, this factor plays a critical role in capturing the attention of early adopters. The results offer valuable insights into the factors influencing FinTech adoption in the Klang Valley. While perceived benefits and innovativeness positively drive usage, security concerns act as a deterrent. These findings suggest that addressing security risks while highlighting the innovative features and benefits of FinTech services is key to fostering greater adoption. Future research could explore the underlying causes of security concerns in greater depth and investigate additional variables, such as regulatory factors, that may impact FinTech usage.

CONCLUSION

The rise of FinTech has transformed the financial sector by offering enhanced convenience, accessibility, and affordability through mobile and online platforms. Advanced technologies, such as artificial intelligence (AI), have strengthened security and streamlined operations. Despite these innovations, challenges such as cybersecurity risks and regulatory barriers continue to limit broader adoption. This study examined consumer attitudes toward FinTech in the Klang Valley, Malaysia, focusing on the impact of perceived benefits, security concerns, and innovativeness on usage.

Key insights reveal that FinTech adoption in this region is primarily driven by younger, well-educated individuals, particularly those employed in the private sector, who display high familiarity with financial technologies. This demographic trend mirrors global patterns, where younger and more tech-savvy populations are early adopters of FinTech innovations. Understanding these characteristics is vital for FinTech providers seeking to optimize their products and services to cater to their core user base.

The regression analysis confirmed that perceived benefits, such as convenience and efficiency, significantly boost FinTech adoption, emphasizing the need for service providers to highlight the practical improvements their offerings bring to users. However, the negative relationship between security concerns and FinTech usage, despite being statistically significant, indicates that cybersecurity and data privacy issues are substantial barriers to adoption. These concerns must be proactively addressed to build user trust and ensure wider acceptance of FinTech services.

RECOMMENDATIONS

Enhancing User Trust through Improved Security

Given the negative association between security concerns and FinTech adoption, FinTech providers should prioritize implementing robust security protocols. Regular security audits, transparent data protection policies, and the use of advanced encryption methods could alleviate user concerns about privacy and cybersecurity. Educating users on how their data is protected and the steps taken to ensure secure transactions may further foster trust.

Highlighting Perceived Benefits

As perceived benefits are a key driver of FinTech adoption, providers should actively communicate the convenience, efficiency, and time-saving aspects of their services. Marketing campaigns and user tutorials should emphasize these tangible advantages, ensuring that users fully understand how FinTech solutions improve their financial management experience.

Innovating to Attract Tech-Savvy Users

With a positive correlation between innovativeness and adoption, FinTech companies should continuously innovate by incorporating cutting-edge technologies like AI, blockchain, and machine learning into their platforms. These innovations can attract early adopters who value technology-driven solutions, helping companies maintain a competitive edge.

Future Research Directions

This study has several limitations that future research could address. First, the geographic scope was limited to the Klang Valley, Malaysia, and the sample primarily consisted of younger, well-educated individuals. Future studies should expand to other regions and include more diverse demographic groups, such as older populations and individuals with varying levels of education and employment status, to enhance the generalizability of the findings.

Second, this study relied on self-reported data collected through online surveys, which may introduce response

biases. Future research should use mixed-method approaches, combining quantitative surveys with qualitative interviews or focus groups, to capture a more comprehensive understanding of user attitudes and behaviors.

Third, financial literacy was not directly examined in this study, though it may play a critical role in FinTech adoption. Future studies should investigate how financial literacy impacts the willingness to adopt FinTech solutions, particularly in regions where digital literacy may vary widely.

Lastly, the study's cross-sectional design limits insights into the long-term evolution of FinTech usage. Future research should adopt longitudinal designs to track changes in user behavior over time and explore how advancements in technology, regulatory shifts, and market conditions influence FinTech adoption. Additionally, the impact of evolving regulatory frameworks on user trust and FinTech development should be examined to provide actionable insights for both policymakers and industry stakeholders.

By addressing these limitations and exploring new variables, future research can provide a more detailed understanding of the complex factors shaping FinTech adoption and help guide the growth of the industry.

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REFERENCES

1. Alam, M. M., Awawdeh, A. E., & Muhamad, A. I. B. (2021). Using e-wallet for business process development: Challenges and prospects in Malaysia. *Business Process Management Journal*, 27(4), 1142–1162. <https://doi.org/10.1108/bpmj-11-2020-0528>
2. Bank Negara Malaysia. (2020). Malaysia's financial inclusion framework. <https://www.bnm.gov.my/documents/20124/1073866/Malaysia's+Financial+Inclusion+Framework.pdf>
3. Bank Negara Malaysia. (2021). Digital economy blueprint. <https://www.bnm.gov.my>
4. Bank Negara Malaysia. (2023). Sandbox regulation. <https://www.bnm.gov.my/sandbox>
5. Cheah, C. M., Teo, A. C., Sim, J. J., Oon, K. H., & Tan, B. I. (2011). Factors affecting Malaysian mobile banking adoption: An empirical analysis. *International Journal of Network and Mobile Technologies*, 2(3), 149-160.
6. Cruz, D., & Pereira, M. (2020). FinTech in Malaysia: A journey of innovation. *Journal of Financial Services Marketing*, 25(1), 42-56. <https://doi.org/10.1057/s41264-020-00073-5>
7. Cumming, D., Johan, S., & Reardon, R. (2023). Global fintech trends and their impact on international business: A review. *Multinational Business Review*, 31(3), 413-436.
8. Deloitte. (2021). The future of RegTech: Reinventing compliance. <https://www2.deloitte.com/global/en/pages/financial-services/articles/future-of-regtech.html>
9. Gomber, P., Koch, J. A., & Siering, M. (2017). Digital finance and FinTech: Current research and future research directions. *Journal of Business Economics*, 87(5), 537-580. <https://doi.org/10.1007/s11573-017-0852-x>
10. Gupta, K., Wajid, A., & Gaur, D. (2023). Determinants of continuous intention to use FinTech

- services: The moderating role of COVID-19. *Journal of Financial Services Marketing*. <https://doi.org/10.1057/s41264-023-00221-z>
11. Hamid, N. A., Suria, K., & Jasni, N. S. (2024). FinTech in Malaysia: Navigating challenges and shaping a digital future. *Accounting and Finance Research*, 13(1).
 12. Hamidah, N., Prihatni, R., & Ulupui, I. G. K. A. (2020). The effect of financial literacy, FinTech (financial technology), and intellectual capital on the performance of MSMEs in Depok city, West Java. *Journal of Social Science*, 1(4), 152-158.
 13. Hassan, A., Manzoor, U., & Younus, A. (2021). The impact of COVID-19 on FinTech adoption in Malaysia: A consumer perspective. *Journal of Financial Technology*, 1(3), 1-18. <https://doi.org/10.1007/s42290-021-00004-2>
 14. Huei, C. T., Cheng, L. S., Seong, L. C., Khin, A. A., & Bin, R. L. L. (2018). Preliminary study on consumer attitude towards FinTech products and services in Malaysia. *International Journal of Engineering & Technology*, 7(2.29), 166–169.
 15. 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(3), 340. <https://doi.org/10.3390/sym11030340>
 16. Hui, X. (2023, April 18). Malaysia's cyber threats spike: Start cybersecurity from now. Exabytes. <https://www.exabytes.my/blog/malaysia-cyber-threats/#:~:text=Cybersecurity%20threats%20have%20been%20on%20the%20rise%20in>
 17. Hussein, H. (2020). The impact of financial technology on financial inclusion: The case of Egypt. *IOSR Journal of Economics and Finance*, 11(6), 35-51.
 18. Hussain, I., Sabir, M. R., ur Rehman, N., Ghaffar, I., & Majeed, K. B. (2022). A spatial analysis of digital technology, digital literacy, performance expectancy, and techno-stress in pandemic conditions in technological institutes. *Journal of Disaster Recovery and Business Continuity*, 13(1), 140-149.
 19. Khraim, H. S., Al Shoubaki, Y. E., & Khraim, A. S. (2011). Factors affecting Jordanian consumers' adoption of mobile banking services. *International Journal of Business and Social Science*, 2(20), 52-58.
 20. Khan, S., & Sadiq, M. (2021). Islamic finance and FinTech: A review of the current trends and future prospects. *International Journal of Islamic Finance*, 13(2), 111-125. <https://doi.org/10.1108/IJIF-12-2020-0146>
 21. Khan, S., Rahman, A., & Ahmed, A. (2022). The evolution and growth of FinTech in Malaysia: Trends, challenges, and opportunities. *Journal of Banking and Finance Technology*, 6(1), 39-54. <https://doi.org/10.1007/s42786-021-00046-7>
 22. Knewton, H. S., & Rosenbaum, M. E. (2020). Financial literacy and FinTech adoption. *Journal of Financial Counseling and Planning*, 31(2), 215-226.
 23. KPMG. (2021). the future of Reg Tech: Reinventing compliance. <https://home.kpmg/xx/en/home/insights/2021/01/future-of-regtech.html>
 24. KPMG. (2022). Global FinTech report 2022. Retrieved from <https://home.kpmg/xx/en/home/insights/2022/01/global-fintech-report-2022.html>
 25. Lu, J., Yao, J. E., & Yu, C. S. (2005). Personal innovativeness, social influences, and adoption of wireless Internet services via mobile technology. *Journal of Strategic Information Systems*, 14(3), 245–268. <https://doi.org/10.1016/j.jsis.2005.04.001>
 26. McKinsey & Company. (2021). Global payments report 2021. Retrieved from <https://www.mckinsey.com/industries/financial-services/our-insights/global-payments-report>
 27. Meng, S., He, X., & Tian, X. (2021). Research on FinTech development issues based on embedded cloud computing and big data analysis. *Microprocessors and Microsystems*, 83, 103977. <https://doi.org/10.1016/j.micpro.2021.103977>
 28. MDEC. (2022). We lead Malaysia's digital economy. <https://mdec.my/>
 29. Milian, E. Z., Spinola, M. M., & Carvalho, M. M. (2019). Fin Techs: A literature review and research agenda. *Electronic Commerce Research and Applications*, 34, 100833. <https://doi.org/10.1016/j.elerap.2019.100833>
 30. Mohsin, M. I. A., Ahmad, R., & Chan, W. M. (2022). Exploring digitalization of Malaysian banking and FinTech companies' services from the customer's perspective. *International Journal of Management and Applied Research*, 9(2), 140-160. <https://doi.org/10.18646/2056.92.22-007>

31. Morosan, C., & DeFranco, A. (2014). When tradition meets new technology: An examination of the antecedents of attitudes and intentions to use mobile devices in private clubs. *International Journal of Hospitality Management*, 42, 126-136. <https://doi.org/10.1016/j.ijhm.2014.05.008>
32. Muniandy, L., Muniandy, B., & Samsusin, Z. (2017). Cyber security behavior among higher education students in Malaysia. *Journal of Information Assurance & Cyber Security*. <https://doi.org/10.5171/2017.800299>
33. Naifar, N. (Ed.). (2019). *Impact of financial technology (FinTech) on Islamic finance and financial stability*. IGI Global.
34. NSC. (2022). Network Security Center (NSC). Malaysian Communications and Multimedia Commission (MCMC). <http://snsc.skmm.gov.my/ini-anti-plishing.php>
35. Puschmann, T. (2017). Fintech. *Business & Information Systems Engineering*, 59(1), 69-76. <https://doi.org/10.1007/s12599-017-0464-6>
36. PricewaterhouseCoopers. (2016). *Catching the FinTech wave: A survey on FinTech in Malaysia*. PwC Malaysia. <https://www.pwc.com/my/en/publications/fintech-survey.html>
37. Rafiuddin, A. (2019). The inside story of financial technology in Malaysia. Hays. https://www.hays.com.my/theinsidestory/HAYS_1917728
38. Rani, M. S. B. A. (2021). Study on customer satisfaction, adoption, perception, behaviour, and Security on financial technology (fintech) services. In *International Conference on Multidisciplinary Innovation and Economics* (Vol. 8, No. 9, pp. 146-160).
39. Ryu, H. (2018, January 3). Understanding benefit and risk framework of FinTech adoption: Comparison of early adopters and late adopters. In *Proceedings of the 2018 Conference on Information Systems*. <http://hdl.handle.net/10125/50374>
40. Roscoe, J. T. (1975). *Fundamental research statistics for the behavioral sciences* (2nd ed.). Holt, Rinehart and Winston.
41. Salehi, M., & Torabi, E. (2012). The role of information technology in financial reporting quality: Iranian scenario. *UDC / UDK: 007:657.3*, 55(6), 127-137.
42. Sartika, I., Wahyudi, R., & Widiastuti, T. (2021). Development of financial technology (FinTech) in Indonesia and its affecting factors. *Journal of Economic Development*, 11(3), 221-235.
43. Shaikh, I. M., Qureshi, M. A., Noordin, K., Shaikh, J. M., Khan, A., & Shahbaz, M. S. (2020). Acceptance of Islamic financial technology (FinTech) banking services by Malaysian users: An extension of the technology acceptance model. *Foresight*, 22(3), 367-383.
44. Siska, E. (2022). Financial Technology (FinTech) and its impact on financial performance of Islamic banking. *ARBITRASE: Journal of Economics and Accounting*, 2(3), 102-108.
45. Suryono, R. R., Purwandari, B., & Budi, N. F. (2020). Challenges and trends of financial technology (FinTech): A systematic literature review. *Information Systems Journal*, 8(2), 23-45.
46. The Edge Malaysia. (2023, June 27). Enriching Malaysia's digital tech talent. The Edge Malaysia. Retrieved from <https://theedgemalaysia.com/content/advertise/enriching-malysias-digital-tech-talent>
47. The Star. (2023, March 18). Cyberthreats on the rise in M'sia. The Star. Retrieved from <https://www.thestar.com.my/>
48. Urus, S. T., & Mohamed, I. S. (2021). A flourishing fintech ecosystem: Conceptualization and governing issues in Malaysia. *Business and Economic Research*, 11(3), 106. <https://doi.org/10.5296/ber.v11i3.18729>
49. 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.
50. Vijai, C. (2019). Fintech in India: Opportunities and challenges. *SAARJ Journal on Banking & Insurance Research (SJBIR)*, 8(1), 13. <https://doi.org/10.5958/2319-1422.2019.00002.X>
51. Vives, X. (2017). The impact of FinTech on banking. *Journal of Financial Regulation and Compliance*, 25(2), 89-104.
52. Yusoff, Y. H., Jamaludin, M. N., Ramdan, M. A., Aziz, N. A., Halim, R. M. M., & Bakar, M. S. A. (2022). Factors influencing the emergence of fintech in Malaysia: A concept paper. *International Journal of Academic Research in Economics and Management Sciences*, 11(3). <https://doi.org/10.6007/ijarems/v11-i3/15074>
53. Zahari, N. M., Zainol, R., & Abdul Rahman, N. (2020). Peer-to-peer lending in Malaysia: An analysis of potential risks and regulatory challenges. *Asian Journal of Accounting Research*, 5(1), 1-20.

<https://doi.org/10.1108/AJAR-02-2019->

54. Zeidy, I. (2022). The role of financial technology (FinTech) in changing the financial industry and increasing efficiency in the economy. *Journal of Financial Innovation*, 13(1), 31-42.
55. Zhao, W., Liao, J., & Yang, F. (2022). FinTech innovation and consumer adoption: The role of social influence and perceived risk. *Information Technology & People*, 35(4), 1190-1210.