

Table of Contents

List of Figures	3
List of Tables.....	4
Chapter 1: Introduction.....	1
1.1 Research Background.....	1
1.2 Research Motivation	3
1.3 Research Aim and Objectives.....	4
1.4 Research Limitations	5
1.5 Summary	7
Chapter 2: Literature Review	8
2.1 <i>Trust</i>	8
2.1.1 <i>Definition</i>	8
2.1.2 <i>Construct and Measurements</i>	10
2.2 <i>System Quality or Accessibility</i>	12
2.2.1 <i>Definition</i>	12
2.2.2 <i>Construct and Measurements</i>	14
2.3 <i>Perceived Risk of Using</i>	16
2.3.1 <i>Definition</i>	16
2.3.2 <i>Construct and Measurements</i>	18
2.4 <i>Perceived Value</i>	20
2.4.1 <i>Definition</i>	20
2.4.2 <i>Construct and Measurements</i>	22
2.5 <i>Intention to Use</i>	24
2.5.1 <i>Definition</i>	24
2.5.2 <i>Construct and Measurements</i>	26
2.6 <i>Demographic Factors</i>	28
Chapter 3: Research Methodology	28
3.1 <i>Research Model with Hypotheses</i>	28
3.2 <i>Triangulation</i>	30
3.3 <i>Quantitative Research Approach</i>	30
3.4 <i>Focus Group</i>	31
3.5 <i>Questionnaire Survey Method</i>	32
3.6 <i>Pilot Test</i>	32
3.7 <i>Final Survey</i>	33
3.7.1 <i>Target Population</i>	35
3.7.2 <i>Sampling Method</i>	36
3.6.3 <i>Sampling Size</i>	37

3.7 Data Analysis Techniques.....	37
3.8 Research Method Limitations	38
3.9 Research Ethics.....	38
Reference List.....	39
Appendix A	53
A.1 Reliability Analysis.....	53
A.2 Correlation	53
A.3 Regression Analysis.....	54

List of Figures

Figure 1. Fintech Market in Hong Kong.....	2
Figure 2. Research Flowchart.....	7
Figure 3. Research Model.....	29
Figure 4. Target Population Chart.....	36

List of Tables

Table 1. Trust Definitions.....	9
Table 2. Trust Measurement.....	11
Table 3. System Quality Definitions.....	13
Table 4. System Quality Measurement.....	15
Table 5. Perceived Risk of Usage Definitions.....	17
Table 6. Perceived Risk of Usage Measurement.....	19
Table 7. Perceived Value Definitions.....	21
Table 8. Perceived Value Measurement.....	23
Table 9. Intention to Use Definitions.....	25
Table 10. Intention to Use Measurement.....	27
Table 11. Final Questionnaire.....	34

The Role of Fintech in Disrupting Traditional Retail and Commercial Banking: Opportunities and Challenges

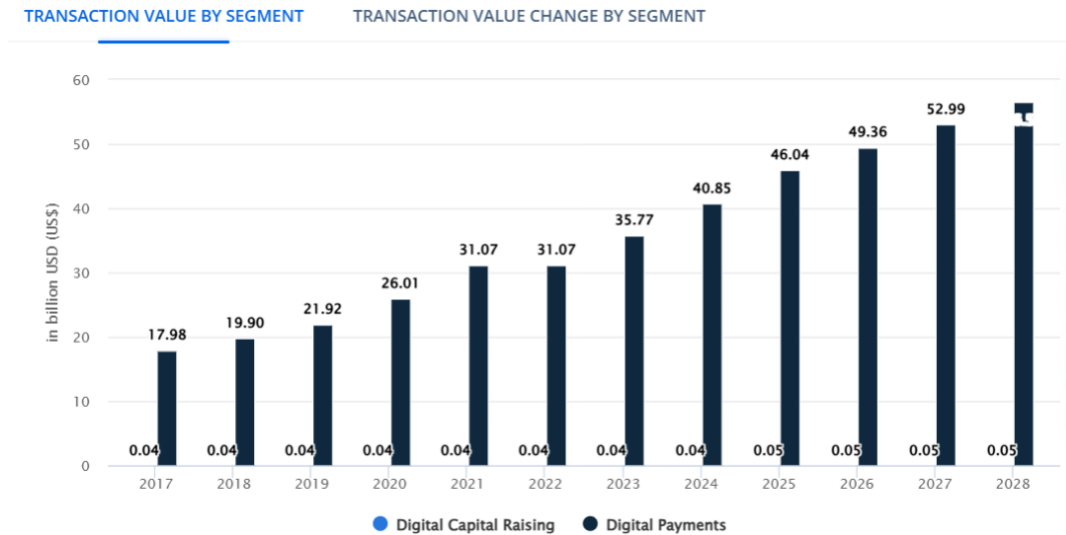
Chapter 1: Introduction

1.1 Research Background

In recent years, Fintech have been disrupting the landscape of traditional retail and commercial banking operations, challenging traditional approaches with innovative, user-centric solutions. Fintech typically optimize processes through increased accessibility, lower costs, and automation, possibly with the implementation of machine learning (Anifa et al., 2022; Jarvis and Han, 2021; Ololade, 2024; Senyo and Osabutey, 2020). Digital wallets, peer-to-peer lending, investment platforms, and recommendation systems are attracting and expanding a growing customer base across a variety of businesses in the industry (Agarwal and Zhang, 2020; Cao, Yang, and Yu, 2021; Sharma, Sharma, and Dhingra, 2024). The transformation is happening globally, including Hong Kong, which is the focus of this study on the efficiency and transformation of governance, lending, investment and many other aspects of financial activity in this subject area.

Figure 1

Fintech Market in Hong Kong



Source: (Statista, 2024)

The fintech market as a whole is growing in this country and is expected to grow even faster for at least the next four years, and at a fairly high rate, as shown in Figure 1. The role of fintech in this case is key, since they are the drivers of this growth (Berman, Cano-Kollmann, and Mudambi, 2022, Caragea et al., 2024, Cojoianu et al., 2021). Hong Kong is recognized as a global financial center, being at the forefront of such developments at least in Asia (Au, 2022). The city's highly developed infrastructure, technologically literate population, and favorable regulatory environment have made it fertile ground for adaptation and development in many areas of human activity, with finance accompanying many of them (Nazir, Tan, and Nazir, 2021). The Hong Kong Monetary Authority (HKMA) has actively supported the adoption of fintech through initiatives such as the Fintech Supervisory Sandbox and Faster Payment System, which ensure secure and efficient digital transactions (Lee, 2022). The competitive presence of fintech companies in the Hong Kong banking sector, driven by technological innovation and regulatory support, has nevertheless raised questions about the factors influencing the adoption

of fintech services among local users.

The appeal of fintech services may not be immediately apparent to ordinary users – adoption of innovations is not universal. While some demographic groups are quick to adopt fintech developments due to convenience and predisposition, others are hesitant, citing issues with trust, privacy, potential risks, uncertainty, and a range of other reasons (Alsmadi et al., 2022, Bouteraa et al., 2023, Chan et al., 2022, Imam et al., 2022). Hong Kong may be a differentiator in such studies due to certain cultural, social, and a range of other determinants that will differentiate the answers to research questions from similar work in the academic community (De Becker, De Witte, and Van Campenhout, 2020). Understanding consumer attitudes is revealed through four critical factors: trust, system quality or accessibility, perceived risk, and purpose of use, each of which potentially influences a user's intention to adopt fintech services (Singh and Srivastava, 2020, Trinh, Tran, and Vuong, 2020, To and Trinh, 2021, Zhou et al., 2021). The results of this study can provide valuable guidance for both companies in the industry aiming to optimize user experience and consumers themselves.

1.2 Research Motivation

Fintech developments in connection with the mentioned problems at the level of user perception can extrapolate into more serious shortcomings at the scale of implementation. Some points of view claim that fintech has a disruptive nature in relation to traditional banking and shifts in consumer behavior (Faustino, 2022, Omarova, 2020, Sharma, Ilavarasan, and Karanasios, 2024). On the one hand, the increasing frequency of fraudulent activities in the financial industry, including due to digitalization, lead to the fact that fintech here looks like a potential salvation and a negative factor at the same time (Karpoff, 2021). Stakeholders in the form of traditional banks and regulators, however, must adapt to the new reality, and therefore

the focus on this issue is one of the most important motivations for conducting the study.

While the general benefits of fintech such as ease of use, flexibility, and access to previously underserved populations are widely recognized, less is known about the nuances that influence adoption in the Hong Kong context. Hong Kong has a unique mix of traditional and modern approaches in financial practices across different demographic groups (Ho and Chow, 2024). As a relatively developed country, consumers are known to have high expectations of financial services, safety, quality, and accessibility (Ho and Wong, 2023). This unique combination is another motivation for carrying out this work, which is of interest both for the subject area and for the region where it is carried out.

1.3 Research Aim and Objectives

This research aims to examine the influence of specific factors—Trust, System Quality, Perceived Risk, and Perceived Value—on the intention of Hong Kong consumers to adopt fintech services. The key objectives:

To evaluate the role of trust in determining Hong Kong consumers' willingness to engage with fintech services.

To analyze the influence of system quality on fintech adoption intentions.

To assess the impact of perceived risk on user intention to adopt fintech.

To investigate how perceived value, or the specific needs and motivations of users (e.g., making payments, investing, or saving), impacts their intention to adopt fintech solutions in correlation with costs.

This study, therefore, aims to address the gap in knowledge about consumer attitudes toward fintech in Hong Kong, exploring these variables to provide a comprehensive view of the market's adoption dynamics. One of the functions of the work is to present actionable insights to

multiple stakeholders in the fintech ecosystem. The results will be particularly relevant for organizations in the fintech field, looking to improve their market penetration strategies in Hong Kong. Accordingly, these companies will adopt their services based on perceived value, trust, or other key determinants that this study identifies. As a result, developers will be able to create transparent systems to strengthen customer relationships, ensuring a seamless consumer experience.

Financial institutions moving to digital services can also use the research information to develop strategies that mitigate perceived security and privacy risks. Policymakers and regulators can also benefit from a clearer understanding of the factors influencing fintech adoption. This knowledge can guide the development of supportive policies and frameworks that enhance consumer trust while promoting innovation in the industry, with a focus on the most promising developments in terms of adoption aspects. Finally, academic and research communities studying consumer technology adoption behavior will find this study valuable in expanding theoretical understanding of the dynamics of fintech adoption. By bridging the gap between theory and practice, this work serves as a foundational resource for developing solutions and policies that meet the unique needs of Hong Kong's consumer base, ensuring sustainable growth and widespread adoption of fintech services.

1.4 Research Limitations

This study, while comprehensive in its approach, is subject to several limitations that may impact the generalizability and interpretation of the findings. First, the research relies heavily on self-reported data collected through surveys. Self-reported data can introduce biases such as social desirability bias, where participants may provide responses they believe are more socially acceptable, or recall bias, which may affect the accuracy of their perceptions and experiences.

Although steps were taken to ensure anonymity and minimize these effects, the potential for such biases remains.

Second, the sample is drawn exclusively from Hong Kong consumers. While this provides valuable insights into the adoption dynamics of fintech within a specific cultural and geographic context, the findings may not be entirely applicable to other regions with differing cultural, economic, or regulatory environments (Wong and Mo, 2019). The results should therefore be interpreted with caution when considering fintech adoption trends in other markets. Third, the study employs a cross-sectional design, which captures data at a single point in time. While this approach is effective for understanding correlations, it does not allow for the establishment of causality or the observation of changes in consumer behavior over time. Future research could address this limitation by adopting a longitudinal design to track changes in fintech adoption intentions.

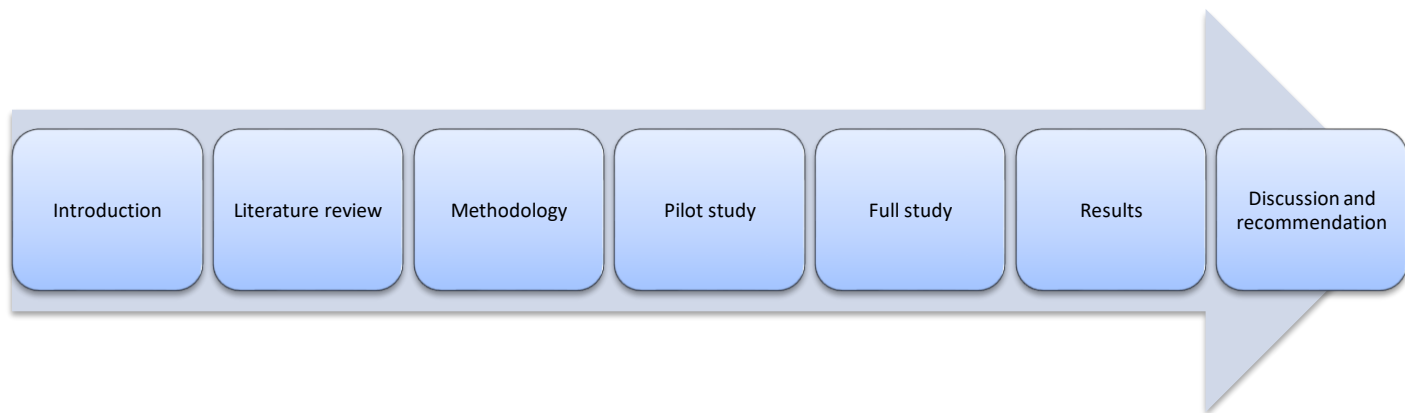
Another limitation lies in the focus on specific variables: trust, system quality, perceived risk, and perceived value. While these are critical factors in understanding fintech adoption, other potentially influential factors, such as government policy, peer influence, or technological innovations, were not included (Faustino, 2022). The exclusion of these variables may result in a less comprehensive model. Finally, the study relies on an online survey platform, which may exclude certain segments of the population, particularly those who are less digitally literate or lack access to the internet. This may introduce selection bias and limit the diversity of perspectives captured. Despite these limitations, the study provides valuable insights into the factors influencing fintech adoption in Hong Kong and serves as a foundation for future research to address these gaps.

1.5 Summary

In summary, fintech are becoming increasingly influential players in the global financial sector, and Hong Kong is an important market where the adoption of innovations is shaped by various user-centric factors. Figure 2 outlines the flow chart of activities related to this study.

Figure 2

Research Flowchart



Source: Construct by the author

Chapter 2: Literature Review

This chapter examines each aspect of usage intention in detail, including this variable. Ten different definitions and determinants are proposed for each of the factors. Such a multifaceted view is necessary to better consider all potential points of view, the impact of different aspects in order to create a more thoughtful questionnaire and to take into account the specifics of Hong Kong in this study of the adoption of fintech developments.

2.1 Trust

2.1.1 Definition

Trust plays a pivotal role in the adoption of fintech services, especially in the context of handling sensitive financial information. Many scholars agree that it is this driver that any adoption of an innovation or technology begins with, since it is this aspect that takes into account issues of security, privacy and a set of potential risks that form psychological or even physical barriers (Fan et al., 2021, Nguyen et al., 2021). At the same time, a high level of subjectivity in this indicator is emphasized, since individual characteristics of a person can act as significant determinants of trust (Aslam et al., 2020). As a result, several sources were selected in their diversity, giving different definitions of this term, however, with a narrowing of the context to the financial context, which is presented in Table 1.

Table 1

Trust Definitions

Source	Definition
Irshad, Ahmad, and Malik, 2020	the willingness to rely on an exchange partner in whom one has confidence
Isaeva, Gruenewald, and Saunders, 2020	a belief that online services are secure, reliable, and credible in fulfilling promises
Soleimani, 2022	a complex of security, safety, continuity and reliability
Zarifis and Cheng, 2022	individuals' psychological disposition with sociological factors influences
Pratama, 2021	a complex of structural assurance, integrity, brand perception
Nayak, Singh, Dave, 2021	a security, promotion, value in fulfilling promises
Chi et al., 2021	efficiency with a high level of safety and reliability
Aldboush and Ferdous, 2023	reliability and continuity with discreet service
Ali et al., 2021	the willingness to rely on service security, and comfort
Roh et al., 2024	the ability to be confident in the security and implementation of functionality

Source: Construct by the author

2.1.2 Construct and Measurements

Trust is often measured using items that assess users' confidence in the platform's ability, integrity, and benefit. The entire set is presented in Table 2.

Table 2

Trust Measurements

Source	Measurements
Zarifis and Cheng, 2022	Individuals psychological disposition to trust, sociological factors influencing trust, trust in either the financial organization or the insurer and trust in AI and related technologies
Pratama, 2021	Structural assurance, ease of use, and brand image, integrity
Nayak, Singh, Dave, 2021	Security, promotion, value
Irshad, Ahmad, and Malik, 2020	Confidence, reliability
Isaeva, Gruenewald, and Saunders, 2020	Security, reliability, credibility
Soleimani, 2022	Security, safety, continuity and reliability
Chi et al., 2021	Efficiency, comfort, ease-of-use
Aldboush and Ferdous, 2023	Service quality, security, comfort
Ali et al., 2021	Service quality, security, comfort
Roh et al., 2024	Security, safety, continuity, credibility

Source: Construct by the author

2.2 System Quality or Accessibility

2.2.1 Definition

System quality refers to the technological aspects of a fintech platform, particularly its accessibility, ease of use, and reliability – Table 3.

Table 3

System Quality Definitions

Source	Definition
Barbu et al., 2021	perceived benefits that fintech system gives to the customer
Mailizar, Burg, and Maulina, 2021	refers to the desired attributes of an information system, including accessibility, flexibility, and functionality
Ivanova and Noh, 2022	a complex of security, service quality, interface design, loyalty
Li and Wang, 2021	the overall performance and reliability of a fintech system, evaluated by its speed, accessibility, and error-free operation
Theresia and Tan, 2021	the perceived effectiveness of a fintech platform in delivering consistent, secure, and user-friendly experiences
Truc, 2024	the level of functionality and dependability that a fintech system offers, encompassing user satisfaction and system stability
Ryu and Ko, 2020	refers to perceptions derived from the overall performance of IT systems
Sharma et al., 2024	a comprehensive evaluation or perception of the service's overall excellence or superiority
Mo and Chu, n.d.	the degree to which a fintech technology performs reliably and as expected, ensuring consistent and high-quality user experiences
Aldaarmi, 2024	a good predictor of customer engagement and satisfaction as banks make the transition into the digital age

Source: Construct by the author

2.2.2 Construct and Measurements

System quality is typically measured by examining the platform's technical aspects, such as accessibility, speed, and ease of navigation. Table 4 reflects the main measures of system quality in empirical studies of this subject area.

Table 4

System Quality Measurements

Source	Measurements
Ivanova and Noh, 2022	Security, service quality, interface design, loyalty
Li and Wang, 2021	Security, service quality, interface design, ease-of-use
Theresia and Tan, 2021	System availability, fulfillment, privacy, responsiveness, compensation, contact
Barbu et al., 2021	Ease-of-use, customer's support, assurance, speed
Mailizar, Burg, and Maulina, 2021	Accessibility, flexibility, and functionality
Truc, 2024	Functionality, satisfaction, flexibility, reliability
Ryu and Ko, 2020	System's technical characteristics, including accessibility, ease of use, response time, reliability, and stability
Sharma et al., 2024	Reliability, responsiveness, assurance, empathy, tangibles
Mo and Chu, n.d.	Responsiveness, interface, functionality, compatibility, troubleshooting
Aldaarmi, 2024	Reliability, responsiveness, assurance, empathy, tangibles

Source: Construct by the author

2.3 Perceived Risk of Using

2.3.1 Definition

Perceived risk of using is the extent to which users believe that using a fintech service could lead to negative outcomes. Despite the greater potential breadth of the concept and the potential for subjectivity, it is this term that has a fairly high level of consensus in terms of the definitions presented in Table 5 (Mascarenhas et al., 2021). It significantly simplifies the interpretation and standardization of understanding of the results depending on the research area.

Table 5

Perceived Risk of Using Definitions

Source	Definition
Rahimi et al., 2021	the expectation of potential loss or negative outcomes associated with the use of a product or service
Tang, Ooi, and Chong	involves the uncertainty and consequences of engaging with a digital service, especially in terms of privacy and financial security
Xie et al., 2021	the extent to which a user feels uncertain or apprehensive about potential negative outcomes from using a technology, such as privacy concerns or financial loss
Zhao and Khaliq, 2024	a user's subjective assessment of potential negative consequences associated with technology usage, including issues of reliability, security, and cost
Hasan, Shams, and Rahman, 2021	the anxiety or hesitancy a user experiences regarding potential risks, such as data breaches, misuse, or service interruptions.
Jünger and Mietzner, 2020	the anticipated probability and severity of adverse effects a user believes could result from technology use, often affecting adoption decisions
Saleem, 2021	serious hesitation by the people because of the perceived fear of underlying consequences as well as the risks associated with the use of innovative technology
Jangir et al., 2022	the most important factor influencing users' intentions to use FinTech

Wong and Mo, 2019	the user's estimation of the uncertainty and possible adverse effects of engaging with a technology, such as fraud risk or reputational damage
Truc, 2024	the psychological discomfort or worry a user feels about using a technology, reflecting concerns about unpredictable or harmful outcomes

Source: Construct by the author

2.3.2 Construct and Measurements

Perceived risk is measured by assessing users' fears related to financial, privacy, and transaction risks. In general, the set of these measures is presented in Table 6.

Table 6

Perceived Risk of Using Measurements

Source	Measurements
Xie et al., 2021	Social influence, facilitating conditions, performance expectancy, effort expectancy
Zhao and Khaliq, 2024	Performance, financial, time, security, social risks
Hasan, Shams, and Rahman, 2021	Consumer trust, interaction, novelty value
Rahimi et al., 2021	Potential loss, performance and effort expectancy
Tang, Ooi, and Chong	Level of uncertainty, quality of a digital service, privacy, financial security
Jünger and Mietzner, 2020	Financial literacy, negative outcomes perception, privacy
Saleem, 2021	Strategic, operational, cyber, legal risks
Jangir et al., 2022	Disclosure of personal information, system failures probability, account accessibility for others
Wong and Mo, 2019	Psychological factors, readiness to change, trust, privacy
Truc, 2024	Performance, financial, time, security risks

Source: Construct by the author

2.4 Perceived Value

2.4.1 Definition

Perceived value is a fairly broad concept, but mainly aimed at a certain value for the user, both in comparison with costs and in terms of other opportunities - technological or emotional. At the same time, this concept is quite widely used in the context of environmental responsibility, but this aspect does not yet extend to the fintech industry (Confente, Scarpi, and Russo, 2020; Li and Shang, 2020). A number of definitions are presented in Table 7.

Table 7

Perceived Value Definitions

Source	Definition
Hasan, Ashfaq, and Shao, 2021	customers can achieve some discount or cashback by using mobile payments, and pleasure means the happiness of customers
Karjaluoto et al., 2020	refers to how individuals or organizations assess the usefulness of a fintech innovation compared to existing alternatives
Anwar, Thongpapanl, and Ashraf, 2021	the trade-off between the utility gained from a fintech service and the monetary, time, and cognitive sacrifices made to adopt it
Miao et al., 2022	the benefit or satisfaction derived from the practical use of a fintech application in addressing financial needs
Riahi and Garrouch, 2023	the encompasses the trust, convenience, and emotional satisfaction consumers feel from interacting with a fintech platform
Alnsour, 2022	refers to the extent to which a fintech innovation enhances financial decision-making through its technological capabilities
Xie et al., 2021	has two components, “received” and “given”, related to performance expectancy, effort expectancy, and perceived risk
Taufiq, 2021	The degree to which a fintech technology is perceived as superior to traditional financial services in terms of accessibility, speed, and customization
Molinillo et al., 2021	involves balancing the anticipated benefits of adopting a fintech service against potential risks such as security and privacy concerns
Barbu et al., 2021	linking together the quality and price of a service

Source: Construct by the author

2.4.2 Construct and Measurements

Perceived value measures the user's perception of the benefits they gain from using fintech services relative to the cost or effort involved – Table 8.

Table 8

Perceived Value Measurements

Source	Measurements
Hasan, Ashfaq, and Shao, 2021	Financial benefits earned, pleasure, financial costs, technical effort
Karjaluoto et al., 2020	Cost savings, perceived affordability, discounts or rewards
Anwar, Thongpapanl, and Ashraf, 2021	Security, enjoyment, reduction of stress, aesthetic appeal
Miao et al., 2022	Peel approval, perception of being technologically advanced, social influence
Riahi and Garrouch, 2023	Availability, accessibility, integration with other financial tools, time
Alnsour, 2022	Security, confidence in data privacy, reputation, absence of errors
Xie et al., 2021	Effort needed, time needed, reducing costs, good value delivery
Taufiq, 2021	Safety, specific benefits, awareness of customer support, personalization
Molinillo et al., 2021	Ease-of-use, security, loyalty, feedback from early adopters, behavioral intentions
Barbu et al., 2021	Saving money, good rating at price, considering a good buy

Source: Construct by the author

2.5 Intention to Use

2.5.1 Definition

Usage intention reflects a user's likelihood or willingness to adopt and use fintech services in the future. This variable is central to this study, which requires a more detailed consideration of it in terms, as it has many different drivers (Sharma and Munjal, 2024). The tabular analysis of definitions, which is presented in Table 9.

Table 9

Intention to Use Definitions

Source	Definition
Golbabaet et al., 2020	an individual's readiness to engage with and use a particular technology
Naruetharadhol et al., 2021	the likelihood that an individual will engage in a behavior based on motivation and previous experience
Truc, 2024	the probability that a person will adopt a particular technology, typically shaped by factors such as peer influence, perceived benefits, and past experiences
Moses et al., 2013	the user's commitment to incorporate a technology into their routines, frequently measured as an early indicator of actual adoption
Ho et al., 2020	an individual's expressed or implicit desire to use a technology or innovation in the near future, often as a result of positive expectations about the technology's outcomes
Zhang and Kim, 2020	a forward-looking psychological state where a user foresees adopting a technology, influenced by situational factors and perceived need
Mo and Chu, n.d.	the level of confidence a user has about adopting a technology, usually based on their assessment of the technology's advantages and potential fit with their needs
Hassan et al., 2022	the pre-adoption stage where a user evaluates the likelihood of using

	a new technology, with intentions often acting as predictors of future behavior
Ng et al., 2022	the user's willingness to incorporate a technology into their activities
Gerlach and Lutz, 2021	an individual's readiness to use an innovation

Source: Construct by the author

2.5.2 Construct and Measurements

Usage intention is measured by gauging the likelihood of future use and users' willingness to recommend the platform, which is presented by a number of empirical studies in Table 10.

Table 10

Intention to Use Measurements

Source	Measurements
Truc, 2024	Design features, cognitive, affective, and behavioral responses
Moses et al., 2013	System-design features, ease-of-use, usefulness, attitude toward using
Ho et al., 2020	Compatibility, trialability, ease-of-use, usefulness, attitude, perceived risk
Golbabaet et al., 2020	Readiness to engage, compatibility, usefulness, specific variables
Naruetharadhol et al., 2021	Motivation, behavior intents
Zhang and Kim, 2020	Motivation, behavior intents, psychological factors, readiness, attractiveness
Mo and Chu, n.d.	Ease-of-use, usefulness, attitude toward using, efforts and intents
Hassan et al., 2022	Trust, perceived risk, readiness for changes
Ng et al., 2022	Perceived risk, readiness for changes, behavioral responses
Gerlach and Lutz, 2021	Compatibility, motivation, usefulness, specific variables

Source: Construct by the author

2.6 Demographic Factors

This study also collects data on the gender, age, income, job and education levels of the participants. Current research on Hong Kong in this context focuses more on the older generation or on the very narrow purpose of working in technology (Mo and Chu, n.d., Ng et al., 2022). Therefore, understanding these characteristics of the sample is an important step to form a complete picture of all possible factors that can affect the dependent variable.

Chapter 3: Research Methodology

3.1 Research Model with Hypotheses

The research model for this study draws upon established theories, including the Technology Acceptance Model or TAM, to assess how various factors influence users' intentions to adopt fintech platforms. This model integrates the following independent variables: trust, system quality, perceived risk of using, and perceived value, which are just typical in the assessments of such studies within the TAM framework (Hassan et al., 2022, Singh, Sahni, and Kovid , 2020, Wang and Mo, 2019). The dependent variable is usage intention, which reflects the likelihood of an individual using fintech services in the future.

Based on this model, the following hypotheses are proposed (they are also shown in Figure 3):

H1: Trust positively influences the intention to use fintech platforms among Hong Kong residents.

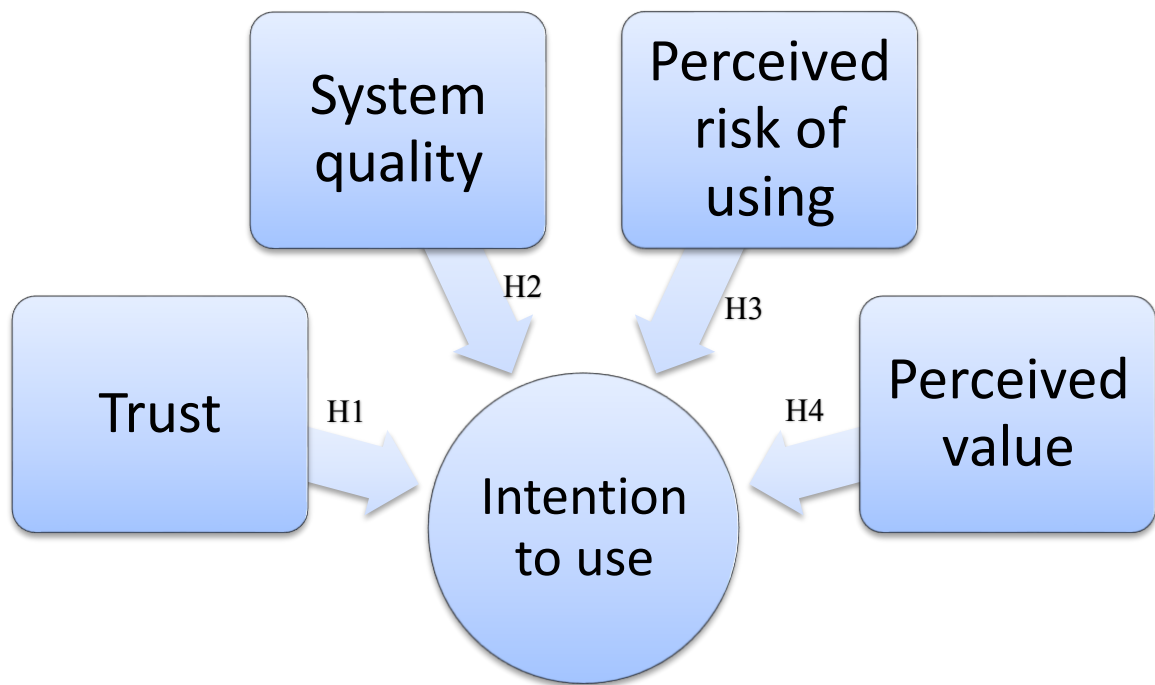
H2: System quality positively influences the intention to use fintech platforms among Hong Kong residents.

H3: Perceived risk of using negatively influences the intention to use fintech platforms among Hong Kong residents.

H4: Perceived value positively influences the intention to use fintech platforms among Hong Kong residents.

Figure 3

Research Model



3.2 Triangulation

In formulating a methodology, it is important to adhere to a number of rules and values. Triangulation is a methodological approach used to enhance the reliability and validity of research findings by integrating multiple data sources, methodologies, or theoretical perspectives (Bans-Akutey and Tiimub, 2021, Santos et al., 2020). In this paper, this aspect is implemented through the use of a structured questionnaire survey as well as established constructs based on previous studies. By including established measures for each variable, the study ensures that it achieves methodological consistency by capturing these constructs. Finally, triangulation also extends to the diverse demographic profile of the survey respondents, who represent different age groups, educational levels, and income levels.

3.3 Quantitative Research Approach

This study uses a quantitative research approach, chosen for its suitability for collecting measurable data on user perceptions and intentions. This classification of methods allows, among other things, to develop statistical models that capture the relationships between independent variables and the dependent variable, usage intention (Jamieson, Govaart, and Pownall, 2023). Quantitative methods also facilitate replicability, allowing future studies to apply similar models to other geographic or cultural contexts (Borgstede and Scholz, 2021). This approach aligns with the goal of examining patterns and correlations in a structured, empirical manner.

This study will gather data on the key variables—trust, system quality, perceived risk, and perceived value—and their impact on fintech adoption intentions using a structured survey. The survey will target a representative sample of Hong Kong consumers, ensuring diversity in terms of age, gender, education level, and financial experience to capture a comprehensive view of consumer attitudes. The questionnaire will include standardized items for each variable, drawn

from validated scales in existing literature to ensure reliability and validity. For example, trust-related items may assess consumers' confidence in the security and reliability of fintech services, while perceived risk questions will evaluate concerns about data privacy or financial loss.

The survey will use a Likert scale (e.g., 1 = strongly disagree to 5 = strongly agree) to quantify participants' perceptions and intentions, making the data amenable to statistical analysis. Responses will be collected through online survey platforms, leveraging digital channels to reach a tech-savvy population likely to engage with fintech services. The data will be analyzed using multivariate statistical methods, such as multiple regression to examine relationships between the independent variables (trust, system quality, perceived risk, perceived value) and the dependent variable (usage intention). Descriptive statistics will provide an overview of the sample characteristics, while inferential analysis will identify significant predictors and their relative influence on fintech adoption. This methodology ensures a robust, evidence-based understanding of the factors driving fintech acceptance in Hong Kong.

3.4 Focus Group

While this study primarily relies on a large-scale questionnaire survey to collect quantitative data, a complementary focus group approach could provide valuable qualitative insights. A focus group involves gathering a small, diverse group of participants to discuss their perceptions, attitudes, and experiences regarding fintech platforms. This method fosters an open discussion, uncovering in-depth perspectives on trust, system quality, perceived risks, values, and intentions. For instance, participants could explore challenges they face when adopting fintech services or share specific concerns about security and accessibility. Such discussions can reveal nuanced themes that might not emerge through a structured questionnaire.

3.5 Questionnaire Survey Method

The primary data collection method for this study is a structured survey using questionnaires. This approach is an effective and established tool for collecting large-scale data from diverse populations in both a systematic and standardized manner (Aithal and Aithal, 2020, Mohajan, 2020). The survey will be conducted online to ensure a wider coverage of Hong Kong residents who are potential users of fintech platforms. Items in each category are rated on a Likert scale ranging from 1: strongly disagree, 2: disagree, 3: neutral, 4: agree, to 5: strongly agree (Jebb, Ng, and Tay, 2021). In addition, the items in each construct are adapted from validated scales in the literature, ensuring construct reliability and validity.

3.6 Pilot Test

The pilot study will be conducted to assess the reliability and clarity of the questionnaire. A sample of 40 participants, representative of the target population in terms of demographics, will be recruited. The study will last for one week in January 2025, during which participants will respond to the questionnaire. Based on the planned analysis, any questions showing poor item-total correlation, ambiguity, or redundancy will be reviewed and revised.

The anticipated outcomes of the pilot study include an improvement in the internal consistency of the scale, as measured by Cronbach's alpha. Currently, the expected Cronbach's alpha for the entire questionnaire should be not less than 0.7. It is projected that eliminating problematic items and refining ambiguous questions will increase Cronbach's alpha to satisfactory levels, potentially exceeding 0.8-0.9. Feedback from participants will also guide adjustments to ensure greater clarity and alignment with the constructs being measured. Questions and sections demonstrating acceptable Cronbach's alpha values above the standard threshold will remain unchanged. Further actions on adjustments and changes to the

questionnaire will be recorded in the table with subsequent assessment of Cronbach's alpha for questions of each variable.

3.7 Final Survey

The final study aims to collect data from approximately 400 participants, a sample size chosen to ensure statistical power and generalizability due to reasons described below.

Recruitment will target Hong Kong consumers through online survey distribution platforms like Google Forms, focusing on diverse demographics to reflect the fintech user base. The survey will remain open for three weeks, allowing ample time for participants to complete it while minimizing response bias due to time constraints. Data from the final study will undergo rigorous reliability and validity checks, followed by hypothesis testing to provide actionable insights into consumer attitudes toward fintech in Hong Kong.

Table 11

Final Questionnaire

Source	Question
Pratama, 2021	I trust that the fintech platform will keep my financial data secure.
	I believe that the fintech platform will act in my best interest.
	I trust the fintech platform to provide accurate and reliable services.
Ivanova and Noh, 2022	The fintech platform is easy to access whenever I need it.
	I can quickly perform the tasks I need on the fintech platform without technical issues.
Theresia and Tan, 2021	The fintech platform is compatible with my devices and operating systems.
Zhao and Khaliq, 2024	I feel that using the fintech platform might expose me to financial risks.
	I am concerned about the possibility of privacy violations on the fintech platform.
	Using the fintech platform makes me feel vulnerable to unauthorized access to my data.
Karjaluoto et al., 2020	Using this fintech solution provides greater benefits compared to traditional financial services.
Anwar, Thongpapanl, and Ashraf, 2021	The cost of using this fintech service is justified by the value it provides.
	The fintech platform I use enhances my financial decisions and overall experience.

Ho et al., 2020	I am likely to use a fintech platform in the future for my financial transactions.
Truc, 2024	I intend to use fintech services regularly if they meet my expectations.
Ho et al., 2020	I am interested in using fintech platforms as a primary option for my financial needs.

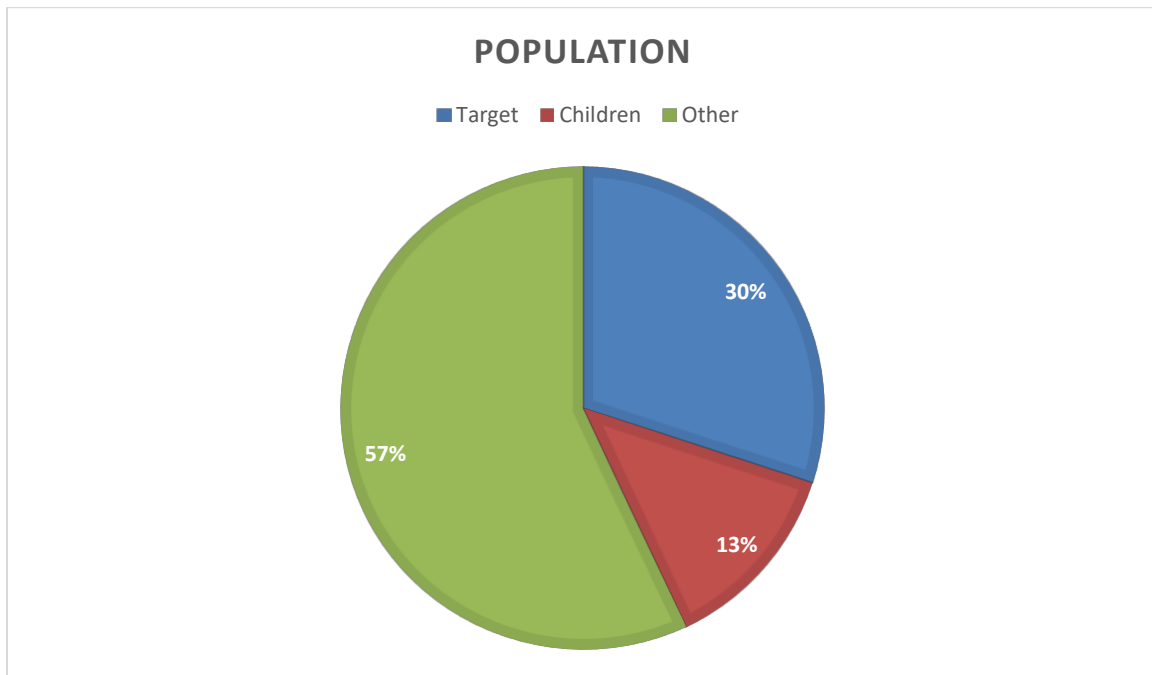
Source: Construct by author

3.7.1 Target Population

The target population for this study consists of Hong Kong residents who are at least 18 years old and have basic familiarity with digital banking and fintech services. This population is chosen to ensure that respondents have the necessary experience to provide informed answers regarding the factors influencing fintech adoption (Zhu, Yu, and Chou, 2021). The population of Hong Kong aged 16 and above excludes the group of children, which is approximately 13%, as well as potentially those who do not use fintech applications, which according to the data, results in only 30% of the population (Fintech News Hong Kong, 2024). Given that the current population level is approximately 7.5 million people, it is possible to use the formula below in 3.7.3 to roughly calculate the required sample size, which will cover 30% of 7.5 million people, i.e. about 2.25 million, which is shown in Figure 4. The selection of Hong Kong residents allows the study to capture data within a defined and culturally relevant market.

Figure 4

Target Population Chart



Source: (Fintech News Hong Kong, 2024)

3.7.2 Sampling Method

A non-probability convenience sampling method will be used to gather survey responses. This method involves selecting participants who are readily accessible and willing to respond, which is efficient and suitable given the broad access provided by online survey distribution channels (Andrade, 2020). The survey will be promoted through social media platforms and fintech-related online forums, aiming to reach a diverse sample in terms of age, income, and educational background. Although convenience sampling has limitations in terms of representativeness, it is an appropriate choice given the study's exploratory focus.

3.7.3 Sampling Size

$$n = \frac{Z^2 p(1-p)}{c^2} \approx 384.16$$

$$n = \frac{ss}{\frac{ss-1}{Population} + 1} \approx 369.98$$

Using a confidence level of 95%, $z = 1.96$, $p = 0.5$ and $q = 0.5$, the calculations suggest that the sample size should be about 400 to be able to extrapolate the results with some confidence to the entire population of about 2.25 million people. Although it is necessary to increase the sample size margin by a few percentage points in order to exclude incomplete responses or respondents who refused to participate, the actual sample size is quite large and the researchers' resources are unlikely to allow for a potential expansion.

3.7 Data Analysis Techniques

The collected data from the surveys will undergo several stages of processing. The initial analysis will focus on descriptive statistics to summarize the demographic characteristics of respondents and provide an overview of their responses. Mean scores, standard deviations, and frequencies will be calculated to gain insights into general trends in trust, system quality, perceived risk of using, perceived value, and usage intention. Cronbach's Alpha will be used to assess the internal consistency of each construct with a target of at least 0.7, which is the standard in the scientific community (Amirrudin, Nasution, and Supahar, 2021). Exploratory factor analysis will be performed to verify the construct validity of the measurement items. To test the research hypotheses, multiple regression analysis will be conducted. Finally, SPSS will be used for all the above mentioned techniques, including the pilot study listed in Appendix A.

3.8 Research Method Limitations

Although the chosen study design can provide a comprehensive understanding of fintech adoption in Hong Kong, there are several limitations. First, convenience sampling may introduce selection bias as participants who are more active online may be overrepresented (Golzar, Noor, and Tajik, 2022). Second, the cross-sectional study design collects data at a single point in time, which does not account for dynamics and causal inferences (Wang and Cheng, 2020). Third, data are collected through self-reports, which creates a risk of response bias where participants may under- or over-report certain attitudes or behaviors (Fryer and Dinsmore, 2020). Finally, the work presents a limited scope of variables that does not take into account the potential for respondent's previous experience, technological anxiety, and a number of other determinants often mentioned in this context (Gerlach and Lutz, 2021, Sabir et al., 2023). Efforts will be made to minimize these limitations by following strict survey design rules, using validated scales, and interpreting the results taking into account limitations related to convenience sampling and self-reported data.

3.9 Research Ethics

Ethical considerations are paramount in this study, especially given the sensitive nature of financial data and the collection of personal information. A number of measures taken to ensure compliance with the norms of this work include informed consent, confidentiality, anonymity, data security, and the right to refuse (Brown, Spiro, and Quinton, 2020). Each participant first agrees to these rules and rights before proceeding with the survey.

Reference List

Agarwal, S., and Zhang, J. (2020) 'FinTech, lending and payment innovation: A review', *Asia-Pacific Journal of Financial Studies*, 49(3), pp. 353-367. [doi: 10.1111/ajfs.12294](https://doi.org/10.1111/ajfs.12294)

Aithal, A., and Aithal, P. S. (2020) 'Development and validation of survey questionnaire & experimental data—a systematical review-based statistical approach', *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 5(2), pp. 233-251. [doi: 10.2139/ssrn.3724105](https://doi.org/10.2139/ssrn.3724105)

Aldaarmi, A. A. (2024) 'Fintech service quality of Saudi Banks: Digital transformation and awareness in satisfaction, re-use intentions, and the sustainable performance of firms', *Sustainability*, 16(6), p. 2261. [doi: 10.3390/su16062261](https://doi.org/10.3390/su16062261)

Aldboush, H. H., and Ferdous, M. (2023) 'Building trust in fintech: an analysis of ethical and privacy considerations in the intersection of big data, AI, and customer trust', *International Journal of Financial Studies*, 11(3), p. 90. [doi: 10.3390/ijfs11030090](https://doi.org/10.3390/ijfs11030090)

Ali, M., Raza, S.A., Khamis, B., Puah, C.H. and Amin, H. (2021) 'How perceived risk, benefit and trust determine user Fintech adoption: a new dimension for Islamic finance', *foresight*, 23(4), pp.403-420. [doi: 10.1108/FS-09-2020-0095](https://doi.org/10.1108/FS-09-2020-0095)

Alnsour, I. R. (2022) 'Impact of fintech over consumer experience and loyalty intentions: an empirical study on Jordanian Islamic Banks', *Cogent Business & Management*, 9(1), p. 2141098. [doi: 10.1080/23311975.2022.2141098](https://doi.org/10.1080/23311975.2022.2141098)

Alsmadi, A., Alfityani, A., Alhwamdeh, L., Al_hazimeh, A. and Al-Gasawneh, J. (2022) 'Intentions to use FinTech in the Jordanian banking industry', *International Journal of Data and Network Science*, 6(4), pp.1351-1358. [doi: 10.5267/j.ijdns.2022.5.016](https://doi.org/10.5267/j.ijdns.2022.5.016)

Amirrudin, M., Nasution, K., and Supahar, S. (2021) 'Effect of variability on Cronbach alpha reliability in research practice', *Jurnal Matematika, Statistika dan Komputasi*, 17(2), pp. 223-230. [doi: 10.20956/jmsk.v17i2.11655](https://doi.org/10.20956/jmsk.v17i2.11655)

Andrade, C. (2020) 'The limitations of online surveys', *Indian Journal of Psychological Medicine*, 42(6), pp. 575-576. [doi: 10.1177/0253717620957496](https://doi.org/10.1177/0253717620957496)

Anifa, M., Ramakrishnan, S., Joghee, S., Kabiraj, S. and Bishnoi, M.M. (2022) 'Fintech innovations in the financial service industry', *Journal of Risk and Financial Management*, 15(7), p.287. [doi: 10.3390/jrfm15070287](https://doi.org/10.3390/jrfm15070287)

Anwar, A., Thongpapanl, N., and Ashraf, A. R. (2021) 'Strategic imperatives of mobile commerce in developing countries: the influence of consumer innovativeness, ubiquity, perceived value, risk, and cost on usage', *Journal of Strategic Marketing*, 29(8), pp. 722-742. [doi: 10.1080/0965254X.2020.1786847](https://doi.org/10.1080/0965254X.2020.1786847)

Aslam, W., Hussain, A., Farhat, K. and Arif, I. (2020) 'Underlying factors influencing consumers' trust and loyalty in E-commerce', *Business Perspectives and Research*, 8(2), pp.186-204. [doi: 10.1177/2278533719887451](https://doi.org/10.1177/2278533719887451)

Au, A. (2022) 'FinTech innovation and knowledge flows in Hong Kong's financial sector: A social network analysis approach', *Journal of Asia Business Studies*, 16(2), pp. 294-307. [doi: 10.1108/JABS-09-2020-0381](https://doi.org/10.1108/JABS-09-2020-0381)

Bans-Akutey, A., and Tiimub, B. M. (2021) 'Triangulation in research', *Academia Letters*, 2, pp. 1-6. [doi: 10.20935/AL3392](https://doi.org/10.20935/AL3392)

Barbu, C.M., Florea, D.L., Dabija, D.C. and Barbu, M.C.R. (2021) 'Customer experience in fintech', *Journal of Theoretical and Applied Electronic Commerce Research*, 16(5), pp.1415-1433. [doi: 10.3390/jtaer16050080](https://doi.org/10.3390/jtaer16050080)

Berman, A., Cano-Kollmann, M., and Mudambi, R. (2022) 'Innovation and entrepreneurial ecosystems: fintech in the financial services industry', *Review of Managerial Science*, 16(1), pp. 45-64. [doi: 10.1007/s11846-020-00435-8](https://doi.org/10.1007/s11846-020-00435-8)

Borgstede, M., and Scholz, M. (2021) 'Quantitative and qualitative approaches to generalization and replication—A representationalist view', *Frontiers in Psychology*, 12, p. 605191. [doi: 10.3389/fpsyg.2021.605191](https://doi.org/10.3389/fpsyg.2021.605191)

Bouteraa, M., Chekima, B., Lajuni, N. and Anwar, A. (2023) 'Understanding consumers' barriers to using FinTech services in the United Arab Emirates: Mixed-methods research approach', *Sustainability*, 15(4), p.2931. [doi: 10.3390/su15042931](https://doi.org/10.3390/su15042931)

Brown, C., Spiro, J., and Quinton, S. (2020) 'The role of research ethics committees: Friend or foe in educational research? An exploratory study', *British Educational Research Journal*, 46(4), pp. 747-769. [doi: 10.1002/berj.3654](https://doi.org/10.1002/berj.3654)

Cao, L., Yang, Q., and Yu, P. S. (2021) 'Data science and AI in FinTech: An overview', *International Journal of Data Science and Analytics*, 12(2), pp. 81-99. [doi: 10.1007/s41060-021-00278-w](https://doi.org/10.1007/s41060-021-00278-w)

Caragea, D., Cojoianu, T., Dobri, M., Hoepner, A., Peia, O. and Romelli, D. (2024) 'Competition and innovation in the financial sector: Evidence from the rise of FinTech start-ups', *Journal of Financial Services Research*, 65(1), pp.103-140. [doi: 10.1007/s10693-023-00413-7](https://doi.org/10.1007/s10693-023-00413-7)

Chan, R., Troshani, I., Rao Hill, S. and Hoffmann, A. (2022) 'Towards an understanding of consumers' FinTech adoption: The case of Open Banking', *International Journal of Bank Marketing*, 40(4), pp.886-917. [doi: 10.1108/IJBM-08-2021-0397](https://doi.org/10.1108/IJBM-08-2021-0397)

Chi, O.H., Jia, S., Li, Y. and Gursoy, D. (2021) ‘Developing a formative scale to measure consumers’ trust toward interaction with artificially intelligent (AI) social robots in service delivery’, *Computers in Human Behavior*, 118, p.106700. [doi: 10.1016/j.chb.2021.106700](https://doi.org/10.1016/j.chb.2021.106700)

Cojoianu, T.F., Clark, G.L., Hoepner, A.G., Pažitka, V. and Wójcik, D. (2021) ‘Fin vs. tech: are trust and knowledge creation key ingredients in fintech start-up emergence and financing?’, *Small Business Economics*, 57, pp.1715-1731. [doi: 10.1007/s11187-020-00367-3](https://doi.org/10.1007/s11187-020-00367-3)

Confente, I., Scarpi, D., and Russo, I. (2020) ‘Marketing a new generation of bio-plastics products for a circular economy: The role of green self-identity, self-congruity, and perceived value’, *Journal of Business Research*, 112, pp. 431-439. [doi: 10.1016/j.jbusres.2019.10.030](https://doi.org/10.1016/j.jbusres.2019.10.030)

De Beckker, K., De Witte, K., and Van Campenhout, G. (2020) ‘The role of national culture in financial literacy: Cross-country evidence’, *Journal of Consumer Affairs*, 54(3), pp. 912-930. [doi: 10.1111/joca.12306](https://doi.org/10.1111/joca.12306)

Fan, M., Ammah, V., Dakhan, S.A., Liu, R., Mingle, M.N.A. and Pu, Z. (2021) ‘Critical factors of reacquainting consumer trust in e-commerce’, *Journal of Asian Finance, Economics and Business*, 8(3), pp.561-573. [doi: 10.13106/jafeb.2021.vol8.no3.0561](https://doi.org/10.13106/jafeb.2021.vol8.no3.0561)

Faustino, S. (2021) ‘Deleuze in the wild: making philosophy matter for fintech’, *Journal of Cultural Economy*, 15(1), pp. 93-102. [doi: 10.1080/17530350.2021.1977676](https://doi.org/10.1080/17530350.2021.1977676)

Fintech News Hong Kong. (2024) ‘Hong Kongers embrace digital banks as usage surges to nearly 30% of population’. Available at: <https://fintechnews.hk/31185/virtual-banking/hong-kong-digital-banks/> (Accessed 14 November 2024).

Fryer, L. K., and Dinsmore, D. L. (2020) ‘The promise and pitfalls of self-report: Development, research design and analysis issues, and multiple methods’, *Frontline Learning Research*. [doi: 10.14786/flr.v8i3.623](https://doi.org/10.14786/flr.v8i3.623)

Gerlach, J. M., and Lutz, J. K. (2021) ‘Digital financial advice solutions—Evidence on factors affecting the future usage intention and the moderating effect of experience’, *Journal of Economics and Business*, 117, p. 106009. [doi: 10.1016/j.jeconbus.2021.106009](https://doi.org/10.1016/j.jeconbus.2021.106009)

Golbabaie, F., Yigitcanlar, T., Paz, A. and Bunker, J. (2020) ‘Individual predictors of autonomous vehicle public acceptance and intention to use: A systematic review of the literature’, *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), p.106. [doi: 10.3390/joitmc6040106](https://doi.org/10.3390/joitmc6040106)

Golzar, J., Noor, S., and Tajik, O. (2022) ‘Convenience sampling’, *International Journal of Education & Language Studies*, 1(2), pp. 72-77. [doi: 10.22034/ijels.2022.162981](https://doi.org/10.22034/ijels.2022.162981)

Hasan, R., Ashfaq, M., and Shao, L. (2021) ‘Evaluating drivers of fintech adoption in the Netherlands’, *Global Business Review*, 09721509211027402. [doi: 10.1177/09721509211027402](https://doi.org/10.1177/09721509211027402)

Hasan, R., Shams, R., and Rahman, M. (2021) ‘Consumer trust and perceived risk for voice-controlled artificial intelligence: The case of Siri’, *Journal of Business Research*, 131, pp. 591-597. [doi: 10.1016/j.jbusres.2020.12.012](https://doi.org/10.1016/j.jbusres.2020.12.012)

Hassan, M.S., Islam, M.A., Sobhani, F.A., Nasir, H., Mahmud, I. and Zahra, F.T. (2022) ‘Drivers influencing the adoption intention towards mobile fintech services: a study on the emerging Bangladesh market’, *Information*, 13(7), p.349. [doi: 10.3390/info13070349](https://doi.org/10.3390/info13070349)

Ho, J. C., Wu, C. G., Lee, C. S., and Pham, T. T. T. (2020) ‘Factors affecting the behavioral intention to adopt mobile banking: An international comparison’, *Technology in Society*, 63, p. 101360. [doi: 10.1016/j.techsoc.2020.101360](https://doi.org/10.1016/j.techsoc.2020.101360)

Ho, S. P. S., and Chow, M. Y. C. (2024) ‘The role of artificial intelligence in consumers’ brand preference for retail banks in Hong Kong’, *Journal of Financial Services Marketing*, 29(2), pp. 292-305. [doi: 10.1057/s41264-022-00207-3](https://doi.org/10.1057/s41264-022-00207-3)

Ho, S. P. S., and Wong, A. (2023) 'The role of customer personality in premium banking services', *Journal of Financial Services Marketing*, 28(2), p. 285. [doi: 10.1057/s41264-022-00150-3](https://doi.org/10.1057/s41264-022-00150-3)

Imam, T., McInnes, A., Colombage, S. and Grose, R. (2022) 'Opportunities and Barriers for FinTech in SAARC and ASEAN Countries', *Journal of Risk and Financial Management*, 15(2), p.77. [doi: 10.3390/jrfm15020077](https://doi.org/10.3390/jrfm15020077)

Irshad, M., Ahmad, M. S., and Malik, O. F. (2020) 'Understanding consumers' trust in social media marketing environment', *International Journal of Retail & Distribution Management*, 48(11), pp. 1195-1212. [doi: 10.1108/IJRDM-07-2019-0225](https://doi.org/10.1108/IJRDM-07-2019-0225)

Isaeva, N., Gruenewald, K., and Saunders, M. N. (2020) 'Trust theory and customer services research: theoretical review and synthesis', *The Service Industries Journal*, 40(15-16), pp. 1031-1063. [doi: 10.1080/02642069.2020.1779225](https://doi.org/10.1080/02642069.2020.1779225)

Ivanova, A., and Noh, G. (2022) 'The impact of service quality and loyalty on adoption and use of mobile banking services: Empirical evidence from central Asian context', *The Journal of Asian Finance, Economics and Business*, 9(5), pp. 75-86. [doi: 10.13106/jafeb.2022.vol9.no5.0075](https://doi.org/10.13106/jafeb.2022.vol9.no5.0075)

Jamieson, M. K., Govaart, G. H., and Pownall, M. (2023) 'Reflexivity in quantitative research: A rationale and beginner's guide', *Social and Personality Psychology Compass*, 17(4), p. e12735. [doi: 10.1111/spc3.12735](https://doi.org/10.1111/spc3.12735)

Jarvis, R., and Han, H. (2021) 'FinTech innovation: Review and future research directions', *International Journal of Banking, Finance and Insurance Technologies*, 1(1), pp. 79-102. <https://researchlakejournals.com/index.php/IJBFIT/article/download/126/98>

Jebb, A. T., Ng, V., and Tay, L. (2021) 'A review of key Likert scale development advances: 1995–2019', *Frontiers in Psychology*, 12, p. 637547. [doi: 10.3389/fpsyg.2021.637547](https://doi.org/10.3389/fpsyg.2021.637547)

Jünger, M., and Mietzner, M. (2020) 'Banking goes digital: The adoption of FinTech services by German households', *Finance Research Letters*, 34, p. 101260. [doi: 10.1016/j.fl.2019.08.008](https://doi.org/10.1016/j.fl.2019.08.008)

Karjaluoto, H., Shaikh, A.A., Saarijärvi, H. and Saraniemi, S. (2019) 'How perceived value drives the use of mobile financial services apps', *International Journal of Information Management*, 47, pp.252-261. [doi: 10.1016/j.ijinfomgt.2018.08.014](https://doi.org/10.1016/j.ijinfomgt.2018.08.014)

Karpoff, J. M. (2021) 'The future of financial fraud', *Journal of Corporate Finance*, 66, p. 101694. [doi: 10.1016/j.jcorpfin.2020.101694](https://doi.org/10.1016/j.jcorpfin.2020.101694)

Lee, E. (2022) 'Technology-driven solutions to banks' de-risking practices in Hong Kong: FinTech and blockchain-based smart contracts for financial inclusion', *Common Law World Review*, 51(1-2), pp. 83-108. [doi: 10.1177/14737795211071095](https://doi.org/10.1177/14737795211071095)

Li, Y., and Shang, H. (2020) 'Service quality, perceived value, and citizens' continuous-use intention regarding e-government: Empirical evidence from China', *Information & Management*, 57(3), p. 103197. [doi: 10.1016/j.im.2019.103197](https://doi.org/10.1016/j.im.2019.103197)

Li, Y., and Wang, J. (2021) 'Evaluating the impact of information system quality on continuance intention toward cloud financial information system', *Frontiers in Psychology*, 12, p. 713353. [doi: 10.3389/fpsyg.2021.713353](https://doi.org/10.3389/fpsyg.2021.713353)

Mailizar, M., Burg, D., and Maulina, S. (2021) 'Examining university students' behavioural intention to use e-learning during the COVID-19 pandemic: An extended TAM model', *Education and Information Technologies*, 26(6), pp. 7057-7077. [doi: 10.1007/s10639-021-10557-5](https://doi.org/10.1007/s10639-021-10557-5)

Mascarenhas, A.B., Perpétuo, C.K., Barrote, E.B. and Perides, M.P. (2021) 'The influence of perceptions of risks and benefits on the continuity of use of fintech services', *BBR. Brazilian Business Review*, 18, pp.1-21. [doi: 10.15728/bbr.2021.18.1.1](https://doi.org/10.15728/bbr.2021.18.1.1)

Miao, M., Jalees, T., Zaman, S.I., Khan, S., Hanif, N.U.A. and Javed, M.K. (2022) 'The influence of e-customer satisfaction, e-trust and perceived value on consumer's repurchase intention in B2C e-commerce segment', *Asia Pacific Journal of Marketing and Logistics*, 34(10), pp.2184-2206. [doi: 10.1108/APJML-03-2021-0221](https://doi.org/10.1108/APJML-03-2021-0221)

Mo, W. Y. and Chu, P. K. H. (n.d.) 'A study of the usage intention for virtual banks in Hong Kong

Mohajan, H. K. (2020) 'Quantitative research: A successful investigation in natural and social sciences', *Journal of Economic Development, Environment and People*, 9(4), pp. 50-79. [doi: 10.26458/jedep.v9i4.679](https://doi.org/10.26458/jedep.v9i4.679)

Molinillo, S., Aguilar-Illescas, R., Anaya-Sánchez, R. and Liébana-Cabanillas, F. (2021) 'Social commerce website design, perceived value and loyalty behavior intentions: The moderating roles of gender, age and frequency of use', *Journal of Retailing and Consumer Services*, 63, p.102404. [doi: 10.1016/j.jretconser.2020.102404](https://doi.org/10.1016/j.jretconser.2020.102404)

Moses, P., Wong, S.L., Bakar, K.A. and Mahmud, R. (2013) 'Perceived usefulness and perceived ease of use: Antecedents of attitude towards laptop use among science and mathematics teachers in Malaysia', *The Asia-Pacific Education Researcher*, 22, pp.293-299. [doi: 10.1007/s40299-012-0054-9](https://doi.org/10.1007/s40299-012-0054-9)

Naruetharadhol, P., Ketkaew, C., Hongkanchanapong, N., Thaniswannasri, P., Uengkusolmongkol, T., Prasomthong, S. and Gebombut, N. (2021) 'Factors affecting sustainable intention to use mobile banking services', *Sage Open*, 11(3), p.21582440211029925. [doi: 10.1177/21582440211029925](https://doi.org/10.1177/21582440211029925)

Nayak, K., Singh, P., and Dave, P. (2021) 'Does data security and trust affect the users of FinTech?', *International Journal of Management (IJM)*, 12(1), pp. 191-206. [doi: 10.34218/IJM.12.1.2021.016](https://doi.org/10.34218/IJM.12.1.2021.016)

Nazir, M. I., Tan, Y., and Nazir, M. R. (2021) 'Intellectual capital performance in the financial sector: Evidence from China, Hong Kong, and Taiwan', *International Journal of Finance & Economics*, 26(4), pp. 6089-6109. [doi: 10.1002/ijfe.2110](https://doi.org/10.1002/ijfe.2110)

Ng, T.K., Lo, M.F., Fong, B.Y. and Yee, H.H. (2022) 'Predictors of the intention to use traditional Chinese medicine (TCM) using extended theory of planned behavior: a cross-sectional study among TCM users in Hong Kong', *BMC Complementary Medicine and Therapies*, 22(1), p.113. [doi: 10.1186/s12906-022-03598-x](https://doi.org/10.1186/s12906-022-03598-x)

Nguyen, D.D., Nguyen, T.D., Nguyen, T.D. and Nguyen, H.V. (2021) 'Impacts of perceived security and knowledge on continuous intention to use mobile Fintech payment services: An empirical study in Vietnam', *The Journal of Asian Finance, Economics and Business*, 8(8), pp.287-296. [doi: 10.13106/jafeb.2021.vol8.no8.0287](https://doi.org/10.13106/jafeb.2021.vol8.no8.0287)

Ololade, Y. J. (2024) 'Conceptualizing fintech innovations and financial inclusion: comparative analysis of African and US initiatives', *Finance & Accounting Research Journal*, 6(4), pp. 546-555. [doi: 10.51594/farj.v6i4.1012](https://doi.org/10.51594/farj.v6i4.1012)

Omarova, S. T. (2020) 'Technology v technocracy: Fintech as a regulatory challenge', *Journal of Financial Regulation*, 6(1), pp. 75-124. [doi: 10.1093/jfr/fjaa004](https://doi.org/10.1093/jfr/fjaa004)

Pratama, J. (2021) 'Analysis of factors affecting trust on the use of FinTech (P2P lending) in Indonesia', *Jurnal Sisfokom (Sistem Informasi Dan Komputer)*, 10(1), pp. 79-85. [doi: 10.32736/sisfokom.v10i1.1068](https://doi.org/10.32736/sisfokom.v10i1.1068)

Rahimi, E., Shabanpour, R., Shamshiripour, A. and Mohammadian, A.K. (2021) 'Perceived risk of using shared mobility services during the COVID-19 pandemic. *Transportation Research Part F: Traffic Psychology and Behaviour*, 81, pp.271-281. [doi: 10.1016/j.trf.2021.06.012](https://doi.org/10.1016/j.trf.2021.06.012)

Riahi, Y., and Garrouch, K. (2023) 'A model explaining perceived investment value and switching intentions toward FinTech: the case of crowdlending', *Journal of Financial Services Marketing*, pp. 1-15. [doi: 10.1057/s41264-023-00222-y](https://doi.org/10.1057/s41264-023-00222-y)

Roh, T., Yang, Y.S., Xiao, S. and Park, B.I. (2024) 'What makes consumers trust and adopt fintech? An empirical investigation in China', *Electronic Commerce Research*, 24(1), pp.3-35. [doi: 10.1007/s10660-021-09527-3](https://doi.org/10.1007/s10660-021-09527-3)

Ryu, H. S., and Ko, K. S. (2020) 'Sustainable development of Fintech: Focused on uncertainty and perceived quality issues', *Sustainability*, 12(18), p. 7669. [doi: 10.3390/su12187669](https://doi.org/10.3390/su12187669)

Sabir, A.A., Ahmad, I., Ahmad, H., Rafiq, M., Khan, M.A. and Noreen, N. (2023) 'Consumer acceptance and adoption of AI robo-advisors in fintech industry', *Mathematics*, 11(6), p.1311. [doi: 10.3390/math11061311](https://doi.org/10.3390/math11061311)

Saleem, A. (2021) 'Fintech revolution, perceived risks and Fintech adoption: Evidence from financial industry of Pakistan', *International Journal of Multidisciplinary and Current Educational Research*, 3(1), pp. 191-205. https://www.ijmcer.com/wp-content/uploads/2023/07/IJMCER_W0330191205.pdf

Santos, K.D.S., Ribeiro, M.C., Queiroga, D.E.U.D., Silva, I.A.P.D. and Ferreira, S.M.S. (2020) 'The use of multiple triangulations as a validation strategy in a qualitative study', *Ciencia & saude coletiva*, 25, pp.655-664. [doi: 10.1590/1413-81232020252.12302018](https://doi.org/10.1590/1413-81232020252.12302018)

Senyo, P. K., and Osabutey, E. L. (2020) 'Unearthing antecedents to financial inclusion through FinTech innovations', *Technovation*, 98, p. 102155. [doi: 10.1016/j.technovation.2020.102155](https://doi.org/10.1016/j.technovation.2020.102155)

Sharma, S. K., Ilavarasan, P. V., and Karanasios, S. (2024) 'Small businesses and FinTech: a systematic review and future directions', *Electronic Commerce Research*, 24(1), pp. 535-575. [doi: 10.1007/s10660-023-09705-5](https://doi.org/10.1007/s10660-023-09705-5)

Sharma, D., and Munjal, P. (2024) 'Determining the key drivers of FinTech adoption in India', *International Journal of Process Management and Benchmarking*, 16(4), pp. 533-554. [doi: 10.1504/IJPMB.2024.137146](https://doi.org/10.1504/IJPMB.2024.137146)

Sharma, S., Sharma, M., and Dhingra, D. (2024) 'Cluster-based systematic literature review: Understanding FinTech adoption and challenges', *Abhigyan*, 42(3), pp. 206-227. [doi: 10.1177/09702385241256010](https://doi.org/10.1177/09702385241256010)

Sharma, V., Jangir, K., Gupta, M. and Rupeika-Apoga, R. (2024) 'Does service quality matter in FinTech payment services? An integrated SERVQUAL and TAM approach', *International Journal of Information Management Data Insights*, 4(2), p.100252. [doi: 10.1016/j.jjime.2024.100252](https://doi.org/10.1016/j.jjime.2024.100252)

Singh, S., Sahni, M. M., and Kovid, R. K. (2020) 'What drives FinTech adoption? A multi-method evaluation using an adapted technology acceptance model', *Management Decision*, 58(8), pp. 1675-1697. [doi: 10.1108/MD-09-2019-1318](https://doi.org/10.1108/MD-09-2019-1318)

Singh, S., and Srivastava, R. K. (2020) 'Understanding the intention to use mobile banking by existing online banking customers: an empirical study', *Journal of Financial Services Marketing*, 25(3), pp. 86-96. [doi: 10.1057/s41264-020-00074-w](https://doi.org/10.1057/s41264-020-00074-w)

Soleimani, M. (2022) 'Buyers' trust and mistrust in e-commerce platforms: a synthesizing literature review', *Information Systems and e-Business Management*, 20(1), pp. 57-78. [doi: 10.1007/s10257-021-00545-0](https://doi.org/10.1007/s10257-021-00545-0)

Statista (2024) 'Fintech market Hong Kong'. Available at: <https://www.statista.com/outlook/dmo/fintech/hong-kong#transaction-value> (Accessed 14 November 2024).

Tang, K. L., Ooi, C. K., and Chong, J. B. (2020) 'Perceived risk factors affect intention to use FinTech', *Journal of Accounting and Finance in Emerging Economies*, 6(2), pp. 453-463. [doi: 10.26710/jafee.v6i2.1101](https://doi.org/10.26710/jafee.v6i2.1101)

Taufiq, A. R. (2021) 'Integrating TAM, VAM, PAM and security perception in the intention of fintech service usage', *Jurnal Manajemen Indonesia*, 21(3), pp. 198-207. [doi: 10.25124/jmi.v21i3.2650](https://doi.org/10.25124/jmi.v21i3.2650)

Theresia, S., and Tan, H. S. (2021) 'Evaluation of service quality and user experience on credit card application using e-SERVQUAL model and usability testing', *IOP Conference Series: Earth and Environmental Science*, 794(1). [doi: 10.1088/1755-1315/794/1/012095](https://doi.org/10.1088/1755-1315/794/1/012095)

To, A. T., and Trinh, T. H. M. (2021) 'Understanding behavioral intention to use mobile wallets in Vietnam: Extending the tam model with trust and enjoyment', *Cogent Business & Management*, 8(1), p. 1891661. [doi: 10.1080/23311975.2021.1891661](https://doi.org/10.1080/23311975.2021.1891661)

Trinh, H. N., Tran, H. H., and Vuong, D. H. Q. (2020) 'Determinants of consumers' intention to use credit card: a perspective of multifaceted perceived risk', *Asian Journal of*

Economics and Banking, 4(3), pp. 105-120. [doi: 10.1108/AJEB-06-2020-0018](https://doi.org/10.1108/AJEB-06-2020-0018)

Truc, L. T. (2024) 'Empowering tomorrow: Unleashing the power of e-wallets with adoption readiness, personal innovativeness, and perceived risk to client's intention', *Journal of Open Innovation Technology Market and Complexity*, 10(3), p. 100322. [doi: /10.1016/j.joitmc.2024.100322](https://doi.org/10.1016/j.joitmc.2024.100322)

Wang, X., and Cheng, Z. (2020) 'Cross-sectional studies: strengths, weaknesses, and recommendations', *Chest*, 158(1), pp. S65-S71. [doi: 10.1016/j.chest.2020.03.012](https://doi.org/10.1016/j.chest.2020.03.012)

Wong, W. H., and Mo, W. Y. (2019) 'A study of consumer intention of mobile payment in Hong Kong, based on perceived risk, perceived trust, perceived security and Technological Acceptance Model', *Journal of Advanced Management Science*, 7(2), pp. 33-38. [doi: 10.18178/joams.7.2.33-38](https://doi.org/10.18178/joams.7.2.33-38)

Xie, J., Ye, L., Huang, W. and Ye, M. (2021) 'Understanding FinTech platform adoption: impacts of perceived value and perceived risk', *Journal of Theoretical and Applied Electronic Commerce Research*, 16(5), pp.1893-1911. [doi: 10.3390/jtaer16050106](https://doi.org/10.3390/jtaer16050106)

Zarifis, A., and Cheng, X. (2022) 'A model of trust in Fintech and trust in Insurtech: How Artificial Intelligence and the context influence it', *Journal of Behavioral and Experimental Finance*, 36, p. 100739. [doi: 10.1016/j.jbef.2022.100739](https://doi.org/10.1016/j.jbef.2022.100739)

Zhang, L. L., and Kim, H. (2020) 'The influence of financial service characteristics on use intention through customer satisfaction with mobile fintech', *Journal of System and Management Sciences*, 10(2), pp. 82-94. [doi:10.33168/JSMS.2020.0206](https://doi.org/10.33168/JSMS.2020.0206)

Zhao, H., and Khaliq, N. (2024) 'In quest of perceived risk determinants affecting intention to use fintech: Moderating effects of situational factors', *Technological Forecasting and Social Change*, 207, p. 123599. [doi: 10.1016/j.techfore.2024.123599](https://doi.org/10.1016/j.techfore.2024.123599)

Zhou, Q., Lim, F.J., Yu, H., Xu, G., Ren, X., Liu, D., Wang, X., Mai, X. and Xu, H. (2021) 'A study on factors affecting service quality and loyalty intention in mobile banking', *Journal of Retailing and Consumer Services*, 60, p.102424. [doi: 10.1016/j.jretconser.2020.102424](https://doi.org/10.1016/j.jretconser.2020.102424)

Zhu, A. Y. F., Yu, C. W. M., and Chou, K. L. (2021) 'Improving financial literacy in secondary school students: An randomized experiment', *Youth & Society*, 53(4), pp. 539-562. [doi: 10.1177/0044118X19851311](https://doi.org/10.1177/0044118X19851311)

Jangir, K., Sharma, V., Taneja, S. and Rupeika-Apoga, R. (2022) 'The moderating effect of perceived risk on users' continuance intention for FinTech services', *Journal of Risk and Financial Management*, 16(1), p.21. [doi: 10.3390/jrfm16010021](https://doi.org/10.3390/jrfm16010021)

Appendix A

A.1 Reliability Analysis

Construct reliability determination was obtained using Cronbach's alpha, based on data from a pilot study involving 30 people. The result showed a value of 0.767, which is an acceptable standard.

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	30	100,0
	Excluded ^a	0	,0
	Total	30	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
,767	5

A.2 Correlation

The concept of correlation and such an assessment makes it possible to preliminarily understand the mutual direction of the relationships between variables, both dependent and independent. The following result was obtained within the framework of the pilot study:

Correlations		trust	s_quality	p_risk	per_value	intention
trust	Pearson Correlation	1	,647**	,383*	,533**	,571**
	Sig. (2-tailed)		,000	,037	,002	,001
	N	30	30	30	30	30
s_quality	Pearson Correlation	,647**	1	,220	,579**	,479**
	Sig. (2-tailed)	,000		,242	,001	,007
	N	30	30	30	30	30
p_risk	Pearson Correlation	,383*	,220	1	,415*	,618**
	Sig. (2-tailed)	,037	,242		,023	,000
	N	30	30	30	30	30
per_value	Pearson Correlation	,533**	,579**	,415*	1	,637**
	Sig. (2-tailed)	,002	,001	,023		,000
	N	30	30	30	30	30
intention	Pearson Correlation	,571**	,479**	,618**	,637**	1
	Sig. (2-tailed)	,001	,007	,000	,000	
	N	30	30	30	30	30

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

A.3 Regression Analysis

Multiple linear regression is necessary to evaluate hypotheses and find dependencies between the specified variables. In the pilot study, the result presented below was obtained. According to it, R square is 0.599, which means that the model describes 59.9% of the data variation. Significance in the second table is below 0.001, which indicates the statistical significance of the result. However, in the model itself, no one variable is statistically significant in relation to the influence on the dependent: the significance indicator exceeds 0.05. This fact indicates a small sample, which may change when moving on to a larger study.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,774 ^a	,599	,534	,580

a. Predictors: (Constant), per_value, p_risk, trust, s_quality

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12,551	4	3,138	9,322	,000 ^b
	Residual	8,415	25	,337		
	Total	20,967	29			

a. Dependent Variable: intention

b. Predictors: (Constant), per_value, p_risk, trust, s_quality

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,109	,660		-,165	,871
	trust	,158	,141	,200	1,124	,272
	s_quality	,059	,140	,076	,419	,679
	p_risk	,391	,144	,391	2,713	,012
	per_value	,378	,196	,324	1,922	,066

a. Dependent Variable: intention

Table of Contents

List of Figures	3
List of Tables.....	4
Chapter 1: Introduction.....	1
1.1 Research Background.....	1
1.2 Research Motivation	3
1.3 Research Aim and Objectives.....	4
1.4 Research Limitations	5
1.5 Summary	7
Chapter 2: Literature Review	8
2.1 Trust.....	8
2.1.1 Definition	8
2.1.2 Construct and Measurements	10
2.2 System Quality or Accessibility.....	12
2.2.1 Definition	12
2.2.2 Construct and Measurements	14
2.3 Perceived Risk of Using.....	16
2.3.1 Definition	16
2.3.2 Construct and Measurements	18
2.4 Perceived Value	20
2.4.1 Definition	20
2.4.2 Construct and Measurements	22
2.5 Intention to Use.....	24
2.5.1 Definition	24
2.5.2 Construct and Measurements	26
2.6 Demographic Factors	28
Chapter 3: Research Methodology	28
3.1 Research Model with Hypotheses	28
3.2 Triangulation	30
3.3 Quantitative Research Approach	30
3.4 Focus Group.....	31
3.5 Questionnaire Survey Method.....	32
3.6 Pilot Test.....	32
3.7 Final Survey	33
3.7.1 Target Population.....	35
3.7.2 Sampling Method	36
3.6.3 Sampling Size.....	37

3.7 Data Analysis Techniques.....	37
3.8 Research Method Limitations	38
3.9 Research Ethics.....	38
Reference List.....	39
Appendix A	53
A.1 Reliability Analysis.....	53
A.2 Correlation	53
A.3 Regression Analysis.....	54

List of Figures

Figure 1. Fintech Market in Hong Kong.....	2
Figure 2. Research Flowchart.....	7
Figure 3. Research Model.....	29
Figure 4. Target Population Chart.....	36

List of Tables

Table 1. Trust Definitions.....	9
Table 2. Trust Measurement.....	11
Table 3. System Quality Definitions.....	13
Table 4. System Quality Measurement.....	15
Table 5. Perceived Risk of Usage Definitions.....	17
Table 6. Perceived Risk of Usage Measurement.....	19
Table 7. Perceived Value Definitions.....	21
Table 8. Perceived Value Measurement.....	23
Table 9. Intention to Use Definitions.....	25
Table 10. Intention to Use Measurement.....	27
Table 11. Final Questionnaire.....	34

The Role of Fintech in Disrupting Traditional Retail and Commercial Banking: Opportunities and Challenges

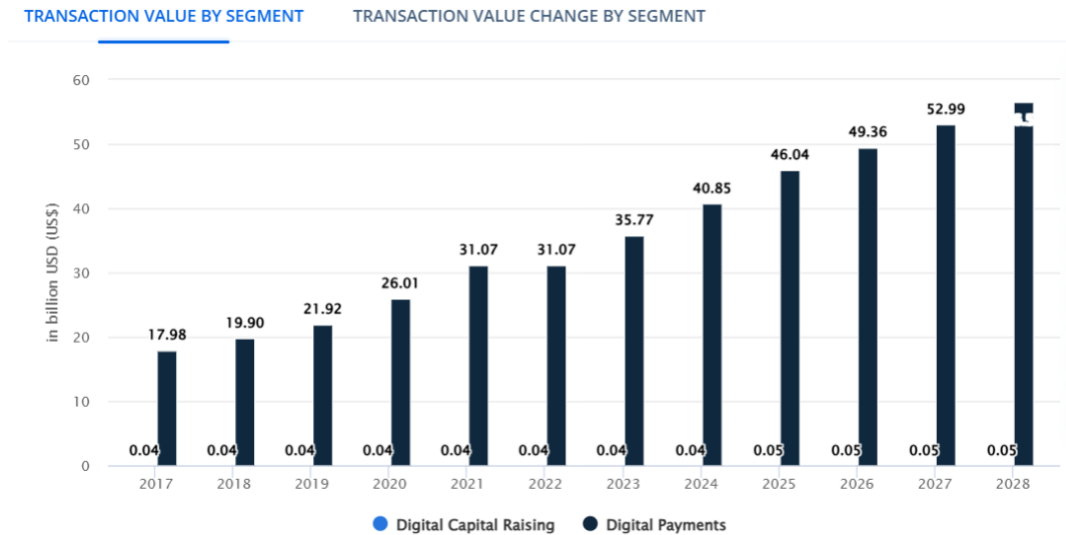
Chapter 1: Introduction

1.1 Research Background

In recent years, Fintech have been disrupting the landscape of traditional retail and commercial banking operations, challenging traditional approaches with innovative, user-centric solutions. Fintech typically optimize processes through increased accessibility, lower costs, and automation, possibly with the implementation of machine learning (Anifa et al., 2022; Jarvis and Han, 2021; Ololade, 2024; Senyo and Osabutey, 2020). Digital wallets, peer-to-peer lending, investment platforms, and recommendation systems are attracting and expanding a growing customer base across a variety of businesses in the industry (Agarwal and Zhang, 2020; Cao, Yang, and Yu, 2021; Sharma, Sharma, and Dhingra, 2024). The transformation is happening globally, including Hong Kong, which is the focus of this study on the efficiency and transformation of governance, lending, investment and many other aspects of financial activity in this subject area.

Figure 1

Fintech Market in Hong Kong



Source: (Statista, 2024)

The fintech market as a whole is growing in this country and is expected to grow even faster for at least the next four years, and at a fairly high rate, as shown in Figure 1. The role of fintech in this case is key, since they are the drivers of this growth (Berman, Cano-Kollmann, and Mudambi, 2022, Caragea et al., 2024, Cojoianu et al., 2021). Hong Kong is recognized as a global financial center, being at the forefront of such developments at least in Asia (Au, 2022). The city's highly developed infrastructure, technologically literate population, and favorable regulatory environment have made it fertile ground for adaptation and development in many areas of human activity, with finance accompanying many of them (Nazir, Tan, and Nazir, 2021). The Hong Kong Monetary Authority (HKMA) has actively supported the adoption of fintech through initiatives such as the Fintech Supervisory Sandbox and Faster Payment System, which ensure secure and efficient digital transactions (Lee, 2022). The competitive presence of fintech companies in the Hong Kong banking sector, driven by technological innovation and regulatory support, has nevertheless raised questions about the factors influencing the adoption

of fintech services among local users.

The appeal of fintech services may not be immediately apparent to ordinary users – adoption of innovations is not universal. While some demographic groups are quick to adopt fintech developments due to convenience and predisposition, others are hesitant, citing issues with trust, privacy, potential risks, uncertainty, and a range of other reasons (Alsmadi et al., 2022, Bouteraa et al., 2023, Chan et al., 2022, Imam et al., 2022). Hong Kong may be a differentiator in such studies due to certain cultural, social, and a range of other determinants that will differentiate the answers to research questions from similar work in the academic community (De Becker, De Witte, and Van Campenhout, 2020). Understanding consumer attitudes is revealed through four critical factors: trust, system quality or accessibility, perceived risk, and purpose of use, each of which potentially influences a user's intention to adopt fintech services (Singh and Srivastava, 2020, Trinh, Tran, and Vuong, 2020, To and Trinh, 2021, Zhou et al., 2021). The results of this study can provide valuable guidance for both companies in the industry aiming to optimize user experience and consumers themselves.

1.2 Research Motivation

Fintech developments in connection with the mentioned problems at the level of user perception can extrapolate into more serious shortcomings at the scale of implementation. Some points of view claim that fintech has a disruptive nature in relation to traditional banking and shifts in consumer behavior (Faustino, 2022, Omarova, 2020, Sharma, Ilavarasan, and Karanasios, 2024). On the one hand, the increasing frequency of fraudulent activities in the financial industry, including due to digitalization, lead to the fact that fintech here looks like a potential salvation and a negative factor at the same time (Karpoff, 2021). Stakeholders in the form of traditional banks and regulators, however, must adapt to the new reality, and therefore

the focus on this issue is one of the most important motivations for conducting the study.

While the general benefits of fintech such as ease of use, flexibility, and access to previously underserved populations are widely recognized, less is known about the nuances that influence adoption in the Hong Kong context. Hong Kong has a unique mix of traditional and modern approaches in financial practices across different demographic groups (Ho and Chow, 2024). As a relatively developed country, consumers are known to have high expectations of financial services, safety, quality, and accessibility (Ho and Wong, 2023). This unique combination is another motivation for carrying out this work, which is of interest both for the subject area and for the region where it is carried out.

1.3 Research Aim and Objectives

This research aims to examine the influence of specific factors—Trust, System Quality, Perceived Risk, and Perceived Value—on the intention of Hong Kong consumers to adopt fintech services. The key objectives:

To evaluate the role of trust in determining Hong Kong consumers' willingness to engage with fintech services.

To analyze the influence of system quality on fintech adoption intentions.

To assess the impact of perceived risk on user intention to adopt fintech.

To investigate how perceived value, or the specific needs and motivations of users (e.g., making payments, investing, or saving), impacts their intention to adopt fintech solutions in correlation with costs.

This study, therefore, aims to address the gap in knowledge about consumer attitudes toward fintech in Hong Kong, exploring these variables to provide a comprehensive view of the market's adoption dynamics. One of the functions of the work is to present actionable insights to

multiple stakeholders in the fintech ecosystem. The results will be particularly relevant for organizations in the fintech field, looking to improve their market penetration strategies in Hong Kong. Accordingly, these companies will adopt their services based on perceived value, trust, or other key determinants that this study identifies. As a result, developers will be able to create transparent systems to strengthen customer relationships, ensuring a seamless consumer experience.

Financial institutions moving to digital services can also use the research information to develop strategies that mitigate perceived security and privacy risks. Policymakers and regulators can also benefit from a clearer understanding of the factors influencing fintech adoption. This knowledge can guide the development of supportive policies and frameworks that enhance consumer trust while promoting innovation in the industry, with a focus on the most promising developments in terms of adoption aspects. Finally, academic and research communities studying consumer technology adoption behavior will find this study valuable in expanding theoretical understanding of the dynamics of fintech adoption. By bridging the gap between theory and practice, this work serves as a foundational resource for developing solutions and policies that meet the unique needs of Hong Kong's consumer base, ensuring sustainable growth and widespread adoption of fintech services.

1.4 Research Limitations

This study, while comprehensive in its approach, is subject to several limitations that may impact the generalizability and interpretation of the findings. First, the research relies heavily on self-reported data collected through surveys. Self-reported data can introduce biases such as social desirability bias, where participants may provide responses they believe are more socially acceptable, or recall bias, which may affect the accuracy of their perceptions and experiences.

Although steps were taken to ensure anonymity and minimize these effects, the potential for such biases remains.

Second, the sample is drawn exclusively from Hong Kong consumers. While this provides valuable insights into the adoption dynamics of fintech within a specific cultural and geographic context, the findings may not be entirely applicable to other regions with differing cultural, economic, or regulatory environments (Wong and Mo, 2019). The results should therefore be interpreted with caution when considering fintech adoption trends in other markets. Third, the study employs a cross-sectional design, which captures data at a single point in time. While this approach is effective for understanding correlations, it does not allow for the establishment of causality or the observation of changes in consumer behavior over time. Future research could address this limitation by adopting a longitudinal design to track changes in fintech adoption intentions.

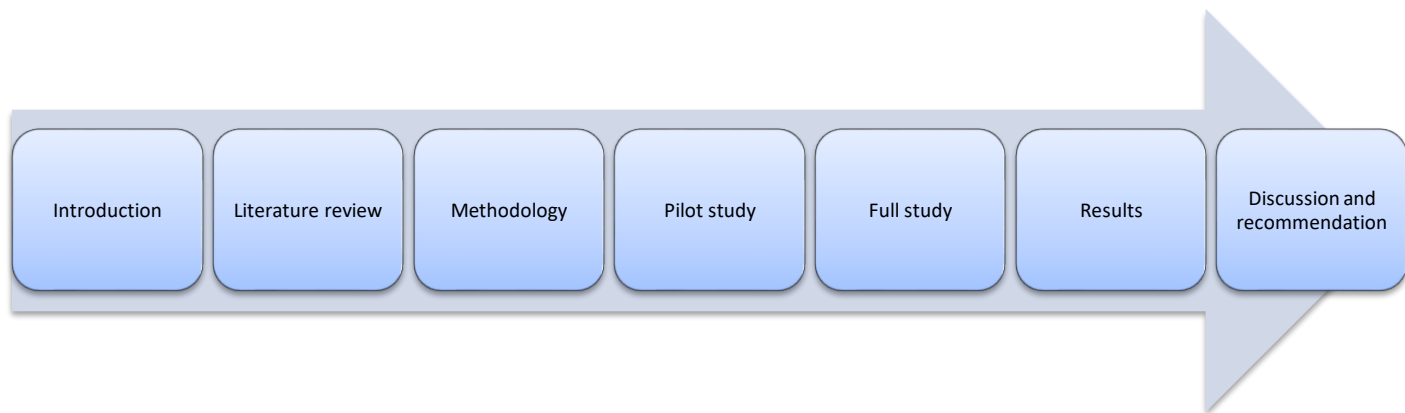
Another limitation lies in the focus on specific variables: trust, system quality, perceived risk, and perceived value. While these are critical factors in understanding fintech adoption, other potentially influential factors, such as government policy, peer influence, or technological innovations, were not included (Faustino, 2022). The exclusion of these variables may result in a less comprehensive model. Finally, the study relies on an online survey platform, which may exclude certain segments of the population, particularly those who are less digitally literate or lack access to the internet. This may introduce selection bias and limit the diversity of perspectives captured. Despite these limitations, the study provides valuable insights into the factors influencing fintech adoption in Hong Kong and serves as a foundation for future research to address these gaps.

1.5 Summary

In summary, fintech are becoming increasingly influential players in the global financial sector, and Hong Kong is an important market where the adoption of innovations is shaped by various user-centric factors. Figure 2 outlines the flow chart of activities related to this study.

Figure 2

Research Flowchart



Source: Construct by the author

Chapter 2: Literature Review

This chapter examines each aspect of usage intention in detail, including this variable. Ten different definitions and determinants are proposed for each of the factors. Such a multifaceted view is necessary to better consider all potential points of view, the impact of different aspects in order to create a more thoughtful questionnaire and to take into account the specifics of Hong Kong in this study of the adoption of fintech developments.

2.1 Trust

2.1.1 Definition

Trust plays a pivotal role in the adoption of fintech services, especially in the context of handling sensitive financial information. Many scholars agree that it is this driver that any adoption of an innovation or technology begins with, since it is this aspect that takes into account issues of security, privacy and a set of potential risks that form psychological or even physical barriers (Fan et al., 2021, Nguyen et al., 2021). At the same time, a high level of subjectivity in this indicator is emphasized, since individual characteristics of a person can act as significant determinants of trust (Aslam et al., 2020). As a result, several sources were selected in their diversity, giving different definitions of this term, however, with a narrowing of the context to the financial context, which is presented in Table 1.

Table 1

Trust Definitions

Source	Definition
Irshad, Ahmad, and Malik, 2020	the willingness to rely on an exchange partner in whom one has confidence
Isaeva, Gruenewald, and Saunders, 2020	a belief that online services are secure, reliable, and credible in fulfilling promises
Soleimani, 2022	a complex of security, safety, continuity and reliability
Zarifis and Cheng, 2022	individuals' psychological disposition with sociological factors influences
Pratama, 2021	a complex of structural assurance, integrity, brand perception
Nayak, Singh, Dave, 2021	a security, promotion, value in fulfilling promises
Chi et al., 2021	efficiency with a high level of safety and reliability
Aldboush and Ferdous, 2023	reliability and continuity with discreet service
Ali et al., 2021	the willingness to rely on service security, and comfort
Roh et al., 2024	the ability to be confident in the security and implementation of functionality

Source: Construct by the author

2.1.2 Construct and Measurements

Trust is often measured using items that assess users' confidence in the platform's ability, integrity, and benefit. The entire set is presented in Table 2.

Table 2

Trust Measurements

Source	Measurements
Zarifis and Cheng, 2022	Individuals psychological disposition to trust, sociological factors influencing trust, trust in either the financial organization or the insurer and trust in AI and related technologies
Pratama, 2021	Structural assurance, ease of use, and brand image, integrity
Nayak, Singh, Dave, 2021	Security, promotion, value
Irshad, Ahmad, and Malik, 2020	Confidence, reliability
Isaeva, Gruenewald, and Saunders, 2020	Security, reliability, credibility
Soleimani, 2022	Security, safety, continuity and reliability
Chi et al., 2021	Efficiency, comfort, ease-of-use
Aldboush and Ferdous, 2023	Service quality, security, comfort
Ali et al., 2021	Service quality, security, comfort
Roh et al., 2024	Security, safety, continuity, credibility

Source: Construct by the author

2.2 System Quality or Accessibility

2.2.1 Definition

System quality refers to the technological aspects of a fintech platform, particularly its accessibility, ease of use, and reliability – Table 3.

Table 3

System Quality Definitions

Source	Definition
Barbu et al., 2021	perceived benefits that fintech system gives to the customer
Mailizar, Burg, and Maulina, 2021	refers to the desired attributes of an information system, including accessibility, flexibility, and functionality
Ivanova and Noh, 2022	a complex of security, service quality, interface design, loyalty
Li and Wang, 2021	the overall performance and reliability of a fintech system, evaluated by its speed, accessibility, and error-free operation
Theresia and Tan, 2021	the perceived effectiveness of a fintech platform in delivering consistent, secure, and user-friendly experiences
Truc, 2024	the level of functionality and dependability that a fintech system offers, encompassing user satisfaction and system stability
Ryu and Ko, 2020	refers to perceptions derived from the overall performance of IT systems
Sharma et al., 2024	a comprehensive evaluation or perception of the service's overall excellence or superiority
Mo and Chu, n.d.	the degree to which a fintech technology performs reliably and as expected, ensuring consistent and high-quality user experiences
Aldaarmi, 2024	a good predictor of customer engagement and satisfaction as banks make the transition into the digital age

Source: Construct by the author

2.2.2 Construct and Measurements

System quality is typically measured by examining the platform's technical aspects, such as accessibility, speed, and ease of navigation. Table 4 reflects the main measures of system quality in empirical studies of this subject area.

Table 4

System Quality Measurements

Source	Measurements
Ivanova and Noh, 2022	Security, service quality, interface design, loyalty
Li and Wang, 2021	Security, service quality, interface design, ease-of-use
Theresia and Tan, 2021	System availability, fulfillment, privacy, responsiveness, compensation, contact
Barbu et al., 2021	Ease-of-use, customer's support, assurance, speed
Mailizar, Burg, and Maulina, 2021	Accessibility, flexibility, and functionality
Truc, 2024	Functionality, satisfaction, flexibility, reliability
Ryu and Ko, 2020	System's technical characteristics, including accessibility, ease of use, response time, reliability, and stability
Sharma et al., 2024	Reliability, responsiveness, assurance, empathy, tangibles
Mo and Chu, n.d.	Responsiveness, interface, functionality, compatibility, troubleshooting
Aldaarmi, 2024	Reliability, responsiveness, assurance, empathy, tangibles

Source: Construct by the author

2.3 Perceived Risk of Using

2.3.1 Definition

Perceived risk of using is the extent to which users believe that using a fintech service could lead to negative outcomes. Despite the greater potential breadth of the concept and the potential for subjectivity, it is this term that has a fairly high level of consensus in terms of the definitions presented in Table 5 (Mascarenhas et al., 2021). It significantly simplifies the interpretation and standardization of understanding of the results depending on the research area.

Table 5

Perceived Risk of Using Definitions

Source	Definition
Rahimi et al., 2021	the expectation of potential loss or negative outcomes associated with the use of a product or service
Tang, Ooi, and Chong	involves the uncertainty and consequences of engaging with a digital service, especially in terms of privacy and financial security
Xie et al., 2021	the extent to which a user feels uncertain or apprehensive about potential negative outcomes from using a technology, such as privacy concerns or financial loss
Zhao and Khaliq, 2024	a user's subjective assessment of potential negative consequences associated with technology usage, including issues of reliability, security, and cost
Hasan, Shams, and Rahman, 2021	the anxiety or hesitancy a user experiences regarding potential risks, such as data breaches, misuse, or service interruptions.
Jünger and Mietzner, 2020	the anticipated probability and severity of adverse effects a user believes could result from technology use, often affecting adoption decisions
Saleem, 2021	serious hesitation by the people because of the perceived fear of underlying consequences as well as the risks associated with the use of innovative technology
Jangir et al., 2022	the most important factor influencing users' intentions to use FinTech

Wong and Mo, 2019	the user's estimation of the uncertainty and possible adverse effects of engaging with a technology, such as fraud risk or reputational damage
Truc, 2024	the psychological discomfort or worry a user feels about using a technology, reflecting concerns about unpredictable or harmful outcomes

Source: Construct by the author

2.3.2 Construct and Measurements

Perceived risk is measured by assessing users' fears related to financial, privacy, and transaction risks. In general, the set of these measures is presented in Table 6.

Table 6

Perceived Risk of Using Measurements

Source	Measurements
Xie et al., 2021	Social influence, facilitating conditions, performance expectancy, effort expectancy
Zhao and Khaliq, 2024	Performance, financial, time, security, social risks
Hasan, Shams, and Rahman, 2021	Consumer trust, interaction, novelty value
Rahimi et al., 2021	Potential loss, performance and effort expectancy
Tang, Ooi, and Chong	Level of uncertainty, quality of a digital service, privacy, financial security
Jünger and Mietzner, 2020	Financial literacy, negative outcomes perception, privacy
Saleem, 2021	Strategic, operational, cyber, legal risks
Jangir et al., 2022	Disclosure of personal information, system failures probability, account accessibility for others
Wong and Mo, 2019	Psychological factors, readiness to change, trust, privacy
Truc, 2024	Performance, financial, time, security risks

Source: Construct by the author

2.4 Perceived Value

2.4.1 Definition

Perceived value is a fairly broad concept, but mainly aimed at a certain value for the user, both in comparison with costs and in terms of other opportunities - technological or emotional. At the same time, this concept is quite widely used in the context of environmental responsibility, but this aspect does not yet extend to the fintech industry (Confente, Scarpi, and Russo, 2020; Li and Shang, 2020). A number of definitions are presented in Table 7.

Table 7

Perceived Value Definitions

Source	Definition
Hasan, Ashfaq, and Shao, 2021	customers can achieve some discount or cashback by using mobile payments, and pleasure means the happiness of customers
Karjaluoto et al., 2020	refers to how individuals or organizations assess the usefulness of a fintech innovation compared to existing alternatives
Anwar, Thongpapanl, and Ashraf, 2021	the trade-off between the utility gained from a fintech service and the monetary, time, and cognitive sacrifices made to adopt it
Miao et al., 2022	the benefit or satisfaction derived from the practical use of a fintech application in addressing financial needs
Riahi and Garrouch, 2023	the encompasses the trust, convenience, and emotional satisfaction consumers feel from interacting with a fintech platform
Alnsour, 2022	refers to the extent to which a fintech innovation enhances financial decision-making through its technological capabilities
Xie et al., 2021	has two components, “received” and “given”, related to performance expectancy, effort expectancy, and perceived risk
Taufiq, 2021	The degree to which a fintech technology is perceived as superior to traditional financial services in terms of accessibility, speed, and customization
Molinillo et al., 2021	involves balancing the anticipated benefits of adopting a fintech service against potential risks such as security and privacy concerns
Barbu et al., 2021	linking together the quality and price of a service

Source: Construct by the author

2.4.2 Construct and Measurements

Perceived value measures the user's perception of the benefits they gain from using fintech services relative to the cost or effort involved – Table 8.

Table 8

Perceived Value Measurements

Source	Measurements
Hasan, Ashfaq, and Shao, 2021	Financial benefits earned, pleasure, financial costs, technical effort
Karjaluoto et al., 2020	Cost savings, perceived affordability, discounts or rewards
Anwar, Thongpapanl, and Ashraf, 2021	Security, enjoyment, reduction of stress, aesthetic appeal
Miao et al., 2022	Peel approval, perception of being technologically advanced, social influence
Riahi and Garrouch, 2023	Availability, accessibility, integration with other financial tools, time
Alnsour, 2022	Security, confidence in data privacy, reputation, absence of errors
Xie et al., 2021	Effort needed, time needed, reducing costs, good value delivery
Taufiq, 2021	Safety, specific benefits, awareness of customer support, personalization
Molinillo et al., 2021	Ease-of-use, security, loyalty, feedback from early adopters, behavioral intentions
Barbu et al., 2021	Saving money, good rating at price, considering a good buy

Source: Construct by the author

2.5 Intention to Use

2.5.1 Definition

Usage intention reflects a user's likelihood or willingness to adopt and use fintech services in the future. This variable is central to this study, which requires a more detailed consideration of it in terms, as it has many different drivers (Sharma and Munjal, 2024). The tabular analysis of definitions, which is presented in Table 9.

Table 9

Intention to Use Definitions

Source	Definition
Golbabaet et al., 2020	an individual's readiness to engage with and use a particular technology
Naruetharadhol et al., 2021	the likelihood that an individual will engage in a behavior based on motivation and previous experience
Truc, 2024	the probability that a person will adopt a particular technology, typically shaped by factors such as peer influence, perceived benefits, and past experiences
Moses et al., 2013	the user's commitment to incorporate a technology into their routines, frequently measured as an early indicator of actual adoption
Ho et al., 2020	an individual's expressed or implicit desire to use a technology or innovation in the near future, often as a result of positive expectations about the technology's outcomes
Zhang and Kim, 2020	a forward-looking psychological state where a user foresees adopting a technology, influenced by situational factors and perceived need
Mo and Chu, n.d.	the level of confidence a user has about adopting a technology, usually based on their assessment of the technology's advantages and potential fit with their needs
Hassan et al., 2022	the pre-adoption stage where a user evaluates the likelihood of using

	a new technology, with intentions often acting as predictors of future behavior
Ng et al., 2022	the user's willingness to incorporate a technology into their activities
Gerlach and Lutz, 2021	an individual's readiness to use an innovation

Source: Construct by the author

2.5.2 Construct and Measurements

Usage intention is measured by gauging the likelihood of future use and users' willingness to recommend the platform, which is presented by a number of empirical studies in Table 10.

Table 10

Intention to Use Measurements

Source	Measurements
Truc, 2024	Design features, cognitive, affective, and behavioral responses
Moses et al., 2013	System-design features, ease-of-use, usefulness, attitude toward using
Ho et al., 2020	Compatibility, trialability, ease-of-use, usefulness, attitude, perceived risk
Golbabaet et al., 2020	Readiness to engage, compatibility, usefulness, specific variables
Naruetharadhol et al., 2021	Motivation, behavior intents
Zhang and Kim, 2020	Motivation, behavior intents, psychological factors, readiness, attractiveness
Mo and Chu, n.d.	Ease-of-use, usefulness, attitude toward using, efforts and intents
Hassan et al., 2022	Trust, perceived risk, readiness for changes
Ng et al., 2022	Perceived risk, readiness for changes, behavioral responses
Gerlach and Lutz, 2021	Compatibility, motivation, usefulness, specific variables

Source: Construct by the author

2.6 Demographic Factors

This study also collects data on the gender, age, income, job and education levels of the participants. Current research on Hong Kong in this context focuses more on the older generation or on the very narrow purpose of working in technology (Mo and Chu, n.d., Ng et al., 2022). Therefore, understanding these characteristics of the sample is an important step to form a complete picture of all possible factors that can affect the dependent variable.

Chapter 3: Research Methodology

3.1 Research Model with Hypotheses

The research model for this study draws upon established theories, including the Technology Acceptance Model or TAM, to assess how various factors influence users' intentions to adopt fintech platforms. This model integrates the following independent variables: trust, system quality, perceived risk of using, and perceived value, which are just typical in the assessments of such studies within the TAM framework (Hassan et al., 2022, Singh, Sahni, and Kovid , 2020, Wang and Mo, 2019). The dependent variable is usage intention, which reflects the likelihood of an individual using fintech services in the future.

Based on this model, the following hypotheses are proposed (they are also shown in Figure 3):

H1: Trust positively influences the intention to use fintech platforms among Hong Kong residents.

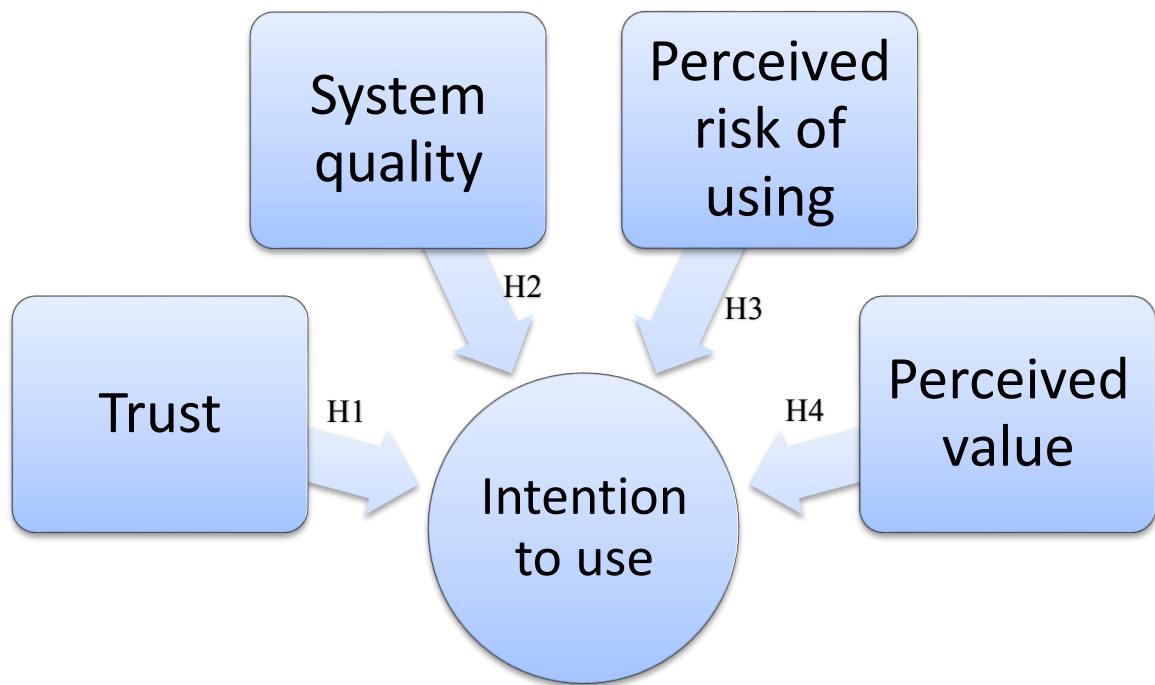
H2: System quality positively influences the intention to use fintech platforms among Hong Kong residents.

H3: Perceived risk of using negatively influences the intention to use fintech platforms among Hong Kong residents.

H4: Perceived value positively influences the intention to use fintech platforms among Hong Kong residents.

Figure 3

Research Model



3.2 Triangulation

In formulating a methodology, it is important to adhere to a number of rules and values. Triangulation is a methodological approach used to enhance the reliability and validity of research findings by integrating multiple data sources, methodologies, or theoretical perspectives (Bans-Akutey and Tiimub, 2021, Santos et al., 2020). In this paper, this aspect is implemented through the use of a structured questionnaire survey as well as established constructs based on previous studies. By including established measures for each variable, the study ensures that it achieves methodological consistency by capturing these constructs. Finally, triangulation also extends to the diverse demographic profile of the survey respondents, who represent different age groups, educational levels, and income levels.

3.3 Quantitative Research Approach

This study uses a quantitative research approach, chosen for its suitability for collecting measurable data on user perceptions and intentions. This classification of methods allows, among other things, to develop statistical models that capture the relationships between independent variables and the dependent variable, usage intention (Jamieson, Govaart, and Pownall, 2023). Quantitative methods also facilitate replicability, allowing future studies to apply similar models to other geographic or cultural contexts (Borgstede and Scholz, 2021). This approach aligns with the goal of examining patterns and correlations in a structured, empirical manner.

This study will gather data on the key variables—trust, system quality, perceived risk, and perceived value—and their impact on fintech adoption intentions using a structured survey. The survey will target a representative sample of Hong Kong consumers, ensuring diversity in terms of age, gender, education level, and financial experience to capture a comprehensive view of consumer attitudes. The questionnaire will include standardized items for each variable, drawn

from validated scales in existing literature to ensure reliability and validity. For example, trust-related items may assess consumers' confidence in the security and reliability of fintech services, while perceived risk questions will evaluate concerns about data privacy or financial loss.

The survey will use a Likert scale (e.g., 1 = strongly disagree to 5 = strongly agree) to quantify participants' perceptions and intentions, making the data amenable to statistical analysis. Responses will be collected through online survey platforms, leveraging digital channels to reach a tech-savvy population likely to engage with fintech services. The data will be analyzed using multivariate statistical methods, such as multiple regression to examine relationships between the independent variables (trust, system quality, perceived risk, perceived value) and the dependent variable (usage intention). Descriptive statistics will provide an overview of the sample characteristics, while inferential analysis will identify significant predictors and their relative influence on fintech adoption. This methodology ensures a robust, evidence-based understanding of the factors driving fintech acceptance in Hong Kong.

3.4 Focus Group

While this study primarily relies on a large-scale questionnaire survey to collect quantitative data, a complementary focus group approach could provide valuable qualitative insights. A focus group involves gathering a small, diverse group of participants to discuss their perceptions, attitudes, and experiences regarding fintech platforms. This method fosters an open discussion, uncovering in-depth perspectives on trust, system quality, perceived risks, values, and intentions. For instance, participants could explore challenges they face when adopting fintech services or share specific concerns about security and accessibility. Such discussions can reveal nuanced themes that might not emerge through a structured questionnaire.

3.5 Questionnaire Survey Method

The primary data collection method for this study is a structured survey using questionnaires. This approach is an effective and established tool for collecting large-scale data from diverse populations in both a systematic and standardized manner (Aithal and Aithal, 2020, Mohajan, 2020). The survey will be conducted online to ensure a wider coverage of Hong Kong residents who are potential users of fintech platforms. Items in each category are rated on a Likert scale ranging from 1: strongly disagree, 2: disagree, 3: neutral, 4: agree, to 5: strongly agree (Jebb, Ng, and Tay, 2021). In addition, the items in each construct are adapted from validated scales in the literature, ensuring construct reliability and validity.

3.6 Pilot Test

The pilot study will be conducted to assess the reliability and clarity of the questionnaire. A sample of 40 participants, representative of the target population in terms of demographics, will be recruited. The study will last for one week in January 2025, during which participants will respond to the questionnaire. Based on the planned analysis, any questions showing poor item-total correlation, ambiguity, or redundancy will be reviewed and revised.

The anticipated outcomes of the pilot study include an improvement in the internal consistency of the scale, as measured by Cronbach's alpha. Currently, the expected Cronbach's alpha for the entire questionnaire should be not less than 0.7. It is projected that eliminating problematic items and refining ambiguous questions will increase Cronbach's alpha to satisfactory levels, potentially exceeding 0.8-0.9. Feedback from participants will also guide adjustments to ensure greater clarity and alignment with the constructs being measured. Questions and sections demonstrating acceptable Cronbach's alpha values above the standard threshold will remain unchanged. Further actions on adjustments and changes to the

questionnaire will be recorded in the table with subsequent assessment of Cronbach's alpha for questions of each variable.

3.7 Final Survey

The final study aims to collect data from approximately 400 participants, a sample size chosen to ensure statistical power and generalizability due to reasons described below.

Recruitment will target Hong Kong consumers through online survey distribution platforms like Google Forms, focusing on diverse demographics to reflect the fintech user base. The survey will remain open for three weeks, allowing ample time for participants to complete it while minimizing response bias due to time constraints. Data from the final study will undergo rigorous reliability and validity checks, followed by hypothesis testing to provide actionable insights into consumer attitudes toward fintech in Hong Kong.

Table 11

Final Questionnaire

Source	Question
Pratama, 2021	I trust that the fintech platform will keep my financial data secure.
	I believe that the fintech platform will act in my best interest.
	I trust the fintech platform to provide accurate and reliable services.
Ivanova and Noh, 2022	The fintech platform is easy to access whenever I need it.
	I can quickly perform the tasks I need on the fintech platform without technical issues.
Theresia and Tan, 2021	The fintech platform is compatible with my devices and operating systems.
Zhao and Khaliq, 2024	I feel that using the fintech platform might expose me to financial risks.
	I am concerned about the possibility of privacy violations on the fintech platform.
	Using the fintech platform makes me feel vulnerable to unauthorized access to my data.
Karjaluoto et al., 2020	Using this fintech solution provides greater benefits compared to traditional financial services.
Anwar, Thongpapanl, and Ashraf, 2021	The cost of using this fintech service is justified by the value it provides.
	The fintech platform I use enhances my financial decisions and overall experience.

Ho et al., 2020	I am likely to use a fintech platform in the future for my financial transactions.
Truc, 2024	I intend to use fintech services regularly if they meet my expectations.
Ho et al., 2020	I am interested in using fintech platforms as a primary option for my financial needs.

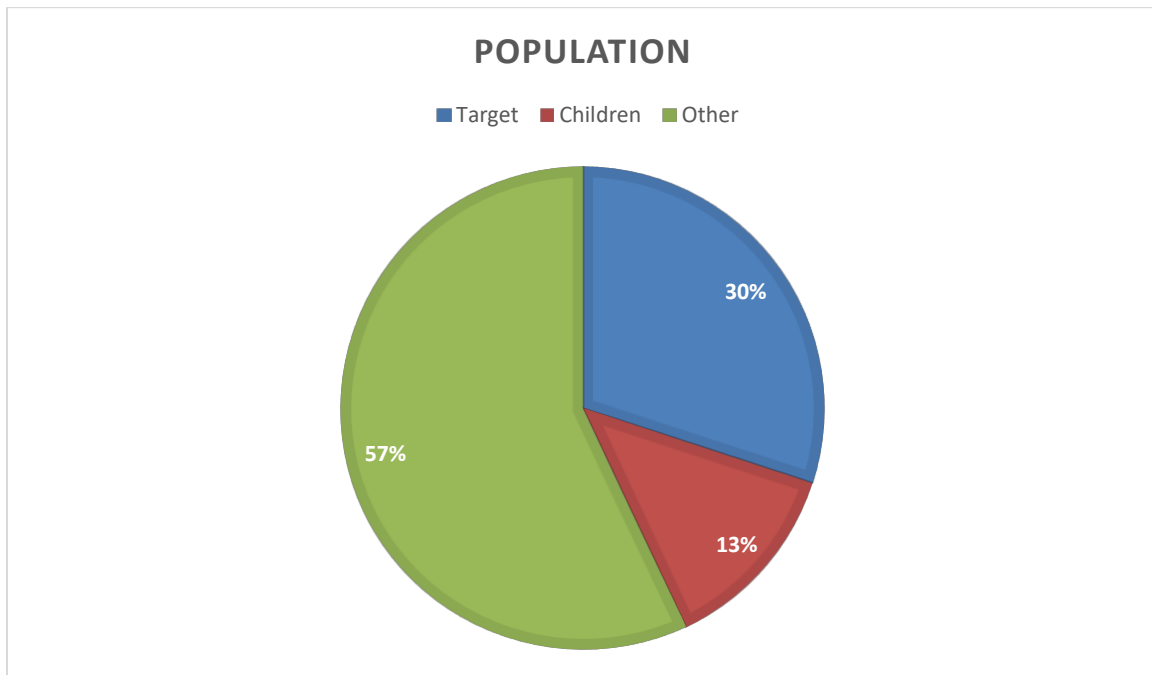
Source: Construct by author

3.7.1 Target Population

The target population for this study consists of Hong Kong residents who are at least 18 years old and have basic familiarity with digital banking and fintech services. This population is chosen to ensure that respondents have the necessary experience to provide informed answers regarding the factors influencing fintech adoption (Zhu, Yu, and Chou, 2021). The population of Hong Kong aged 16 and above excludes the group of children, which is approximately 13%, as well as potentially those who do not use fintech applications, which according to the data, results in only 30% of the population (Fintech News Hong Kong, 2024). Given that the current population level is approximately 7.5 million people, it is possible to use the formula below in 3.7.3 to roughly calculate the required sample size, which will cover 30% of 7.5 million people, i.e. about 2.25 million, which is shown in Figure 4. The selection of Hong Kong residents allows the study to capture data within a defined and culturally relevant market.

Figure 4

Target Population Chart



Source: (Fintech News Hong Kong, 2024)

3.7.2 Sampling Method

A non-probability convenience sampling method will be used to gather survey responses. This method involves selecting participants who are readily accessible and willing to respond, which is efficient and suitable given the broad access provided by online survey distribution channels (Andrade, 2020). The survey will be promoted through social media platforms and fintech-related online forums, aiming to reach a diverse sample in terms of age, income, and educational background. Although convenience sampling has limitations in terms of representativeness, it is an appropriate choice given the study's exploratory focus.

3.7.3 Sampling Size

$$n = \frac{Z^2 p(1-p)}{c^2} \approx 384.16$$

$$n = \frac{ss}{\frac{ss-1}{Population} + 1} \approx 369.98$$

Using a confidence level of 95%, $z = 1.96$, $p = 0.5$ and $q = 0.5$, the calculations suggest that the sample size should be about 400 to be able to extrapolate the results with some confidence to the entire population of about 2.25 million people. Although it is necessary to increase the sample size margin by a few percentage points in order to exclude incomplete responses or respondents who refused to participate, the actual sample size is quite large and the researchers' resources are unlikely to allow for a potential expansion.

3.7 Data Analysis Techniques

The collected data from the surveys will undergo several stages of processing. The initial analysis will focus on descriptive statistics to summarize the demographic characteristics of respondents and provide an overview of their responses. Mean scores, standard deviations, and frequencies will be calculated to gain insights into general trends in trust, system quality, perceived risk of using, perceived value, and usage intention. Cronbach's Alpha will be used to assess the internal consistency of each construct with a target of at least 0.7, which is the standard in the scientific community (Amirrudin, Nasution, and Supahar, 2021). Exploratory factor analysis will be performed to verify the construct validity of the measurement items. To test the research hypotheses, multiple regression analysis will be conducted. Finally, SPSS will be used for all the above mentioned techniques, including the pilot study listed in Appendix A.

3.8 Research Method Limitations

Although the chosen study design can provide a comprehensive understanding of fintech adoption in Hong Kong, there are several limitations. First, convenience sampling may introduce selection bias as participants who are more active online may be overrepresented (Golzar, Noor, and Tajik, 2022). Second, the cross-sectional study design collects data at a single point in time, which does not account for dynamics and causal inferences (Wang and Cheng, 2020). Third, data are collected through self-reports, which creates a risk of response bias where participants may under- or over-report certain attitudes or behaviors (Fryer and Dinsmore, 2020). Finally, the work presents a limited scope of variables that does not take into account the potential for respondent's previous experience, technological anxiety, and a number of other determinants often mentioned in this context (Gerlach and Lutz, 2021, Sabir et al., 2023). Efforts will be made to minimize these limitations by following strict survey design rules, using validated scales, and interpreting the results taking into account limitations related to convenience sampling and self-reported data.

3.9 Research Ethics

Ethical considerations are paramount in this study, especially given the sensitive nature of financial data and the collection of personal information. A number of measures taken to ensure compliance with the norms of this work include informed consent, confidentiality, anonymity, data security, and the right to refuse (Brown, Spiro, and Quinton, 2020). Each participant first agrees to these rules and rights before proceeding with the survey.

Reference List

Agarwal, S., and Zhang, J. (2020) 'FinTech, lending and payment innovation: A review', *Asia-Pacific Journal of Financial Studies*, 49(3), pp. 353-367. [doi: 10.1111/ajfs.12294](https://doi.org/10.1111/ajfs.12294)

Aithal, A., and Aithal, P. S. (2020) 'Development and validation of survey questionnaire & experimental data—a systematical review-based statistical approach', *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 5(2), pp. 233-251. [doi: 10.2139/ssrn.3724105](https://doi.org/10.2139/ssrn.3724105)

Aldaarmi, A. A. (2024) 'Fintech service quality of Saudi Banks: Digital transformation and awareness in satisfaction, re-use intentions, and the sustainable performance of firms', *Sustainability*, 16(6), p. 2261. [doi: 10.3390/su16062261](https://doi.org/10.3390/su16062261)

Aldboush, H. H., and Ferdous, M. (2023) 'Building trust in fintech: an analysis of ethical and privacy considerations in the intersection of big data, AI, and customer trust', *International Journal of Financial Studies*, 11(3), p. 90. [doi: 10.3390/ijfs11030090](https://doi.org/10.3390/ijfs11030090)

Ali, M., Raza, S.A., Khamis, B., Puah, C.H. and Amin, H. (2021) 'How perceived risk, benefit and trust determine user Fintech adoption: a new dimension for Islamic finance', *foresight*, 23(4), pp.403-420. [doi: 10.1108/FS-09-2020-0095](https://doi.org/10.1108/FS-09-2020-0095)

Alnsour, I. R. (2022) 'Impact of fintech over consumer experience and loyalty intentions: an empirical study on Jordanian Islamic Banks', *Cogent Business & Management*, 9(1), p. 2141098. [doi: 10.1080/23311975.2022.2141098](https://doi.org/10.1080/23311975.2022.2141098)

Alsmadi, A., Alfityani, A., Alhwamdeh, L., Al_hazimeh, A. and Al-Gasawneh, J. (2022) 'Intentions to use FinTech in the Jordanian banking industry', *International Journal of Data and Network Science*, 6(4), pp.1351-1358. [doi: 10.5267/j.ijdns.2022.5.016](https://doi.org/10.5267/j.ijdns.2022.5.016)

Amirrudin, M., Nasution, K., and Supahar, S. (2021) 'Effect of variability on Cronbach alpha reliability in research practice', *Jurnal Matematika, Statistika dan Komputasi*, 17(2), pp. 223-230. [doi: 10.20956/jmsk.v17i2.11655](https://doi.org/10.20956/jmsk.v17i2.11655)

Andrade, C. (2020) 'The limitations of online surveys', *Indian Journal of Psychological Medicine*, 42(6), pp. 575-576. [doi: 10.1177/0253717620957496](https://doi.org/10.1177/0253717620957496)

Anifa, M., Ramakrishnan, S., Joghee, S., Kabiraj, S. and Bishnoi, M.M. (2022) 'Fintech innovations in the financial service industry', *Journal of Risk and Financial Management*, 15(7), p.287. [doi: 10.3390/jrfm15070287](https://doi.org/10.3390/jrfm15070287)

Anwar, A., Thongpapanl, N., and Ashraf, A. R. (2021) 'Strategic imperatives of mobile commerce in developing countries: the influence of consumer innovativeness, ubiquity, perceived value, risk, and cost on usage', *Journal of Strategic Marketing*, 29(8), pp. 722-742. [doi: 10.1080/0965254X.2020.1786847](https://doi.org/10.1080/0965254X.2020.1786847)

Aslam, W., Hussain, A., Farhat, K. and Arif, I. (2020) 'Underlying factors influencing consumers' trust and loyalty in E-commerce', *Business Perspectives and Research*, 8(2), pp.186-204. [doi: 10.1177/2278533719887451](https://doi.org/10.1177/2278533719887451)

Au, A. (2022) 'FinTech innovation and knowledge flows in Hong Kong's financial sector: A social network analysis approach', *Journal of Asia Business Studies*, 16(2), pp. 294-307. [doi: 10.1108/JABS-09-2020-0381](https://doi.org/10.1108/JABS-09-2020-0381)

Bans-Akutey, A., and Tiimub, B. M. (2021) 'Triangulation in research', *Academia Letters*, 2, pp. 1-6. [doi: 10.20935/AL3392](https://doi.org/10.20935/AL3392)

Barbu, C.M., Florea, D.L., Dabija, D.C. and Barbu, M.C.R. (2021) 'Customer experience in fintech', *Journal of Theoretical and Applied Electronic Commerce Research*, 16(5), pp.1415-1433. [doi: 10.3390/jtaer16050080](https://doi.org/10.3390/jtaer16050080)

Berman, A., Cano-Kollmann, M., and Mudambi, R. (2022) 'Innovation and entrepreneurial ecosystems: fintech in the financial services industry', *Review of Managerial Science*, 16(1), pp. 45-64. [doi: 10.1007/s11846-020-00435-8](https://doi.org/10.1007/s11846-020-00435-8)

Borgstede, M., and Scholz, M. (2021) 'Quantitative and qualitative approaches to generalization and replication—A representationalist view', *Frontiers in Psychology*, 12, p. 605191. [doi: 10.3389/fpsyg.2021.605191](https://doi.org/10.3389/fpsyg.2021.605191)

Bouteraa, M., Chekima, B., Lajuni, N. and Anwar, A. (2023) 'Understanding consumers' barriers to using FinTech services in the United Arab Emirates: Mixed-methods research approach', *Sustainability*, 15(4), p.2931. [doi: 10.3390/su15042931](https://doi.org/10.3390/su15042931)

Brown, C., Spiro, J., and Quinton, S. (2020) 'The role of research ethics committees: Friend or foe in educational research? An exploratory study', *British Educational Research Journal*, 46(4), pp. 747-769. [doi: 10.1002/berj.3654](https://doi.org/10.1002/berj.3654)

Cao, L., Yang, Q., and Yu, P. S. (2021) 'Data science and AI in FinTech: An overview', *International Journal of Data Science and Analytics*, 12(2), pp. 81-99. [doi: 10.1007/s41060-021-00278-w](https://doi.org/10.1007/s41060-021-00278-w)

Caragea, D., Cojoianu, T., Dobri, M., Hoepner, A., Peia, O. and Romelli, D. (2024) 'Competition and innovation in the financial sector: Evidence from the rise of FinTech start-ups', *Journal of Financial Services Research*, 65(1), pp.103-140. [doi: 10.1007/s10693-023-00413-7](https://doi.org/10.1007/s10693-023-00413-7)

Chan, R., Troshani, I., Rao Hill, S. and Hoffmann, A. (2022) 'Towards an understanding of consumers' FinTech adoption: The case of Open Banking', *International Journal of Bank Marketing*, 40(4), pp.886-917. [doi: 10.1108/IJBM-08-2021-0397](https://doi.org/10.1108/IJBM-08-2021-0397)

Chi, O.H., Jia, S., Li, Y. and Gursoy, D. (2021) ‘Developing a formative scale to measure consumers’ trust toward interaction with artificially intelligent (AI) social robots in service delivery’, *Computers in Human Behavior*, 118, p.106700. [doi: 10.1016/j.chb.2021.106700](https://doi.org/10.1016/j.chb.2021.106700)

Cojoianu, T.F., Clark, G.L., Hoepner, A.G., Pažitka, V. and Wójcik, D. (2021) ‘Fin vs. tech: are trust and knowledge creation key ingredients in fintech start-up emergence and financing?’, *Small Business Economics*, 57, pp.1715-1731. [doi: 10.1007/s11187-020-00367-3](https://doi.org/10.1007/s11187-020-00367-3)

Confente, I., Scarpi, D., and Russo, I. (2020) ‘Marketing a new generation of bio-plastics products for a circular economy: The role of green self-identity, self-congruity, and perceived value’, *Journal of Business Research*, 112, pp. 431-439. [doi: 10.1016/j.jbusres.2019.10.030](https://doi.org/10.1016/j.jbusres.2019.10.030)

De Beckker, K., De Witte, K., and Van Campenhout, G. (2020) ‘The role of national culture in financial literacy: Cross-country evidence’, *Journal of Consumer Affairs*, 54(3), pp. 912-930. [doi: 10.1111/joca.12306](https://doi.org/10.1111/joca.12306)

Fan, M., Ammah, V., Dakhan, S.A., Liu, R., Mingle, M.N.A. and Pu, Z. (2021) ‘Critical factors of reacquainting consumer trust in e-commerce’, *Journal of Asian Finance, Economics and Business*, 8(3), pp.561-573. [doi: 10.13106/jafeb.2021.vol8.no3.0561](https://doi.org/10.13106/jafeb.2021.vol8.no3.0561)

Faustino, S. (2021) ‘Deleuze in the wild: making philosophy matter for fintech’, *Journal of Cultural Economy*, 15(1), pp. 93-102. [doi: 10.1080/17530350.2021.1977676](https://doi.org/10.1080/17530350.2021.1977676)

Fintech News Hong Kong. (2024) ‘Hong Kongers embrace digital banks as usage surges to nearly 30% of population’. Available at: <https://fintechnews.hk/31185/virtual-banking/hong-kong-digital-banks/> (Accessed 14 November 2024).

Fryer, L. K., and Dinsmore, D. L. (2020) ‘The promise and pitfalls of self-report: Development, research design and analysis issues, and multiple methods’, *Frontline Learning Research*. [doi: 10.14786/flr.v8i3.623](https://doi.org/10.14786/flr.v8i3.623)

Gerlach, J. M., and Lutz, J. K. (2021) ‘Digital financial advice solutions—Evidence on factors affecting the future usage intention and the moderating effect of experience’, *Journal of Economics and Business*, 117, p. 106009. [doi: 10.1016/j.jeconbus.2021.106009](https://doi.org/10.1016/j.jeconbus.2021.106009)

Golbabaie, F., Yigitcanlar, T., Paz, A. and Bunker, J. (2020) ‘Individual predictors of autonomous vehicle public acceptance and intention to use: A systematic review of the literature’, *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), p.106. [doi: 10.3390/joitmc6040106](https://doi.org/10.3390/joitmc6040106)

Golzar, J., Noor, S., and Tajik, O. (2022) ‘Convenience sampling’, *International Journal of Education & Language Studies*, 1(2), pp. 72-77. [doi: 10.22034/ijels.2022.162981](https://doi.org/10.22034/ijels.2022.162981)

Hasan, R., Ashfaq, M., and Shao, L. (2021) ‘Evaluating drivers of fintech adoption in the Netherlands’, *Global Business Review*, 09721509211027402. [doi: 10.1177/09721509211027402](https://doi.org/10.1177/09721509211027402)

Hasan, R., Shams, R., and Rahman, M. (2021) ‘Consumer trust and perceived risk for voice-controlled artificial intelligence: The case of Siri’, *Journal of Business Research*, 131, pp. 591-597. [doi: 10.1016/j.jbusres.2020.12.012](https://doi.org/10.1016/j.jbusres.2020.12.012)

Hassan, M.S., Islam, M.A., Sobhani, F.A., Nasir, H., Mahmud, I. and Zahra, F.T. (2022) ‘Drivers influencing the adoption intention towards mobile fintech services: a study on the emerging Bangladesh market’, *Information*, 13(7), p.349. [doi: 10.3390/info13070349](https://doi.org/10.3390/info13070349)

Ho, J. C., Wu, C. G., Lee, C. S., and Pham, T. T. T. (2020) ‘Factors affecting the behavioral intention to adopt mobile banking: An international comparison’, *Technology in Society*, 63, p. 101360. [doi: 10.1016/j.techsoc.2020.101360](https://doi.org/10.1016/j.techsoc.2020.101360)

Ho, S. P. S., and Chow, M. Y. C. (2024) ‘The role of artificial intelligence in consumers’ brand preference for retail banks in Hong Kong’, *Journal of Financial Services Marketing*, 29(2), pp. 292-305. [doi: 10.1057/s41264-022-00207-3](https://doi.org/10.1057/s41264-022-00207-3)

Ho, S. P. S., and Wong, A. (2023) 'The role of customer personality in premium banking services', *Journal of Financial Services Marketing*, 28(2), p. 285. [doi: 10.1057/s41264-022-00150-3](https://doi.org/10.1057/s41264-022-00150-3)

Imam, T., McInnes, A., Colombage, S. and Grose, R. (2022) 'Opportunities and Barriers for FinTech in SAARC and ASEAN Countries', *Journal of Risk and Financial Management*, 15(2), p.77. [doi: 10.3390/jrfm15020077](https://doi.org/10.3390/jrfm15020077)

Irshad, M., Ahmad, M. S., and Malik, O. F. (2020) 'Understanding consumers' trust in social media marketing environment', *International Journal of Retail & Distribution Management*, 48(11), pp. 1195-1212. [doi: 10.1108/IJRDM-07-2019-0225](https://doi.org/10.1108/IJRDM-07-2019-0225)

Isaeva, N., Gruenewald, K., and Saunders, M. N. (2020) 'Trust theory and customer services research: theoretical review and synthesis', *The Service Industries Journal*, 40(15-16), pp. 1031-1063. [doi: 10.1080/02642069.2020.1779225](https://doi.org/10.1080/02642069.2020.1779225)

Ivanova, A., and Noh, G. (2022) 'The impact of service quality and loyalty on adoption and use of mobile banking services: Empirical evidence from central Asian context', *The Journal of Asian Finance, Economics and Business*, 9(5), pp. 75-86. [doi: 10.13106/jafeb.2022.vol9.no5.0075](https://doi.org/10.13106/jafeb.2022.vol9.no5.0075)

Jamieson, M. K., Govaart, G. H., and Pownall, M. (2023) 'Reflexivity in quantitative research: A rationale and beginner's guide', *Social and Personality Psychology Compass*, 17(4), p. e12735. [doi: 10.1111/spc3.12735](https://doi.org/10.1111/spc3.12735)

Jarvis, R., and Han, H. (2021) 'FinTech innovation: Review and future research directions', *International Journal of Banking, Finance and Insurance Technologies*, 1(1), pp. 79-102. <https://researchlakejournals.com/index.php/IJBFIT/article/download/126/98>

Jebb, A. T., Ng, V., and Tay, L. (2021) 'A review of key Likert scale development advances: 1995–2019', *Frontiers in Psychology*, 12, p. 637547. [doi: 10.3389/fpsyg.2021.637547](https://doi.org/10.3389/fpsyg.2021.637547)

Jünger, M., and Mietzner, M. (2020) 'Banking goes digital: The adoption of FinTech services by German households', *Finance Research Letters*, 34, p. 101260. [doi: 10.1016/j.fl.2019.08.008](https://doi.org/10.1016/j.fl.2019.08.008)

Karjaluoto, H., Shaikh, A.A., Saarijärvi, H. and Saraniemi, S. (2019) 'How perceived value drives the use of mobile financial services apps', *International Journal of Information Management*, 47, pp.252-261. [doi: 10.1016/j.ijinfomgt.2018.08.014](https://doi.org/10.1016/j.ijinfomgt.2018.08.014)

Karpoff, J. M. (2021) 'The future of financial fraud', *Journal of Corporate Finance*, 66, p. 101694. [doi: 10.1016/j.jcorpfin.2020.101694](https://doi.org/10.1016/j.jcorpfin.2020.101694)

Lee, E. (2022) 'Technology-driven solutions to banks' de-risking practices in Hong Kong: FinTech and blockchain-based smart contracts for financial inclusion', *Common Law World Review*, 51(1-2), pp. 83-108. [doi: 10.1177/14737795211071095](https://doi.org/10.1177/14737795211071095)

Li, Y., and Shang, H. (2020) 'Service quality, perceived value, and citizens' continuous-use intention regarding e-government: Empirical evidence from China', *Information & Management*, 57(3), p. 103197. [doi: 10.1016/j.im.2019.103197](https://doi.org/10.1016/j.im.2019.103197)

Li, Y., and Wang, J. (2021) 'Evaluating the impact of information system quality on continuance intention toward cloud financial information system', *Frontiers in Psychology*, 12, p. 713353. [doi: 10.3389/fpsyg.2021.713353](https://doi.org/10.3389/fpsyg.2021.713353)

Mailizar, M., Burg, D., and Maulina, S. (2021) 'Examining university students' behavioural intention to use e-learning during the COVID-19 pandemic: An extended TAM model', *Education and Information Technologies*, 26(6), pp. 7057-7077. [doi: 10.1007/s10639-021-10557-5](https://doi.org/10.1007/s10639-021-10557-5)

Mascarenhas, A.B., Perpétuo, C.K., Barrote, E.B. and Perides, M.P. (2021) 'The influence of perceptions of risks and benefits on the continuity of use of fintech services', *BBR. Brazilian Business Review*, 18, pp.1-21. [doi: 10.15728/bbr.2021.18.1.1](https://doi.org/10.15728/bbr.2021.18.1.1)

Miao, M., Jalees, T., Zaman, S.I., Khan, S., Hanif, N.U.A. and Javed, M.K. (2022) 'The influence of e-customer satisfaction, e-trust and perceived value on consumer's repurchase intention in B2C e-commerce segment', *Asia Pacific Journal of Marketing and Logistics*, 34(10), pp.2184-2206. [doi: 10.1108/APJML-03-2021-0221](https://doi.org/10.1108/APJML-03-2021-0221)

Mo, W. Y. and Chu, P. K. H. (n.d.) 'A study of the usage intention for virtual banks in Hong Kong

Mohajan, H. K. (2020) 'Quantitative research: A successful investigation in natural and social sciences', *Journal of Economic Development, Environment and People*, 9(4), pp. 50-79. [doi: 10.26458/jedep.v9i4.679](https://doi.org/10.26458/jedep.v9i4.679)

Molinillo, S., Aguilar-Illescas, R., Anaya-Sánchez, R. and Liébana-Cabanillas, F. (2021) 'Social commerce website design, perceived value and loyalty behavior intentions: The moderating roles of gender, age and frequency of use', *Journal of Retailing and Consumer Services*, 63, p.102404. [doi: 10.1016/j.jretconser.2020.102404](https://doi.org/10.1016/j.jretconser.2020.102404)

Moses, P., Wong, S.L., Bakar, K.A. and Mahmud, R. (2013) 'Perceived usefulness and perceived ease of use: Antecedents of attitude towards laptop use among science and mathematics teachers in Malaysia', *The Asia-Pacific Education Researcher*, 22, pp.293-299. [doi: 10.1007/s40299-012-0054-9](https://doi.org/10.1007/s40299-012-0054-9)

Naruetharadhol, P., Ketkaew, C., Hongkanchanapong, N., Thaniswannasri, P., Uengkusolmongkol, T., Prasomthong, S. and Gebombut, N. (2021) 'Factors affecting sustainable intention to use mobile banking services', *Sage Open*, 11(3), p.21582440211029925. [doi: 10.1177/21582440211029925](https://doi.org/10.1177/21582440211029925)

Nayak, K., Singh, P., and Dave, P. (2021) 'Does data security and trust affect the users of FinTech?', *International Journal of Management (IJM)*, 12(1), pp. 191-206. [doi: 10.34218/IJM.12.1.2021.016](https://doi.org/10.34218/IJM.12.1.2021.016)

Nazir, M. I., Tan, Y., and Nazir, M. R. (2021) 'Intellectual capital performance in the financial sector: Evidence from China, Hong Kong, and Taiwan', *International Journal of Finance & Economics*, 26(4), pp. 6089-6109. [doi: 10.1002/ijfe.2110](https://doi.org/10.1002/ijfe.2110)

Ng, T.K., Lo, M.F., Fong, B.Y. and Yee, H.H. (2022) 'Predictors of the intention to use traditional Chinese medicine (TCM) using extended theory of planned behavior: a cross-sectional study among TCM users in Hong Kong', *BMC Complementary Medicine and Therapies*, 22(1), p.113. [doi: 10.1186/s12906-022-03598-x](https://doi.org/10.1186/s12906-022-03598-x)

Nguyen, D.D., Nguyen, T.D., Nguyen, T.D. and Nguyen, H.V. (2021) 'Impacts of perceived security and knowledge on continuous intention to use mobile Fintech payment services: An empirical study in Vietnam', *The Journal of Asian Finance, Economics and Business*, 8(8), pp.287-296. [doi: 10.13106/jafeb.2021.vol8.no8.0287](https://doi.org/10.13106/jafeb.2021.vol8.no8.0287)

Ololade, Y. J. (2024) 'Conceptualizing fintech innovations and financial inclusion: comparative analysis of African and US initiatives', *Finance & Accounting Research Journal*, 6(4), pp. 546-555. [doi: 10.51594/farj.v6i4.1012](https://doi.org/10.51594/farj.v6i4.1012)

Omarova, S. T. (2020) 'Technology v technocracy: Fintech as a regulatory challenge', *Journal of Financial Regulation*, 6(1), pp. 75-124. [doi: 10.1093/jfr/fjaa004](https://doi.org/10.1093/jfr/fjaa004)

Pratama, J. (2021) 'Analysis of factors affecting trust on the use of FinTech (P2P lending) in Indonesia', *Jurnal Sisfokom (Sistem Informasi Dan Komputer)*, 10(1), pp. 79-85. [doi: 10.32736/sisfokom.v10i1.1068](https://doi.org/10.32736/sisfokom.v10i1.1068)

Rahimi, E., Shabanpour, R., Shamshiripour, A. and Mohammadian, A.K. (2021) 'Perceived risk of using shared mobility services during the COVID-19 pandemic. *Transportation Research Part F: Traffic Psychology and Behaviour*, 81, pp.271-281. [doi: 10.1016/j.trf.2021.06.012](https://doi.org/10.1016/j.trf.2021.06.012)

Riahi, Y., and Garrouch, K. (2023) 'A model explaining perceived investment value and switching intentions toward FinTech: the case of crowdlending', *Journal of Financial Services Marketing*, pp. 1-15. [doi: 10.1057/s41264-023-00222-y](https://doi.org/10.1057/s41264-023-00222-y)

Roh, T., Yang, Y.S., Xiao, S. and Park, B.I. (2024) 'What makes consumers trust and adopt fintech? An empirical investigation in China', *Electronic Commerce Research*, 24(1), pp.3-35. [doi: 10.1007/s10660-021-09527-3](https://doi.org/10.1007/s10660-021-09527-3)

Ryu, H. S., and Ko, K. S. (2020) 'Sustainable development of Fintech: Focused on uncertainty and perceived quality issues', *Sustainability*, 12(18), p. 7669. [doi: 10.3390/su12187669](https://doi.org/10.3390/su12187669)

Sabir, A.A., Ahmad, I., Ahmad, H., Rafiq, M., Khan, M.A. and Noreen, N. (2023) 'Consumer acceptance and adoption of AI robo-advisors in fintech industry', *Mathematics*, 11(6), p.1311. [doi: 10.3390/math11061311](https://doi.org/10.3390/math11061311)

Saleem, A. (2021) 'Fintech revolution, perceived risks and Fintech adoption: Evidence from financial industry of Pakistan', *International Journal of Multidisciplinary and Current Educational Research*, 3(1), pp. 191-205. https://www.ijmcer.com/wp-content/uploads/2023/07/IJMCER_W0330191205.pdf

Santos, K.D.S., Ribeiro, M.C., Queiroga, D.E.U.D., Silva, I.A.P.D. and Ferreira, S.M.S. (2020) 'The use of multiple triangulations as a validation strategy in a qualitative study', *Ciencia & saude coletiva*, 25, pp.655-664. [doi: 10.1590/1413-81232020252.12302018](https://doi.org/10.1590/1413-81232020252.12302018)

Senyo, P. K., and Osabutey, E. L. (2020) 'Unearthing antecedents to financial inclusion through FinTech innovations', *Technovation*, 98, p. 102155. [doi: 10.1016/j.technovation.2020.102155](https://doi.org/10.1016/j.technovation.2020.102155)

Sharma, S. K., Ilavarasan, P. V., and Karanasios, S. (2024) 'Small businesses and FinTech: a systematic review and future directions', *Electronic Commerce Research*, 24(1), pp. 535-575. [doi: 10.1007/s10660-023-09705-5](https://doi.org/10.1007/s10660-023-09705-5)

Sharma, D., and Munjal, P. (2024) 'Determining the key drivers of FinTech adoption in India', *International Journal of Process Management and Benchmarking*, 16(4), pp. 533-554. [doi: 10.1504/IJPMB.2024.137146](https://doi.org/10.1504/IJPMB.2024.137146)

Sharma, S., Sharma, M., and Dhingra, D. (2024) 'Cluster-based systematic literature review: Understanding FinTech adoption and challenges', *Abhigyan*, 42(3), pp. 206-227. [doi: 10.1177/09702385241256010](https://doi.org/10.1177/09702385241256010)

Sharma, V., Jangir, K., Gupta, M. and Rupeika-Apoga, R. (2024) 'Does service quality matter in FinTech payment services? An integrated SERVQUAL and TAM approach', *International Journal of Information Management Data Insights*, 4(2), p.100252. [doi: 10.1016/j.jjime.2024.100252](https://doi.org/10.1016/j.jjime.2024.100252)

Singh, S., Sahni, M. M., and Kovid, R. K. (2020) 'What drives FinTech adoption? A multi-method evaluation using an adapted technology acceptance model', *Management Decision*, 58(8), pp. 1675-1697. [doi: 10.1108/MD-09-2019-1318](https://doi.org/10.1108/MD-09-2019-1318)

Singh, S., and Srivastava, R. K. (2020) 'Understanding the intention to use mobile banking by existing online banking customers: an empirical study', *Journal of Financial Services Marketing*, 25(3), pp. 86-96. [doi: 10.1057/s41264-020-00074-w](https://doi.org/10.1057/s41264-020-00074-w)

Soleimani, M. (2022) 'Buyers' trust and mistrust in e-commerce platforms: a synthesizing literature review', *Information Systems and e-Business Management*, 20(1), pp. 57-78. [doi: 10.1007/s10257-021-00545-0](https://doi.org/10.1007/s10257-021-00545-0)

Statista (2024) 'Fintech market Hong Kong'. Available at: <https://www.statista.com/outlook/dmo/fintech/hong-kong#transaction-value> (Accessed 14 November 2024).

Tang, K. L., Ooi, C. K., and Chong, J. B. (2020) 'Perceived risk factors affect intention to use FinTech', *Journal of Accounting and Finance in Emerging Economies*, 6(2), pp. 453-463. [doi: 10.26710/jafee.v6i2.1101](https://doi.org/10.26710/jafee.v6i2.1101)

Taufiq, A. R. (2021) 'Integrating TAM, VAM, PAM and security perception in the intention of fintech service usage', *Jurnal Manajemen Indonesia*, 21(3), pp. 198-207. [doi: 10.25124/jmi.v21i3.2650](https://doi.org/10.25124/jmi.v21i3.2650)

Theresia, S., and Tan, H. S. (2021) 'Evaluation of service quality and user experience on credit card application using e-SERVQUAL model and usability testing', *IOP Conference Series: Earth and Environmental Science*, 794(1). [doi: 10.1088/1755-1315/794/1/012095](https://doi.org/10.1088/1755-1315/794/1/012095)

To, A. T., and Trinh, T. H. M. (2021) 'Understanding behavioral intention to use mobile wallets in Vietnam: Extending the tam model with trust and enjoyment', *Cogent Business & Management*, 8(1), p. 1891661. [doi: 10.1080/23311975.2021.1891661](https://doi.org/10.1080/23311975.2021.1891661)

Trinh, H. N., Tran, H. H., and Vuong, D. H. Q. (2020) 'Determinants of consumers' intention to use credit card: a perspective of multifaceted perceived risk', *Asian Journal of*

Economics and Banking, 4(3), pp. 105-120. [doi: 10.1108/AJEB-06-2020-0018](https://doi.org/10.1108/AJEB-06-2020-0018)

Truc, L. T. (2024) 'Empowering tomorrow: Unleashing the power of e-wallets with adoption readiness, personal innovativeness, and perceived risk to client's intention', *Journal of Open Innovation Technology Market and Complexity*, 10(3), p. 100322. [doi: /10.1016/j.joitmc.2024.100322](https://doi.org/10.1016/j.joitmc.2024.100322)

Wang, X., and Cheng, Z. (2020) 'Cross-sectional studies: strengths, weaknesses, and recommendations', *Chest*, 158(1), pp. S65-S71. [doi: 10.1016/j.chest.2020.03.012](https://doi.org/10.1016/j.chest.2020.03.012)

Wong, W. H., and Mo, W. Y. (2019) 'A study of consumer intention of mobile payment in Hong Kong, based on perceived risk, perceived trust, perceived security and Technological Acceptance Model', *Journal of Advanced Management Science*, 7(2), pp. 33-38. [doi: 10.18178/joams.7.2.33-38](https://doi.org/10.18178/joams.7.2.33-38)

Xie, J., Ye, L., Huang, W. and Ye, M. (2021) 'Understanding FinTech platform adoption: impacts of perceived value and perceived risk', *Journal of Theoretical and Applied Electronic Commerce Research*, 16(5), pp.1893-1911. [doi: 10.3390/jtaer16050106](https://doi.org/10.3390/jtaer16050106)

Zarifis, A., and Cheng, X. (2022) 'A model of trust in Fintech and trust in Insurtech: How Artificial Intelligence and the context influence it', *Journal of Behavioral and Experimental Finance*, 36, p. 100739. [doi: 10.1016/j.jbef.2022.100739](https://doi.org/10.1016/j.jbef.2022.100739)

Zhang, L. L., and Kim, H. (2020) 'The influence of financial service characteristics on use intention through customer satisfaction with mobile fintech', *Journal of System and Management Sciences*, 10(2), pp. 82-94. [doi:10.33168/JSMS.2020.0206](https://doi.org/10.33168/JSMS.2020.0206)

Zhao, H., and Khaliq, N. (2024) 'In quest of perceived risk determinants affecting intention to use fintech: Moderating effects of situational factors', *Technological Forecasting and Social Change*, 207, p. 123599. [doi: 10.1016/j.techfore.2024.123599](https://doi.org/10.1016/j.techfore.2024.123599)

Zhou, Q., Lim, F.J., Yu, H., Xu, G., Ren, X., Liu, D., Wang, X., Mai, X. and Xu, H. (2021) 'A study on factors affecting service quality and loyalty intention in mobile banking', *Journal of Retailing and Consumer Services*, 60, p.102424. [doi: 10.1016/j.jretconser.2020.102424](https://doi.org/10.1016/j.jretconser.2020.102424)

Zhu, A. Y. F., Yu, C. W. M., and Chou, K. L. (2021) 'Improving financial literacy in secondary school students: An randomized experiment', *Youth & Society*, 53(4), pp. 539-562. [doi: 10.1177/0044118X19851311](https://doi.org/10.1177/0044118X19851311)

Jangir, K., Sharma, V., Taneja, S. and Rupeika-Apoga, R. (2022) 'The moderating effect of perceived risk on users' continuance intention for FinTech services', *Journal of Risk and Financial Management*, 16(1), p.21. [doi: 10.3390/jrfm16010021](https://doi.org/10.3390/jrfm16010021)

Appendix A

A.1 Reliability Analysis

Construct reliability determination was obtained using Cronbach's alpha, based on data from a pilot study involving 30 people. The result showed a value of 0.767, which is an acceptable standard.

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	30	100,0
	Excluded ^a	0	,0
	Total	30	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
,767	5

A.2 Correlation

The concept of correlation and such an assessment makes it possible to preliminarily understand the mutual direction of the relationships between variables, both dependent and independent. The following result was obtained within the framework of the pilot study:

Correlations		trust	s_quality	p_risk	per_value	intention
trust	Pearson Correlation	1	,647**	,383*	,533**	,571**
	Sig. (2-tailed)		,000	,037	,002	,001
	N	30	30	30	30	30
s_quality	Pearson Correlation	,647**	1	,220	,579**	,479**
	Sig. (2-tailed)	,000		,242	,001	,007
	N	30	30	30	30	30
p_risk	Pearson Correlation	,383*	,220	1	,415*	,618**
	Sig. (2-tailed)	,037	,242		,023	,000
	N	30	30	30	30	30
per_value	Pearson Correlation	,533**	,579**	,415*	1	,637**
	Sig. (2-tailed)	,002	,001	,023		,000
	N	30	30	30	30	30
intention	Pearson Correlation	,571**	,479**	,618**	,637**	1
	Sig. (2-tailed)	,001	,007	,000	,000	
	N	30	30	30	30	30

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

A.3 Regression Analysis

Multiple linear regression is necessary to evaluate hypotheses and find dependencies between the specified variables. In the pilot study, the result presented below was obtained. According to it, R square is 0.599, which means that the model describes 59.9% of the data variation. Significance in the second table is below 0.001, which indicates the statistical significance of the result. However, in the model itself, no one variable is statistically significant in relation to the influence on the dependent: the significance indicator exceeds 0.05. This fact indicates a small sample, which may change when moving on to a larger study.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,774 ^a	,599	,534	,580

a. Predictors: (Constant), per_value, p_risk, trust, s_quality

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12,551	4	3,138	9,322	,000 ^b
	Residual	8,415	25	,337		
	Total	20,967	29			

a. Dependent Variable: intention

b. Predictors: (Constant), per_value, p_risk, trust, s_quality

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,109	,660		-,165	,871
	trust	,158	,141	,200	1,124	,272
	s_quality	,059	,140	,076	,419	,679
	p_risk	,391	,144	,391	2,713	,012
	per_value	,378	,196	,324	1,922	,066

a. Dependent Variable: intention

APPLICATION FOR ETHICAL APPROVAL

RESEARCH STUDENTS

This form is to be completed by the student within **SIX** months for full-time students and **TWELVE** months for part time students, after the commencement of the research degree or following progression to Part Two of your course.

Once complete, submit this form via the **MyTSD Doctoral College Portal** at (<https://mytsd.uwtsd.ac.uk>).

This document is also available in Welsh.

RESEARCH STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk, with the title 'Ethical Approval' followed by your name.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.

In order for research to result in benefit and minimise risk of harm, it must be conducted ethically. A researcher may not be covered by the University's insurance if ethical approval has not been obtained prior to commencement.

The University follows the OECD Frascati manual definition of **research activity**: "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications". As such this covers activities undertaken by members of staff, postgraduate research students, and both taught postgraduate and undergraduate students working on dissertations/projects.

The individual undertaking the research activity is known as the "principal researcher".

Ethical approval is not required for routine audits, performance reviews, quality assurance studies, testing within normal educational requirements, and literary or artistic criticism.

Please read the notes for guidance before completing ALL sections of the form.

This form must be completed and approved prior to undertaking any research activity. Please see Checklist for details of process for different categories of application.

SECTION A: About You (Principal Researcher)

1	Full Name:	Tow Choon Liang			
2	Tick all boxes that apply:	Member of staff:	☐	Honorary research fellow:	☐
	Undergraduate Student	☐	Taught Postgraduate Student	☒	Postgraduate Research Student
3	Institute/Academic Discipline/Centre:	HKMA			
4	Campus:				
5	E-mail address:	steven_tow0113@hotmail.com			
6	Contact Telephone Number:	(852) 5577-7258			
For students:					

7	Student Number:	2322637
8	Programme of Study:	Master of Business Administration
9	Director of Studies/Supervisor:	Dr. Katherine Mo

SECTION B: Approval for Research Activity

1	Has the research activity received approval in principle? (please check the Guidance Notes as to the appropriate approval process for different levels of research by different categories of individual)	YES	☐	NO	☒
					Date
2	If Yes, please indicate source of approval (and date where known): Approval in principle must be obtained from the relevant source prior to seeking ethical approval	Research Degrees Committee	☐		
Institute Research Committee		☐			
Other (write in)		☐			

SECTION C: Internal and External Ethical Guidance Materials

	Please list the core ethical guidance documents that have been referred to during the completion of this form (including any discipline-specific codes of research ethics, location-specific codes of research ethics, and also any specific ethical guidance relating to the proposed methodology). Please tick to confirm that your research proposal adheres to these codes and guidelines. You may add rows to this table if needed.	
1	UWTSD Research Ethics & Integrity Code of Practice	☒
2	UWTSD Research Data Management Policy	☒
3	<i>[List any other relevant documents here]</i>	☒

SECTION D: External Collaborative Research Activity

If there are external collaborators then you should gain consent from the contact persons to share their personal data with the university. If there are no external collaborators then leave this section blank and continue to section E.

1	Institution					
2	Contact person name					
3	Contact person e-mail address					
4	Is your research externally funded?	YES	☐	NO	☒	
5	Are you in receipt of a KESS scholarship?	YES	☐	NO	☒	
6	Are you specifically employed to undertake this research in either a paid or voluntary capacity?	Voluntary	YES	☐	NO	☒
7		Employed	YES	☐	NO	☒
8	Is the research being undertaken within an existing UWTSD Athrofa Professional Learning Partnership (APLP)?	If YES then the permission question below does not need to be answered.	YES	☐	NO	☒

9	Has permission to undertake the research has been provided by the partner organisation?	(If YES attach copy) If NO the application cannot continue	YES	☐	NO	☒
---	---	---	------------	--------------------------	-----------	-------------------------------------

Where research activity is carried out in collaboration with an external organisation

10	Does this organisation have its own ethics approval system?	YES	☐	NO	☒
	If Yes, please attach a copy of any final approval (or interim approval) from the organisation (this may be a copy of an email if appropriate).				

SECTION E: Details of Research Activity

1	Indicative title:	The Role of Fintech in Disrupting Retail and Commercial Banking- Opportunities and Challenges			
2	Proposed start date:	3 rd Nov 2024	Proposed end date:	19 th Dec 2024	
	Introduction to the Research (maximum 300 words per section) Ensure that you write for a <u>Non-Specialist Audience</u> when outlining your response to the points below: <i>Purpose of Research Activity</i> <i>Proposed Research Question</i> <i>Aims of Research Activity</i> <i>Objectives of Research Activity</i> Demonstrate, briefly, how <u>Existing Research</u> has informed the proposed activity and explain <i>What the research activity will add to the body of knowledge</i> <i>How it addresses an area of importance.</i>				
3	Purpose of Research Activity Fintech developments in connection with the mentioned problems at the level of user perception can extrapolate into more serious shortcomings at the scale of implementation. Some points of view claim that fintech has a disruptive nature in relation to traditional banking and shifts in consumer behavior (Faustino, 2022, Omarova, 2020, Sharma, Ilavarasan, and Karanasios, 2024). On the one hand, the increasing frequency of fraudulent activities in the financial industry, including due to digitalization, lead to the fact that fintech here looks like a potential salvation and a negative factor at the same time (Karpoff, 2021). Stakeholders in the form of traditional banks and regulators, however, must adapt to the new reality, and therefore the focus on this issue is one of the most important motivations for conducting the study. While the general benefits of fintech such as ease of use, flexibility, and access to previously underserved populations are widely recognized, less is known about the nuances that influence adoption in the Hong Kong context. Hong Kong has a unique mix of traditional and modern approaches in financial practices across different demographic groups (Ho and Chow, 2024). As a relatively developed country, consumers are known to have high expectations of financial services, safety, quality, and accessibility (Ho and Wong, 2023). This unique combination is another motivation for carrying out this work, which is of interest both for the subject area and for the region where it is carried out. (this box should expand as you type)				
4	Research Question Do Trust have significant impact on customer's intention to use digital banking? Do System quality influence on customer's intention to use digital banking? Do perceived risk of using have significant impact on customer's intention to use digital banking? Do perceived value have significant influence on customer's intention to use digital banking?				

	(this box should expand as you type)
5	Aims of Research Activity This research aims to examine the influence of specific factors—Trust, System Quality, Perceived Risk, and Perceived Value—on the intention of Hong Kong consumers to adopt fintech services. The key objectives: - To evaluate the role of trust in determining Hong Kong consumers' willingness to engage with fintech services. - To analyze the influence of system quality on fintech adoption intentions. - To assess the impact of perceived risk on user intention to adopt fintech. - To investigate how perceived value, or the specific needs and motivations of users (e.g., making payments, investing, or saving), impacts their intention to adopt fintech solutions in correlation with costs. This study, therefore, aims to address the gap in knowledge about consumer attitudes toward fintech in Hong Kong, exploring these variables to provide a comprehensive view of the market's adoption dynamics. (this box should expand as you type)
6	Objectives of Research Activity This research aims to examine the influence of specific factors—Trust, System Quality, Perceived Risk, and Perceived Value—on the intention of Hong Kong consumers to adopt fintech services. The key objectives: - To evaluate the role of trust in determining Hong Kong consumers' willingness to engage with fintech services. - To analyze the influence of system quality on fintech adoption intentions. - To assess the impact of perceived risk on user intention to adopt fintech. - To investigate how perceived value, or the specific needs and motivations of users (e.g., making payments, investing, or saving), impacts their intention to adopt fintech solutions in correlation with costs. This study, therefore, aims to address the gap in knowledge about consumer attitudes toward fintech in Hong Kong, exploring these variables to provide a comprehensive view of the market's adoption dynamics. (this box should expand as you type)
	Proposed methods (maximum 600 words) Provide a brief summary of all the methods that may be used in the research activity, making it clear what specific techniques may be used. If methods other than those listed in this section are deemed appropriate later, additional ethical approval for those methods will be needed. You do not need to justify the methods here, but should instead describe how you intend to collect the data necessary for you to complete your project.
7	Snowball sampling will be used in the study and statistical bias may occur. A google form survey will be distributed to fellow friends. Identifying specific questions relevant to the research objectives in survey design is essential. Several questions must be answer and it is key value to determine how Fintech disrupting retail and commercial banking. What will be the challenges and opportunities. There will be 2 parts of questionnaire: overview of general demographic data including gender, age, income, job and education level. Another part of questionnaire consists of how customer trust the fintech platform, system quality influence customer's intention, does perceived risk have any impact on customer's intention and lastly how perceived value influence customer's intention to use fintech platform. (this box should expand as you type)
	Location of research activity Identify all locations where research activity will take place.
8	Hong Kong (this box should expand as you type)

	Research activity outside of the UK If research activity will take place overseas, you are responsible for ensuring that local ethical considerations are complied with and that the relevant permissions are sought. Specify any local guidelines (e.g. from local professional associations/learned societies/universities) that exist and whether these involve any ethical stipulations beyond those usual in the UK (provide details of any licenses or permissions required). Also specify whether there are any specific ethical issues raised by the local context in which the research activity is taking place, for example, particular cultural and/or legal sensitivities or vulnerabilities of participants. If you live in the country where you will do the research then please state this.
9	Yes, I understood. <i>(this box should expand as you type)</i>

10	Use of documentation not in the public domain: Are any documents NOT publicly available?	NO	☒
		YES	☐
11	If Yes, please provide details here of how you will gain access to specific documentation that is not in the public domain and that this is in accordance with the current data protection law of the country in question and that of England and Wales. <i>(this box should expand as you type)</i>		

	Does your research relate to one or more of the seven aims of the Well-being of Future Generations (Wales) Act 2015?	YES	NO
12	A prosperous Wales	☐	☒
13	A resilient Wales	☐	☒
14	A healthier Wales	☐	☒
15	A more equal Wales	☐	☒
16	A Wales of cohesive communities	☐	☒
17	A Wales of vibrant culture and thriving Welsh language	☐	☒
18	A globally responsible Wales	☐	☒
19	If YES to any of the above, please give details:		
	<i>(this box should expand as you type)</i>		

SECTION F: Scope of Research Activity

	Will the research activity include:	YES	NO
1	Use of a questionnaire or similar research instrument?	☒	☐
2	Use of interviews?	☒	☐
3	Use of focus groups?	☐	☒

4	Use of participant diaries?	☐	☒
5	Use of video or audio recording?	☐	☒
6	Use of computer-generated log files?	☒	☐
7	Participant observation with their knowledge?	☒	☐
8	Participant observation without their knowledge?	☒	☒
9	Access to personal or confidential information without the participants' specific consent?	☐	☒
10	Administration of any questions, test stimuli, presentation that may be experienced as physically, mentally or emotionally harmful / offensive?	☐	☒
11	Performance of any acts which may cause embarrassment or affect self-esteem?	☐	☒
12	Investigation of participants involved in illegal activities?	☐	☒
13	Use of procedures that involve deception?	☐	☒
14	Administration of any substance, agent or placebo?	☐	☒
15	Working with live vertebrate animals?	☐	☒
16	Procedures that may have a negative impact on the environment?	☐	☒
17	Other primary data collection methods. Please indicate the type of data collection method(s) below.		
	Details of any other primary data collection method:	☐	☒
	(this box should expand as you type)		

If NO to every question, then the research activity is (ethically) low risk and **may** be exempt from **some** of the following sections (please refer to Guidance Notes).

If YES to any question, then no research activity should be undertaken until full ethical approval has been obtained.

SECTION G: Intended Participants

If there are no participants then do not complete this section, but go directly to section H.

	Who are the intended participants:	YES	NO
1	Students or staff at the University?	☒	☐
2	Adults (over the age of 18 and competent to give consent)?	☒	☐
3	Vulnerable adults?	☐	☒
4	Children and Young People under the age of 18? (Consent from Parent, Carer or Guardian will be required)	☐	☒
5	Prisoners?	☐	☒
6	Young offenders?	☐	☒
7	Those who could be considered to have a particularly dependent relationship with the investigator or a gatekeeper?	☐	☒
8	People engaged in illegal activities?	☐	☒
9	Others. Please indicate the participants below, and specifically any group who may be unable to give consent.	☐	☒

	Details of any other participant groups:		
	(this box should expand as you type)		

Participant numbers and source Provide an estimate of the expected number of participants. How will you identify participants and how will they be recruited?		
10	How many participants are expected?	400 (this box should expand as you type)
11	Who will the participants be?	Friends and fellow. Online friends (this box should expand as you type)
12	How will you identify the participants?	Leverage my network Interview with professionals in banking industry (this box should expand as you type)

Information for participants:		YES	NO	N/A
13	Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	☒	☐	☐
14	Will you tell participants that their participation is voluntary?	☒	☐	☐
15	Will you obtain written consent for participation?	☒	☐	☐
16	Will you explain to participants that refusal to participate in the research will not affect their treatment or education (if relevant)?	☒	☐	☐
17	If the research is observational, will you ask participants for their consent to being observed?	☒	☐	☐
18	Will you tell participants that they may withdraw from the research at any time and for any reason?	☒	☐	☐
19	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	☒	☐	☐
20	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	☒	☐	☐
21	Will you debrief participants at the end of their participation, in a way appropriate to the type of research undertaken?	☒	☐	☐
22	If NO to any of above questions, please give an explanation			
	N/A (this box should expand as you type)			

Information for participants:		YES	NO	N/A
24	Will participants be paid?	☐	☒	☐
25	Is specialist electrical or other equipment to be used with participants?	☐	☒	☐

26	Are there any financial or other interests to the investigator or University arising from this study?	☐	☒	☐
27	Will the research activity involve deliberately misleading participants in any way, or the partial or full concealment of the specific study aims?	☐	☒	☐
28	If YES to any question, please provide full details			
	N/A <i>(this box should expand as you type)</i>			

SECTION H: Anticipated Risks

	Outline any anticipated risks that may adversely affect any of the participants, the researchers and/or the University, and the steps that will be taken to address them.					
	If you have completed a full risk assessment (for example as required by a laboratory, or external research collaborator) you may append that to this form.					
1	Full risk assessment completed and appended?	<table border="1"> <tr> <td>Yes</td> <td>☐</td> </tr> <tr> <td>No</td> <td>☒</td> </tr> </table>	Yes	☐	No	☒
Yes	☐					
No	☒					
2	Risks to participants For example: sector-specific health & safety, emotional distress, financial disclosure, physical harm, transfer of personal data, sensitive organisational information					
	Risk to participants: N/A <i>(this box should expand as you type)</i>	How you will mitigate the risk to participants: N/A <i>(this box should expand as you type)</i>				
3	If research activity may include sensitive, embarrassing or upsetting topics (e.g. sexual activity, drug use) or issues likely to disclose information requiring further action (e.g. criminal activity), give details of the procedures to deal with these issues, including any support/advice (e.g. helpline numbers) to be offered to participants. Note that where applicable, consent procedures should make it clear that if something potentially or actually illegal is discovered in the course of a project, it may need to be disclosed to the proper authorities					
	N/A <i>(this box should expand as you type)</i>					
4	Risks to the investigator For example: personal health & safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest					
	Risk to the investigator: N/A <i>(this box should expand as you type)</i>	How you will mitigate the risk to the investigator: N/A <i>(this box should expand as you type)</i>				
5	University/institutional risks For example: adverse publicity, financial loss, data protection					
	Risk to the University: N/A <i>(this box should expand as you type)</i>	How you will mitigate the risk to the University: N/A <i>(this box should expand as you type)</i>				
6	Environmental risks For example: accidental spillage of pollutants, damage to local ecosystems					
	Risk to the environment: N/A	How you will mitigate the risk to environment: N/A				

	(this box should expand as you type)	(this box should expand as you type)
--	--------------------------------------	--------------------------------------

Disclosure and Barring Service				
	If the research activity involves children or vulnerable adults, a Disclosure and Barring Service (DBS) certificate must be obtained before any contact with such participants.	YES	NO	N/A
7	Does your research require you to hold a current DBS Certificate?	☐	☐	☒
8	If YES, please give the certificate number. If the certificate number is not available please write "Pending"; in this case any ethical approval will be subject to providing the appropriate certificate number.			

SECTION I: Feedback, Consent and Confidentiality

1	Feedback What de-briefing and feedback will be provided to participants, how will this be done and when? The following survey is study towards about how fintech will disrupt traditional retail and commercial banking. All the collected data will only use for research purpose and will delete after research is completed. All the response will be strictly kept as confidentiality and stay anonymous. The surveyor is allowed to withdraw at any point of time. The project does not disclose any personal information. (this box should expand as you type)
2	Informed consent Describe the arrangements to inform potential participants, before providing consent, of what is involved in participating. Describe the arrangements for participants to provide full consent before data collection begins. If gaining consent in this way is inappropriate, explain how consent will be obtained and recorded in accordance with prevailing data protection legislation. The following survey is study towards about how fintech will disrupt traditional retail and commercial banking. All the collected data will only use for research purpose and will delete after research is completed. All the response will be strictly kept as confidentiality and stay anonymous. The surveyor is allowed to withdraw at any point of time. The project does not disclose any personal information. (this box should expand as you type)
3	Confidentiality / Anonymity Set out how anonymity of participants and confidentiality will be ensured in any outputs. If anonymity is not being offered, explain why this is the case. The following survey is study towards about how fintech will disrupt traditional retail and commercial banking. All the collected data will only use for research purpose and will delete after research is completed. All the response will be strictly kept as confidentiality and stay anonymous. The surveyor is allowed to withdraw at any point of time. The project does not disclose any personal information.

	(this box should expand as you type)
--	--------------------------------------

SECTION J: Data Protection and Storage

	Does the research activity involve personal data (as defined by the General Data Protection Regulation 2016 “GDPR” and the Data Protection Act 2018 “DPA”)?	YES	NO
1	“Personal data” means any information relating to an identified or identifiable natural person (‘data subject’). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person. Any video or audio recordings of participants is considered to be personal data.	☐	☒
	If YES, provide a description of the data and explain why this data needs to be collected:		
2	N/A (this box should expand as you type)		
	Does it involve special category data (as defined by the GDPR)?	YES	NO
3	“Special category data” means sensitive personal data consisting of information as to the data subjects’ – (a) racial or ethnic origin, (b) political opinions, (c) religious beliefs or other beliefs of a similar nature, (d) membership of a trade union (within the meaning of the Trade Union and Labour Relations (Consolidation) Act 1992), (e) physical or mental health or condition, (f) sexual life, (g) genetics, (h) biometric data (as used for ID purposes),	☐	☒
	If YES, provide a description of the special category data and explain why this data needs to be collected:		
4	N/A (this box should expand as you type)		

	Will data from the research activity (collected data, drafts of the thesis, or materials for publication) be stored in any of the following ways?	YES	NO
5	Manual files (i.e. in paper form)?	☒	☐
6	University computers?	☐	☒
7	Private company computers?	☐	☒
8	Home or other personal computers?	☒	☐
9	Laptop computers/ CDs/ Portable disk-drives/ memory sticks?	☒	☐
10	“Cloud” storage or websites?	☒	☐
11	Other – specify:	☐	☒
12	For all stored data, explain the measures in place to ensure the security of the data collected, data confidentiality, including details of backup procedures, password protection, encryption, anonymisation and pseudonymisation:		

	N/A <i>(this box should expand as you type)</i>
--	--

Data Protection			
	Will the research activity involve any of the following activities:	YES	NO
13	Electronic transfer of data in any form?	☒	☐
14	Sharing of data with others at the University outside of the immediate research team?	☐	☒
15	Sharing of data with other organisations?	☐	☒
16	Export of data outside the UK or importing of data from outside the UK?	☐	☒
17	Use of personal addresses, postcodes, faxes, emails or telephone numbers?	☒	☒
18	Publication of data that might allow identification of individuals?	☐	☒
19	Use of data management system? (SPSS)	☒	☐
20	Data archiving?	☐	☒
21	If YES to any question, please provide full details, explaining how this will be conducted in accordance with the GDPR and Data Protection Act (2018) (and any international equivalents, where appropriate):		
	SPSS Google form <i>(this box should expand as you type)</i>		
22	List all who will have access to the data generated by the research activity:		
	N/A <i>(this box should expand as you type)</i>		
23	List who will have control of, and act as custodian(s) for, data generated by the research activity:		
	N/A <i>(this box should expand as you type)</i>		
24	Give details of data storage arrangements, including security measures in place to protect the data, where data will be stored, how long for, and in what form. Will data be archived – if so how and if not why not.		
	N/A <i>(this box should expand as you type)</i>		
25	Please indicate if your data will be stored in the UWTSD Research Data Repository (see https://researchdata.uwtsd.ac.uk/). If so please explain. <i>(Most relevant to academic staff)</i>		
	N/A <i>(this box should expand as you type)</i>		
26	Confirm that you have read the UWTSD guidance on data management (see https://www.uwtsd.ac.uk/library/research-data-management/)	YES	☒



27	Confirm that you are aware that you need to keep all data until after your research has completed or the end of your funding	YES	☒
----	--	-----	-------------------------------------

SECTION K: Declaration

	The information which I have provided is correct and complete to the best of my knowledge. I have attempted to identify any risks and issues related to the research activity and acknowledge my obligations and the rights of the participants. In submitting this application I hereby confirm that I undertake to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice which is published on the website: https://www.uwtsd.ac.uk/research/research-ethics/		
1	Signature of applicant:		Date: 17 Dec 2024

For STUDENT Submissions:

2	Director of Studies/Supervisor:	Dr. Katherine Mo	Date: 17 Dec 2024
3	Signature:	<i>KMo</i>	

For STAFF Submissions:

4	Academic Director/ Assistant Dean:		Date:
5	Signature:		

Checklist: Please complete the checklist below to ensure that you have completed the form according to the guidelines and attached any required documentation:

☒	I have read the guidance notes supplied before completing the form.
☒	I have completed ALL RELEVANT sections of the form in full.
☒	I confirm that the research activity has received approval in principle
☒	I have attached a copy of final/interim approval from external organisation (where appropriate)
☒	I have attached a full risk assessment (where appropriate) ONLY TICK IF YOU HAVE ATTACHED A FULL RISK ASSESSMENT
☒	I understand that it is my responsibility to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice.
☒	I understand that before commencing data collection all documents aimed at respondents (including information sheets, consent forms, questionnaires, interview schedules etc.) must be confirmed by the DoS/Supervisor, module tutor or Academic Director.

RESEARCH STUDENTS ONLY

Once complete, submit this form via the **MyTSD Doctoral College Portal** at (<https://mytsd.uwtsd.ac.uk>).

RESEARCH STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk, with the title 'Ethical Approval' followed by your name.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.