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# Mobile, traditional, and cryptocurrency payments influence consumer trust, attitude, and destination choice: Chinese versus Koreans

Wei Quan<sup>a,1</sup>, Hyoungun Moon<sup>b,2</sup>, Seongseop (Sam) Kim<sup>c,3</sup>, Heesup Han<sup>d,\*,4</sup>

<sup>a</sup> College of Hospitality and Tourism Management, Sejong University, 98 Gunja-Dong, Gwangjin-Gu, Seoul 143-747, South Korea

<sup>b</sup> Department of Tourism Management, College of Business Administration, Keimyung University, 1095 Dalgubeoldae-ro, Dalseo-gu, Daegu 42601 South Korea

<sup>c</sup> School of Hotel & Tourism Management, The Hong Kong Polytechnic University, 17 Science Museum Road, TST East, Kowloon, Hong Kong Special Administrative Region

<sup>d</sup> College of Hospitality and Tourism Management, Sejong University, 98 Gunja-Dong, Gwangjin-Gu, Seoul 143-747, South Korea

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## ABSTRACT

This study explores consumers' perceptions of different payment methods (mobile, traditional and cryptocurrency) for hotels and tourism in an international destination, based on the technology acceptance model (TAM). Taking a quantitative research approach, data collected from China and Korea were analyzed using structural equation modeling. The results show that Chinese and Korean consumers' perceived usefulness, ease of use, and security differ with different payment methods. The findings also reveal different underlying mechanisms that determine Chinese and Korean consumers' intention to visit a destination based on their choice of payment method. This study provides a theoretical basis for future research on crypto-payments and offers pragmatic recommendations for professionals in the hospitality and travel industry in light of the attitudes and intentions of the two countries towards the three payment methods.

## 1. Introduction

In modern society, the way consumers make payments is no longer limited to traditional methods (cash and credit cards), and has become more diverse (Oliveira et al., 2016; Johnson et al., 2018). The hospitality and tourism industries are no exception in adopting a variety of payment methods. More consumers who visit hotels pay their deposits through credit cards than in cash as there is a risk of losing cash, which makes most people prefer credit cards (Miao and Jayakar, 2016). In addition, credit card companies (e.g., Visa and MasterCard issuers) have specifically launched business travel cards to increase credit card usage by advertising to consumers that using credit cards at hotels will offer corresponding benefits (Singh and Sinha, 2020). Furthermore, along with the rapid development of technology, mobile payment methods have been launched that use the trading platform software on mobile devices to make payments, which have received much attention from tourists. The swift transactions and the convenience of not having to

carry cash or credit cards have made the mobile payment method popular (Cabanillas et al., 2014). In addition, a report prior to the outbreak of the Covid-19 pandemic showed that the majority of millennials (57%) choose to use online travel agents to make reservations for their travels, while approximately 30% of them also use online websites to book hotels and flight tickets (Condor, 2021). To increase platform usage, service providers offer various marketing campaigns, such as a 5% discount on the price for using a specific payment platform, or a free travel service, or additional services when using a credit card from a specific issuer. Consumers can thus use various payment methods to purchase products and services via the service provider platform (Inversini and Masiero, 2014; Law et al., 2009; Morosan, 2012; Nuryyev et al., 2021; Wang and Qualls, 2007).

Following the creation of the first Bitcoin block in 2009, other cryptocurrencies (including Ethereum, Litecoin and Tether) began to be developed in 2011. This payment method is becoming more pervasive in businesses as 15,000 companies worldwide have now accepted

\* Corresponding author.

E-mail addresses: [rj782615@gmail.com](mailto:rj782615@gmail.com) (W. Quan), [gm@kmu.ac.kr](mailto:gm@kmu.ac.kr) (H. Moon), [sam.kim@polyu.edu.hk](mailto:sam.kim@polyu.edu.hk) (S.(S. Kim), [heesup.han@gmail.com](mailto:heesup.han@gmail.com) (H. Han).

<sup>1</sup> 0000-0002-1174-6209

<sup>2</sup> 0000-0002-9670-3960

<sup>3</sup> 0000-0002-9213-6540

<sup>4</sup> 0000-0001-6356-3001

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cryptocurrency payments and 32,330 cryptocurrency ATMs are located in 77 countries (Coinatmradar.com, 2021). Cryptocurrency payment adoption is also expanding since major global businesses (e.g. Pavilion Hotels & Resorts, AXA Insurance, Microsoft, Starbucks, Tesla, Amazon, Visa, PayPal, airBaltic, Sotheby's, Coca Cola, LOT Polish Airlines, Expedia, Lush) agreed to use Bitcoin for transactions (Euronews, 2021). In the hotel and tourism industry, Travalta.com, as the only platform that is currently able to book 2.2 million hotels and travel products using cryptocurrency payments, listed the well-known travel product booking platform Expedia (Euronews, 2021). In addition, according to Statista.com (2022), 64% and 44% of consumers are interested in using cryptocurrency payments for travel products and hotel bookings, respectively. This statistic shows that the acceptance of cryptocurrencies in tourism and hospitality industry will bring huge advantages, and indicates that the acceptance of cryptocurrencies as a payment method is becoming a growing trend in many business sectors, helping industries to promote their products and services to consumers (Roussou and Stiakakis, 2016; Fotiadis and Stylos, 2017; Nuryyev et al., 2020).

Previous studies have explored consumers' perceptions of mobile payment (e.g., Cobanoglu et al., 2015; Kang and Namkung, 2019; Liébana-Cabanillas et al., 2018; Lou et al., 2017; Ozturk et al., 2016; Sun et al., 2021), and a study by Wu et al. (2021) suggested that the use of mobile payment methods has become a habit in China, which makes the frequency of use extremely high. However, the traditional market, using traditional payment methods, such as cash, still has a larger market share in Korea than mobile payments. In addition, the credit card market offers many benefits to consumers (e.g., cash back for specific spending amounts; discounts for visiting hotels, theme parks, restaurants, and cafes that partner with card issuers; and increased discounts based on spending amounts) (Radic et al., 2022). Although the Chinese government has recently banned and deemed cryptocurrency trading an illegal activity (Reuters, 2021), findings by Nadeem et al. (2021) and Radic et al. (2022) indicate that there is a strong intention among Chinese respondents to use cryptocurrencies for payments. Coupled with this, interest in the adoption of cryptocurrencies in business has recently developed, but only a few studies have explored consumer adoption of cryptocurrency payments based on the Technology Acceptance Model (TAM) (Lou and Li, 2017; Nuryyev et al., 2020). Therefore, it is valuable to analyze attitudes and behavioral intentions related to mobile payment, traditional payment (cash/credit card), and cryptocurrency payment simultaneously, using Korea and China as research contexts.

To fill the research gaps, this study aimed to (1) simultaneously investigate the relationships between consumers' perceptions of the three payment methods, using the notions of the TAM; (2) examine the effect of antecedents (perceived security, ease of use, and usefulness) on outcome variables (trust, attitude, and behavioral intention); and (3) explore the cultural impact on the relationships between the study variables in Chinese and South Korean consumers. To address the research questions, this study targets Chinese and South Koreans, and uses a survey method, taking a quantitative approach. The data collected through specialized research agencies of both countries are analyzed using SPSS 26.0 and AMOS 26.0 statistical analysis programs.

The results of this study will contribute to understanding how consumers' behavioral intentions toward a destination are formulated for a tourism destination. Determining whether the psychological models differ with cultural background will offer pragmatic implications for the cryptocurrency payment era. Most of the prior research related to blockchain and cryptocurrency payments was conducted in 2016–2020. Based on the fact that cryptocurrencies became known to most people in late 2020–2021, we would hazard a guess that the results of the current study may differ from the earlier studies. Compared to past studies in the period before cryptocurrencies became popular, this study will provide research results that are closest to the current facts and thus suggest a more applicable response for the travel and hospitality industry.

## 2. Literature review

### 2.1. Payment methods in the hospitality and tourism industry: Mobile, traditional, and cryptocurrency payments

As mobile payment enables consumers to pay via their mobile devices, it has gradually been adopted by consumers, retailers and companies (Tan and Ooi, 2018). By reducing the likelihood of losing cash or debit/credit cards and decreasing the time spent on transactions, this payment method provides an efficient service through a platform on mobile devices (Ozturk et al., 2017; Law et al., 2018; Khanra et al., 2021). Mobile payment generally requires the use of third-party payment platforms such as Apple Pay, Alipay, PayPal, Google Pay, Kakao Pay or WeChat Pay. As more payment platforms become available, merchants obtain corresponding advantages in marketing, such as increasing visits by consumers who use a particular payment method, and improving merchant image (Ozturk et al., 2017). For example, the platforms can grant cashback and benefits to consumers when they make payments through specific mobile payment platforms during hotel consumption activities (e.g., renewal of stay will directly deduct a specific amount from the payment; and booking a specific hotel will provide complimentary hotel room service, or discounted tickets for scenic spots in tourist destinations). These offers enable travel consumers to save time and perform leisure activities efficiently (Wu et al., 2021).

Despite the benefits of mobile payment, mobile payment users are vulnerable to financial theft and privacy invasion. Mobile payment users are also prone to financial losses due to failed transactions and periodic maintenance of payment applications during their usage (Choi et al., 2019; Gomber et al., 2017; Gursoy et al., 2019; Law et al., 2018; Peng et al., 2012). Although the number of smartphone users worldwide has exceeded 6 billion in 2022, in many densely populated countries (e.g., China and India), the smartphone penetration rate is less than 70% (Statista.com, 2022). This also leaves some people still reliant on traditional payment methods (cash/credit card) (Chawla and Joshi, 2019). In the hospitality business sector, hotels often require a credit card or cash deposit during check-in or tourism activities (Chen et al., 2021). Moreover, many travelers bring fiat currency from their country of residence to a destination for exchange when crossing borders. In this respect, traditional payment methods remain in use for consumers in hospitality and tourism.

Cryptocurrency payment based on blockchain technology has been introduced globally across businesses (Kim et al., 2022). Cryptography, as one of the important infrastructures in blockchain technology, ensures the security of transaction information and enables smart contracts to function properly (Büttgen et al., 2021; Liu and Ye, 2021; Shin and Bianco, 2020). In brief, a transfer performed in blockchain, which involves a minor fee, is enacted about 10 min after the nodes have authenticated and wrapped a block. The details of transactions (known as "TXID"), as well as receiver and payer names, are displayed by a string of characters (known as the "wallet address"). With such transparent and traceable transactions, cryptocurrency payment guarantees privacy and security for both payer and receiver (Nakamoto, 2008), allowing users to trust and feel free to proceed with any transaction through blockchain (Liu and Ye, 2021). In the hospitality industry, various advantages of integrating blockchain technology for different stakeholders (consumers, suppliers, brand/franchise owners, hospitality enterprises, and policymakers) have been described (Filimonau and Naumova, 2020). These include unbiased feedback and reviews from consumers, more personalized and effective marketing for hospitality companies, loyalty programs resulting from the absence of middle-men, and safe and secure payment from companies to suppliers (Filimonau and Naumova, 2020).

Given the different nature of the available payment methods (see Table 1), consumers' perceptions can differ according to which payment method they use. In addition to reviewing the contextual differences between the payment methods, the following section further elucidates the research gaps with regard to consumers' perceptions of payment

**Table 1**  
Differences in features of three payment methods.

Payment method	Financial damages	Convenience & utility	Privacy & Security
Mobile payment	O	O	X
Traditional payment (credit card and cash)	O	X	O
Cryptocurrency payment	X	X	O

Note: Indicate the presence or absence of such feature with 'O' and 'X'.

methods in hospitality and tourism.

## 2.2. Research gaps in payment methods in hospitality and tourism

First, there is an urgent call for research on cryptocurrency payment in the hospitality and tourism business sector due to the emergence of blockchain technology (Kim et al., 2022). Most of the existing research on blockchain and cryptocurrencies is limited to their technical aspects (e.g., Monrat et al., 2019; Treleaven et al., 2017; Yli-Huumo et al., 2016; Yuneline, 2019; Zheng et al., 2017). In the hospitality tourism industry, previous studies mainly center on building conceptual models of the operational process or describing its pros and cons for the industry in a limited manner (e.g., Rashideh, 2020; Saurabh and Dey, 2021). For example, Rashideh (2020) highlights the role of blockchain technology in industries and provides experts' mixed predictions of the role of intermediaries in tourism, along with the emergence of blockchain technology, by taking a qualitative approach. Although blockchain technology, in the form of bitcoin, is a major trend in tourism, some experts think intermediaries will vanish, whereas others anticipate that intermediaries will remain as they serve as a major role in the tourism industry by providing a huge proportion of deals (Rashideh, 2020). A few conceptual papers identify a range of benefits and drawbacks of integrating blockchain technology into the hospitality and tourism industry, and provide practical insights and future research suggestions (Filimonau and Naumova, 2020; Valeri and Baggio, 2021). As research related to cryptocurrency payment has only recently begun, more studies are needed to extend the understanding of its application to the industry and consumers' perception of it (Büttgen et al., 2021).

Second, there is a lack of studies on payment methods in the hospitality and tourism context, especially investigating different payment methods simultaneously. The prior research has mainly paid attention to single payment methods. For example, researchers have examined consumers' perceptions of using mobile payments in the hotel and restaurant industry (Cobanoglu et al., 2015; Kibe et al., 2019; Sun et al., 2021). Existing studies also focus on consumers' evaluations or perceptions of making payment through blockchain technology (as a cryptocurrency payment method) (Liébana-Cabanillas et al., 2018; Nuryyev et al., 2020; Singh et al., 2020). However, consumers can use different payment methods, according to the situation, during the selection of tourism products (e.g., hotels and restaurants). Therefore, studies that simultaneously explore consumers' attitudes and intentions with regard to different methods of payment are necessary. Accordingly, this study further examines and compares consumers' perceptions of the three payment methods by targeting the already popularly used mobile and traditional payments, combined with the emerging cryptocurrency payment method as the object of inquiry.

Lastly, a few studies have taken cultural impact into account when investigating consumers' responses to a payment method. In relation to mobile payment for hospitality and tourism products, prior studies have often examined Chinese consumers' perceptions of usefulness, ease of use and security, and their impact on attitudes, satisfaction, and behavioral intention (Lou et al., 2017; Sun et al., 2021; Wu and Tran, 2018) and adoption (Cheng et al., 2021). A few existing studies have compared Chinese consumers' perceptions of mobile payment with those of Americans (Pan et al., 2019), and the operational aspects of

mobile payment procedures between China and Finland (Zhong, 2009). Particularly in China, where the cryptocurrency payment method has been adopted, there is ongoing discussion regarding a controversial system in which citizens can be punished or rewarded, based on the ability of the government to anonymously observe citizens, risking personal privacy and rights (Lecarme, 2019). To add to the payment method-related literature, this study explores differences in perceptions of payment methods, if any exist, between Chinese and Korean consumers in hospitality and tourism.

## 2.3. Technology adoption model (TAM) and application of the TAM to payment methods in hospitality and tourism

This study uses the tenets of the technology adoption model (TAM) as a conceptual anchor to establish a framework for consumers' perceptions of payment methods. The TAM proposed by Davis (1989) is considered an effective conceptual model for predicting consumers' willingness to adopt a technology (Han et al., 2021; Kim et al., 2020). It helps the understanding of potential acceptance or rejection in consumer behavioral intentions towards new technology (Scherer et al., 2019). The TAM has been widely used in studies of new technology adoption such as information technology, computer applications, cell phone utilization programs, financial technology and blockchain technology, and is also considered a rational scientific model capable of evaluating the implementation of heterogeneous technologies (Yang et al., 2017; Fu et al., 2018; Chawla and Joshi, 2019; Singh et al., 2020; Pal et al., 2021; Saurabh and Dey, 2021). In this model, perceived usefulness and ease of use are the key factors in consumers' attitudes and behaviors related to the adoption of a new technology (Davis, 1989, 1993). *Perceived usefulness* is described as "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis, 1989, p. 320). *Perceived ease of use* is defined as "the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989, p. 320). According to the TAM, perceived usefulness and ease of use are the significant antecedents of consumers' attitudes toward a technology, which determine their willingness to accept and use the technology (Davis, 1989).

The existing research related to different payment methods has often used the TAM to investigate consumer responses to a technology. For instance, the prior research on mobile payment methods shows the significant impact of consumers' perceived usefulness and ease of use on forming positive attitudes and increased intentions to reuse the payment method (Liébana-Cabanillas et al., 2018; Oliveira et al., 2016; Schierz et al., 2010). In the context of blockchain technology (e.g., FinTech services), an existing study shows similar outcomes, whereby perceived usefulness and ease of use exert a positive effect on consumers' behavioral intentions to use the service (Singh et al., 2020).

In hospitality and tourism, several studies have used the TAM to examine the relationships between antecedents (perceived usefulness and ease of use) and outcome variables (Han et al., 2021). With regard to mobile payment methods in online hotel booking, the perceived usefulness of the payment method (how quick, convenient, and safe it is) generates positive attitudes, which in turn increase consumers' intentions to book hotels through an online travel agency's mobile app (Park and Tussyadiah, 2017; Sun et al., 2021). The effortless use of mobile payment for hotel bookings is also critical to enhancing hospitality consumers' loyalty to mobile payment systems (Ozturk et al., 2016). In a restaurant setting, the usefulness of mobile payment appears to be one of the most influential factors relating to consumers' payment intentions (Cobanoglu et al., 2015). Therefore, both perceived usefulness and ease of use are vital factors in building hospitality and tourism consumers' positive attitudes (Kang and Namkung, 2019; Liébana-Cabanillas et al., 2018; Lou et al., 2017). When considering cryptocurrency payment adoption in small and medium-sized enterprises in hospitality and tourism, owners'/managers' perceptions of usefulness and ease of use significantly and positively influence their

intention to use the payment method in their businesses (Nuryyev et al., 2020). The findings of Albayati et al. (2020) also suggest that the factors in the TAM have a significant impact on users' behavioral intentions toward cryptocurrency transactions.

In addition to the two antecedents introduced in the TAM, the other factor often used to predict consumers' attitudes and intentions toward a technology is *perceived security*, which is central to consumers' perceptions of a technology. Security issues relating to technology are considered to be a threat that disrupts specific situations, activities, and people to a certain extent through data as well as network resources (Peng et al., 2012). When conducting online transactions, consumers are concerned about potential harm as they are required to provide personal and financial information on public networks, and the way this information will be used is unpredictable and out of their control (Miyazaki and Fernandez, 2001; Featherman and Pavlou, 2003). For this reason, privacy and information security have become the main factors that users are concerned about during e-commerce transactions (Glover and Benbasat, 2010). In terms of information security, consumers are concerned when they perceive a service provider as incompetent or inattentive in protecting consumers' monetary information (Salisbury et al., 2001). For mobile payment, security indicates that a "person believes that using a particular mobile payment procedure would be secure" (Gerpott and Kornmeier, 2009). In a hospitality and tourism context, consumers' perceived security, i.e., feeling safe and secure to provide sensitive information, builds positive attitudes toward mobile payment (Schierz et al., 2010), which result in higher intention to adopt, recommend, and use the mobile payment method (Cobanoglu et al., 2015; Oliveira et al., 2016). Therefore, perceived security is both an important barrier (Sathye, 1999) and a major determinant (Mallat, 2007) for consumers in the adoption of payment methods.

In addition, in blockchain technology, Rashideh (2020) emphasizes that trust is built upon a level of security in processing payment and transactions. Perceived usefulness, ease of use and security precede consumer trust in mobile payment and cryptocurrency, which determines the extent to which consumers intend to use them (Nuryyev et al., 2021; Peng et al., 2012; Singh et al., 2020). Since people are not yet knowledgeable about the technical aspects of cryptocurrencies, in the process of using cryptocurrency for payment, there are problems with the unskilled use of functions and lack of understanding of technical operations (Nuryyev et al., 2021). Also, the first thing that comes to mind with respect to cryptocurrencies is whether they are secure, whether there will be errors in the transaction process, and whether blockchain technology is a trustworthy ecosystem (Rashideh, 2020). These questions can be classified as ease of use, convenience, security, and trust in the blockchain as experienced by consumers during use. Thus, the TAM and perceived security are considered reasonable theoretical anchors that are well positioned to anticipate consumers' reactions to cryptocurrency payment.

## 2.4. Outcome variables of consumers' perception of a payment method

### 2.4.1. Trust in a payment method

In an online setting, trust is seen as "an attitude of confident expectation in an online situation of risk that one's vulnerabilities will not be exploited" (Corritore et al., 2003, p. 740). This concept of trust is underlined by researchers as a key factor that should be included, especially in e-commerce (Gefen et al., 2003; Pavlou, 2003). For example, Shin and Bianco (2020) indicate that trust is a key component of blockchain technology. Although consumer trust is not entirely based on blockchain technology per se, it is established by understanding and using this new technology. In mobile payment adoption, when merchants perceive a mobile payment application as safe and reliable, their intention to adopt the application increases (Singh and Sinha, 2020). Consumer trust in mobile payment systems also exerts a positive effect on forming attitudes, which in turn, enhance behavioral intention to use mobile payment (Liébana-Cabanillas et al., 2018). Trust in a food service

mobile application also strengthens users' ongoing usage of the application (Kang and Namkung, 2019). Therefore, consumer trust in mobile payment and cryptocurrency contributes to the tourism industry's operation (Rashideh, 2020; Saurabh and Dey, 2021) as well as consumers' behavioral intentions toward the payment method (Kang and Namkung, 2019; Liébana-Cabanillas et al., 2018; Shin and Bianco, 2020).

### 2.4.2. Attitude toward a payment method

As a major output of perceived usefulness and ease of use, according to the TAM (Davis, 1989), attitude indicates to what extent consumers respond to a used technology either positively or negatively (Schierz et al., 2010). In terms of using a mobile payment method, consumers' mobile payment-related attitudes influence their willingness to use the payment method (Liébana-Cabanillas et al., 2018; Schierz et al., 2010). When purchasing a hospitality product, consumers' positive attitudes toward the mobile payment method (e.g., enjoyable and pleasant) contribute to their intention to rebook a hotel (Sun et al., 2021). From hotel employees' perspective, mobile payment applications are also considered convenient, quick and secure payment methods, for which guests have no need to carry cash (Kibe et al., 2019). At destinations in China where mobile payment methods are adopted, tourists' actual usage of mobile payment methods increases when they have positive responses to such methods (Lou et al., 2017).

### 2.4.3. Behavioral intention toward a destination

Consumers' behavioral intention refers to how likely consumers are to use a technology; such behavioral intention is generally captured by consumers' intentions to repurchase and recommend a product or service (Schierz et al., 2010). Across different payment methods adopted in hospitality and tourism, prior studies have often taken consumers' behavioral intention toward a payment method into account (e.g., Nuryyev et al., 2020; Ozturk et al., 2016). In contrast, a few studies have focused on consumers' behavioral intention toward a service provider that introduces a certain payment method, such as consumers' intention to rebook a hotel that adopts mobile payments (Sun et al., 2021) and to purchase travel products through mobile payment (Park and Tussydiah, 2017).

Based on the prior studies, this study considers the TAM to be an efficient model for exploring consumer reactions to technology. This study therefore uses the model as a theoretical basis to propose perceived usefulness, ease of use, and security as the three main antecedents of the outcome variables (trust, attitude, and intention to visit) and extends the TAM by including additional variables (perceived security and trust). This study further investigates the impact of these antecedents on consumers' mobile, traditional (cash/credit), and cryptocurrency payment experiences. The hypotheses established for this study are as follows. Fig. 1 visualizes the relationships between the antecedents and outcome variables on the basis of the TAM.

**H1a,b,c.** : Security has a positive impact on trust in the payment method (mobile, traditional, and cryptocurrency).

**H2a,b,c.** : Security has a positive impact on attitude toward the payment method (mobile, traditional, and cryptocurrency).

**H3a,b,c.** : Ease of use has a positive impact on trust in the payment method (mobile, traditional, and cryptocurrency).

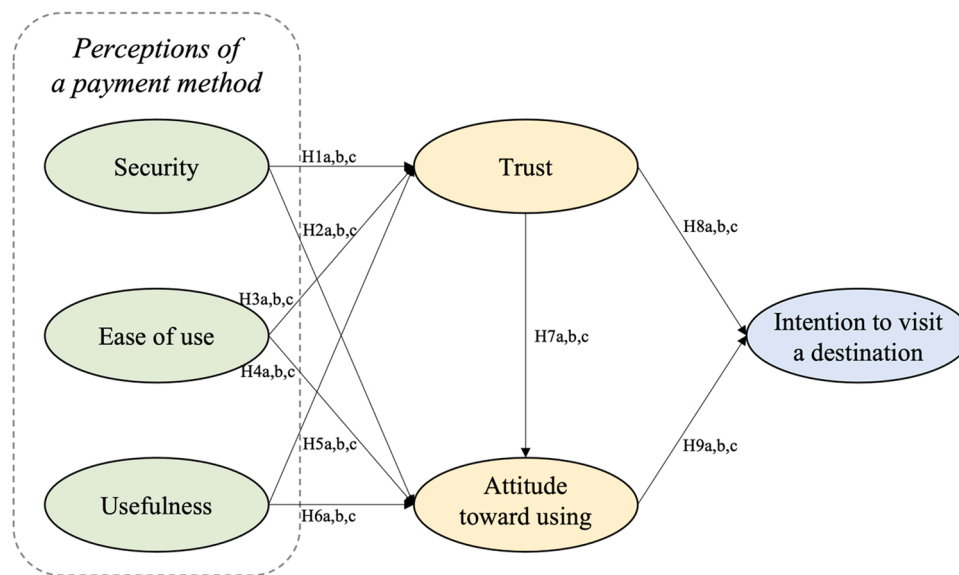
**H4a,b,c.** : Ease of use has a positive impact on attitude toward the payment method (mobile, traditional, and cryptocurrency).

**H5a,b,c.** : Usefulness has a positive impact on trust in the payment method (mobile, traditional, and cryptocurrency).

**H6a,b,c.** : Usefulness has a positive impact on attitude toward the payment method (mobile, traditional, and cryptocurrency).

**H7a,b,c.** : Trust has a positive impact on attitude toward the payment





**Fig. 1.** Conceptual framework of consumers' perceptions of three payment methods *Note:* Consumers' perceptions of three different payment methods were compared (a: mobile payment method, b: traditional payment method, and c: cryptocurrency payment method).

method (mobile, traditional, and cryptocurrency).

**H8a,b,c.** : Trust in the payment method (mobile, traditional, and cryptocurrency) has a positive impact on intention to visit a destination.

**H9a,b,c.** : Attitude toward the payment method (mobile, traditional, and cryptocurrency) has a positive impact on intention to visit a destination.

### 3. Methodology

#### 3.1. Measurement items

Measurement items for the construction of this study were extracted from previous research (Chawla and Joshi, 2019; Davis, 1989, 1993; Peng et al., 2012; Fu et al., 2018; Liu and Ye, 2021; Nuryyev et al., 2020, 2021; Pal et al., 2021; Shin and Bianco, 2020; Singh et al., 2020). The research model is composed of six constructs including perceived security, ease of use, usefulness, trust, attitude, and intention to visit a destination. Tables 2 and 3 show the measurement items and domains adopted to measure each construct. All the measurement items (see Appendix) were adapted from previously validated and reliable measurement scales to preserve content validity. Each item is measured on a 7-point Likert scale from "1" ("strongly disagree") to "7" ("strongly agree").

#### 3.2. Data collection and data analysis

The original survey questionnaire version in English was translated into Chinese and Korean by two bilingual PhD students or professors for each pair of the two languages. The translators then met to implement back-translation and discuss whether their translations were correct, following which the final versions of the Chinese and Korean questionnaires were confirmed. Then, an online survey method was used to collect the data, using professional survey companies in both China and South Korea, in July 2021. Since the research topic of this study is related to blockchain-cryptocurrency, which is not fully popularized, the first question at the beginning of the questionnaire was "Do you know about cryptocurrencies?". This question excluded 30% of potential participants, who did not know much about cryptocurrencies. Then the question "Have you ever used cryptocurrencies?" was asked. Only participants who answered "yes" to both questions were able to continue

with the survey.

In this study, we analysed the data using SEM to measure the relationship between the latent constructs of each factor, since SEM is largely considered as a confirmatory technique in contrast with SPSS, which is an exploratory technique. In addition, the data in this study were cross-sectional and based on technology adoption, a model that has been widely used. Therefore, structural equation modeling with confirmatory factors and path analysis (Hoyle, 1995; Chin, 1998; Hershberger, 2003; Hair et al., 2021) was used in this study.

#### 3.3. Participant profile

While 421 and 396 responses were initially collected in China and Korea, respectively, after two screening procedures, 407 and 378 questionnaires were used for further data analysis after the exclusion of insincere responses and those with multiple missing values.

With regard to the demographic profile of the Chinese participants, 42.5% were male, and 42.0% were 21–30 years old, followed by those aged 31–40 years (35.9%). For annual household income, the highest percentage was observed in the category of above \$80,000 (28%), followed by between \$40,000 and \$59,999 (23.1%) and between \$60,000 and \$79,999 (21.9%). Nearly 47% of participants had a bachelor's degree, followed by those with a high school diploma (32.9%). Married people accounted for 51.4% of the participants, while 48.6% were single.

For the Korean respondents, 53.7% were male. About 44% of them were 31–40 years old, followed by those aged 41–50 years (18.8%). With regard to annual household income, 29.1% had an income above \$80,000, while 26.7% indicated an income between \$40,000 and \$59,999. With regard to educational level, 40.7% had graduated from high school, followed by 21.7% with a graduate degree, and 19.6% with a bachelor's degree. They were mostly married (62.4%), rather than single (37.6%).

## 4. Results

#### 4.1. Data quality testing by confirmatory factor analysis (CFA)

The correlations among the study variables are presented in Table 2. The results of CFA for the payment methods show that all three models of the construct structure had acceptable goodness-of-fit statistics for

**Table 2**  
Correlation matrix of measurement constructs for three payment methods.

Mobile payment (Chinese consumers)								
	[1]	[2]	[3]	[4]	[5]	[6]	Mean	SD
[1] SM	<i>0.731</i>						5.58	0.947
[2] EUM	0.374 **	.775					4.86	1.120
[3] UM	0.353 **	0.749 **	.713				4.41	1.211
[4] TM	0.451 **	0.729 **	0.700 **	.879			3.29	1.554
[5] AM	0.710 **	0.401 **	0.363 **	0.446 **	.876		5.29	1.489
[6] ICM	0.704 **	0.395 **	0.340 **	0.436 **	0.861 **	.885	5.27	1.478
Mobile payment (Korean consumers)								
[1] SM	<i>0.724</i>						5.52	1.023
[2] EUM	0.637 **	<i>0.731</i>					5.61	0.993
[3] UM	0.685 **	0.612 **	<i>0.736</i>				5.56	0.997
[4] TM	0.281 **	0.295 **	0.246 **	<i>0.758</i>			4.66	1.084
[5] AM	0.704 **	0.693 **	0.716 **	0.311 **	<i>0.834</i>		5.36	1.320
[6] ICM	0.208 **	0.458 **	0.166 **	0.109 *	0.218 **	<i>0.744</i>	5.89	0.789
Traditional payment (Chinese consumers)								
[1] ST	<i>0.715</i>						3.14	0.876
[2] EUT	0.331 **	<i>0.823</i>					3.60	1.286
[3] UT	0.103 *	0.412 **	<i>0.871</i>				3.73	1.543
[4] TT	0.654 **	-0.042	-0.051	<i>0.732</i>			3.00	0.943
[5] AT	0.330 **	0.815 **	0.401 **	0.716 **	-0.048	<i>0.792</i>	3.24	1.516
[6] ICT	0.346 **	0.804 **	0.413 **	-0.040	0.744 **	<i>0.834</i>	2.60	1.304
Traditional payment (Korean consumers)								
[1] ST	<i>0.727</i>						4.44	0.998
[2] EUT	-0.036	<i>0.779</i>					3.78	0.797
[3] UT	0.013	0.539 **	<i>0.723</i>				3.37	0.852
[4] TT	0.022	0.559 **	0.649 **	<i>0.849</i>			3.97	0.953
[5] AT	0.065	0.548 **	0.695 **	0.728 **	<i>0.731</i>		4.43	1.038
[6] ICT	0.058	0.644 **	0.743 **	0.814 **	0.827 **	<i>0.926</i>	3.02	1.950
Cryptocurrency payment (Chinese consumers)								
[1] SC	<i>0.839</i>						5.28	1.502
[2] EUC	0.367 **	<i>0.879</i>					3.57	1.784
[3] UC	0.354 **	0.766 **	<i>0.790</i>				3.08	1.319
[4] TC	0.384 **	0.843 **	0.716 **	<i>0.761</i>			3.18	0.873
[5] AC	0.853 **	0.359 **	0.369 **	0.370 **	<i>0.760</i>		4.83	1.329
[6] ICC	0.376 **	0.805 **	0.758 **	0.841 **	0.369 **	<i>0.884</i>	3.81	1.564
Cryptocurrency payment (Korean consumers)								
[1] SC	<i>0.781</i>						3.42	1.205
[2] EUC	0.749 **	<i>0.835</i>					4.24	1.541
[3] UC	0.727 **	0.830 **	<i>0.788</i>				3.51	1.182
[4] TC	0.337 **	0.324 **	0.421 **	<i>0.880</i>			2.87	1.973
[5] AC	0.270 **	0.328 **	0.355 **	0.359 **	<i>0.722</i>		3.17	1.144
[6] ICC	0.705 **	0.733 **	0.780 **	0.294 **	0.288 **	<i>0.816</i>	4.44	1.173

Note: Perceived security of mobile (SM), traditional (ST), and cryptocurrency (SC) payments; Perceived ease of use of mobile (EUM), traditional (EUT), and cryptocurrency (EUC) payments; Perceived usefulness of mobile (UM), traditional (UT), and cryptocurrency (UC) payments; Trust in mobile (TM), traditional (TT), and cryptocurrency (TC) payments; Attitude to mobile (AM), traditional (AT), and cryptocurrency (AC) payment; Intention to visit a destination where convenient mobile (ICM), only traditional (cash/credit card) (ICT), and convenient cryptocurrency (ICC) payment options are available.

\*p < .05, \*\*p < .01.

Numbers in italics denote Square root of AVE

both the Chinese and Korean groups. In addition, composite reliability (CR) was examined, which showed acceptable values between .756 and .947, indicating adequate internal consistency of the measured items for each construct (Hair et al., 2021). The average variance extracted (AVE) values ranged between .508 and .857, which were all greater than the .50 threshold (Hair et al., 2021). This result showed that the convergence of the construct measures was valid. All correlation coefficients between constructs were lower than  $\sqrt{AVE}$ , which supports the discriminant validity of the construct measures.

#### 4.2. The structural model evaluation for three payment methods

We generated a structural equation model to assess the validity of our proposed theoretical framework and to test the research hypotheses. Based on maximum likelihood estimation, the fit statistics of all three models constructed for the Chinese and Korean consumer groups showed a satisfactory level. The results of the structural equation model based on the hypothesized relationships are illustrated in Table 3 and Fig. 2. First, the effects of Chinese versus Korean consumers' perceptions of mobile payment methods on outcome variables were investigated.

The results showed that for both Chinese and Korean consumer groups, perceived security and ease of use of mobile payments have a significant effect on trust and attitude toward mobile payments. While perceived usefulness appeared to have an insignificant effect on trust, it positively influenced both groups' attitudes toward mobile payment. Both groups' trust also exerted an impact on attitude, and attitude had a significant impact on behavioral intention. However, the relationship between trust and behavioral intention was insignificant.

For traditional payment methods, the results showed that both Chinese and Korean consumers perceived that security and ease of use had a significant and positive effect on trust, in addition to a positive effect of attitude toward use on intention to visit a destination. However, dissimilar results were noticed between the responses of Chinese and Korean consumers. In terms of generating a positive attitude toward traditional payment methods, Chinese consumers' perceived security, ease of use, and usefulness appeared to be significant in explaining trust and attitude toward use, whereas these factors were all statistically insignificant in the Korean consumer data set. With regard to the relationship of trust to intention to visit a destination and to attitude toward use, significant values were only found in the Korean consumer data set.

**Table 3**  
Structural model evaluation for three payment methods.

Mobile payment				Chinese respondents (n = 407)		Korean respondents (n = 378)	
Proposed paths				$\beta$	t-value	$\beta$	t-value
H1a	SM	→	TM	0.136	3.157 **	0.317	1.978 *
H2a	SM	→	AM	0.814	29.005 **	0.691	9.488 **
H3a	EUM	→	TM	0.538	15.443 **	0.222	3.004 **
H4a	EUM	→	AM	0.090	2.261 *	0.489	8.972 **
H5a	UM	→	TM	0.009	0.237	0.052	0.737
H6a	UM	→	AM	0.354	10.334 **	0.594	10.188 **
H7a	TM	→	AM	0.446	10.040 **	0.311	6.346 **
H8a	TM	→	ICM	0.037	1.623	0.046	0.859
H9a	AM	→	ICM	0.893	38.891 **	0.183	3.633 **
Variance explained: R <sup>2</sup> for TM = 0.240, R <sup>2</sup> for AM = 0.394, R <sup>2</sup> for ICM = 0.335				Variance explained: R <sup>2</sup> for TM = 0.221, R <sup>2</sup> for AM = 0.435, R <sup>2</sup> for ICM = 0.339			
Goodness-of-fit statistics for the structural model: $\chi^2/df = 3.18$ ( $\chi^2 = 394.23$ , $df = 124$ , $p < .01$ ), GFI = 0.914, CFI = 0.931, NFI = 0.912, TLI = 0.917, RMSEA = 0.073				Goodness-of-fit statistics for the structural model: $\chi^2/df = 1.85$ ( $\chi^2 = 227.31$ , $df = 123$ , $p < .01$ ), GFI = 0.930, CFI = 0.940, AGFI = 0.917, TLI = 0.948, RMSEA = 0.047.			
Traditional payment				Chinese respondents (n = 407)		Korean respondents (n = 378)	
Proposed paths				$\beta$	t-value	$\beta$	t-value
H1b	ST	→	TT	0.750	20.160 **	0.347	9.418 **
H2b	ST	→	AT	0.059	2.125 *	0.045	1.253
H3b	EUT	→	TT	-0.286	-7.050 **	0.723	11.993 **
H4b	EUT	→	AT	0.789	26.197 **	0.183	0.454
H5b	UT	→	TT	0.032	1.582	0.898	9.995 **
H6b	UT	→	AT	0.066	2.268 *	0.138	0.271
H7b	TT	→	AT	-0.048	-0.973	0.728	20.575 **
H8b	TT	→	ICT	-0.040	-0.804	0.450	12.723 **
H9b	AT	→	ICT	0.844	31.599 **	0.784	14.131 **
Variance explained: R <sup>2</sup> for TT = 0.598, R <sup>2</sup> for AT = 0.620, R <sup>2</sup> for ICT = 0.686				Variance explained: R <sup>2</sup> for TT = 0.633, R <sup>2</sup> for AT = 0.462, R <sup>2</sup> for ICT = 0.791.			
Goodness-of-fit statistics for the structural model: $\chi^2/df = 2.24$ ( $\chi^2 = 282.42$ , $df = 126$ , $p < .01$ ), GFI = 0.901, CFI = 0.936, NFI = 0.930, TLI = 0.928, RMSEA = 0.055.				Goodness-of-fit statistics for the structural model: $\chi^2/df = 2.98$ ( $\chi^2 = 375.57$ , $df = 126$ , $p < .01$ ), GFI = 0.913, CFI = 0.949, NFI = 0.938, IFI = 0.946, RMSEA = 0.072.			
Cryptocurrency payment				Chinese respondents (n = 407)		Korean respondents (n = 378)	
Proposed paths				$\beta$	t-value	$\beta$	t-value
H1c	SC	→	TC	0.072	2.662 *	-0.109	-0.1177
H2c	SC	→	AC	0.828	29.809 **	-0.253	-9.452 **
H3c	EUC	→	TC	0.526	10.368 **	0.061	0.905
H4c	EUC	→	AC	-0.039	-0.750	0.305	11.522 **
H5c	UC	→	TC	0.335	6.647 **	0.800	7.811 **
H6c	UC	→	AC	0.109	2.110 *	0.259	8.763 **
H7c	TC	→	AC	0.027	0.536	0.541	33.909 **
H8c	TC	→	ICC	0.816	28.336 **	0.203	1.982 *
H9c	AC	→	ICC	0.068	2.345 *	0.227	2.351 **
Variance explained: R <sup>2</sup> for TT = 0.598, R <sup>2</sup> for AT = 0.620, R <sup>2</sup> for ICT = 0.686				Variance explained: R <sup>2</sup> for TC = 0.251, R <sup>2</sup> for AC = 0.694, R <sup>2</sup> for ICC = 0.862.			
Goodness-of-fit statistics for the structural model: $\chi^2/df = 1.55$ ( $\chi^2 = 194.25$ , $df = 125$ , $p < .01$ ), GFI = 0.911, CFI = 0.939, NFI = 0.921, TLI = 0.924, RMSEA = 0.037.				Goodness-of-fit statistics for the structural model: $\chi^2/df = 1.88$ ( $\chi^2 = 230.85$ , $df = 123$ , $p < .01$ ), GFI = 0.903, CFI = 0.921, NFI = 0.907, TLI = 0.902, RMSEA = 0.028.			

Note: Perceived security of mobile (SM), traditional (ST), and cryptocurrency (SC) payment; Perceived ease of use of mobile (EUM), traditional (EUT), and cryptocurrency (EUC) payments; Perceived usefulness of mobile (UM), traditional (UT), and cryptocurrency (UC) payments; Trust in mobile (TM), traditional (TT), cryptocurrency (TC) payments; Attitude to mobile (AM), traditional (AT), and cryptocurrency (AC) payments; Intention to visit a destination where convenient mobile (ICM), only traditional (cash/credit card) (ICT), and

convenient cryptocurrency (ICC) payment options are available.  
\*p < .05, \*\*p < .01.

The results are reported in Table 3 and Fig. 3.

Lastly, the hypothesis testing for cryptocurrency payment methods showed that for both Chinese and Korean consumer groups, there were positive relationships between perceived security and attitude toward use; usefulness and trust; usefulness and attitude toward use; trust and intention to visit a destination; and attitude toward use and intention to visit a destination. However, again, heterogeneous results were observed in a comparison of significant path coefficients between the two national groups. For example, in the Chinese consumer group, relationships between perceived security and ease of use, and trust in cryptocurrency payment methods were significant, while the relationships were insignificant in the Korean consumer group. The results for cryptocurrency payment methods are displayed in Table 3 and Fig. 4.

#### 4.3. Indirect impact and total impact assessment (China and Korea)

This study further investigated the indirect effects of the study variables on the three different payment methods, based on the significant total effect of behavioral intention on payment methods. For mobile payment methods, Chinese consumers' perceived security and ease of use exerted significant indirect effects on attitude and behavioral intention. For traditional payment methods, both Chinese and Korean consumer groups' perceived security, ease of use and usefulness commonly had an indirect effect on intention to visit a destination. There was also a significant indirect effect of perceived security, ease of use, and usefulness on attitude for the Korean consumer group. For cryptocurrency payment methods, the results revealed that Chinese consumers' perceived security, ease of use, and usefulness all had a significant indirect effect on the intention to visit, while security and usefulness only had a significant indirect effect on attitude for the Korean consumer group. This suggests that the factors affecting intention include security, ease of use, and usefulness of the payment method. The results are reported in Table 4.

### 5. Discussion

This study simultaneously examined Chinese and Korean consumers' perceptions and behavioral intentions relating to three different payment methods (mobile, traditional, and cryptocurrency). While this study considered two nations, China and Korea, where mobile and traditional payment methods are widely adopted, we also took the newly developed cryptocurrency payment system into account, which is beginning to be adopted across the world. The survey data yielded several notable findings.

First, while Chinese and Korean consumers' perceptions varied across the different payment methods, their perceptions of mobile payment were consistent with each other. As shown in this study, for both parties, all three antecedents – perceived security, ease of use, and usefulness – were valid factors in building positive attitudes toward mobile payment methods. In addition, the relationships between trust, attitude, and behavioral intention related to mobile payment were also significant. Such results related to mobile payment may be due to the prevalence of the payment method compared to cryptocurrency payment. Due to the pervasive use of mobile payments, seminal works in the mobile payment context have been conducted across business sectors (e.g., Cobanoglu et al., 2015; Pal et al., 2021; Sun et al., 2021). In contrast, only a few conceptual and empirical studies exist in relation to cryptocurrency payment (e.g., Filimonau and Naumova, 2020; Rashideh, 2020; Saurabh and Dey, 2021; Treiblmaier et al., 2020). The results of assessing consumers' perceptions of mobile payment methods in this study extend the extant research by showing hospitality and tourism consumers' common perceptions of mobile payment methods across different countries.

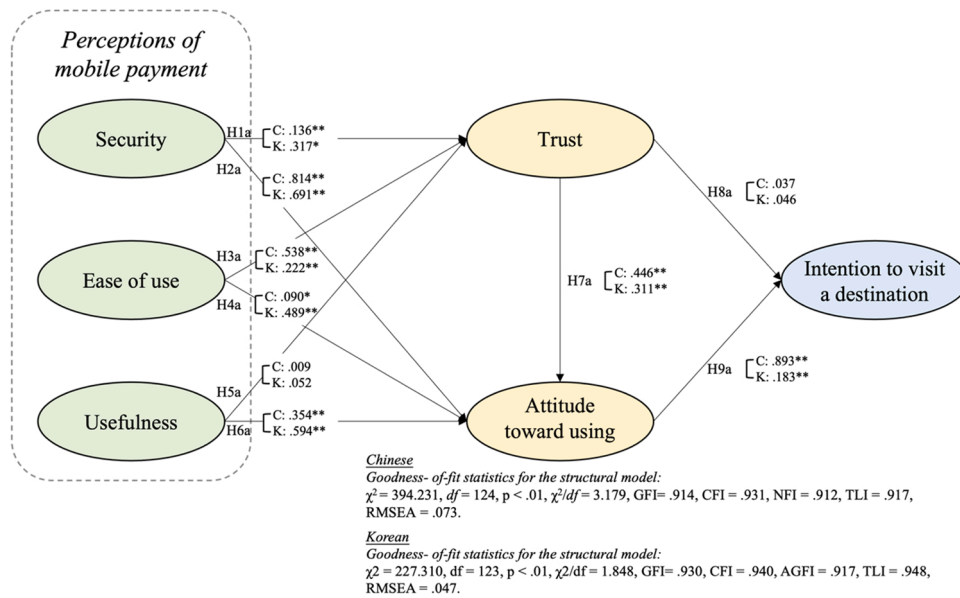


Fig. 2. The results of testing hypotheses for mobile payment methods based on Chinese and Korean consumers Note: C indicates Chinese consumers, while K represents Korean consumers.

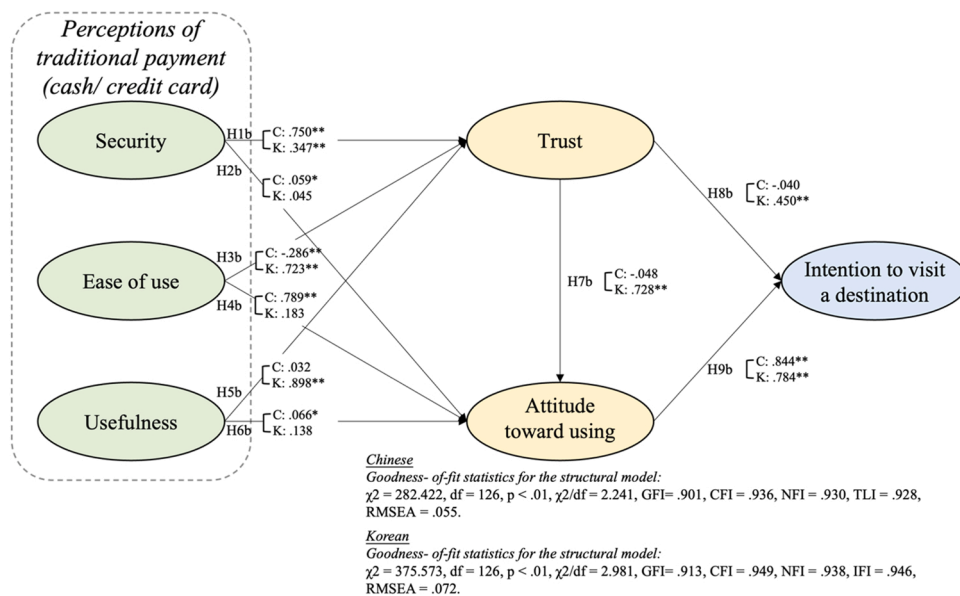


Fig. 3. The results of testing hypotheses for traditional payment methods (cash/credit card) based on Chinese and Korean consumers Note: C indicates Chinese consumers, while K indicates Korean consumers.

Second, this study revealed that Chinese and Korean consumers' perceptions of traditional payment and cryptocurrency payment differed. While for both groups, security and ease of use were important in facilitating trust in traditional payment methods (cash/credit card), Chinese consumers in particular perceived all three antecedents (security, ease of use, and usefulness) as significant to their preference for and satisfaction with the traditional payment method. These results may reflect that for Chinese consumers, the functional performance of traditional payments is central to their evaluation (e.g., Wu and Tran, 2018). In contrast, this study showed that Korean consumers seemed to put more emphasis on usefulness (convenience and speed of payment), which fosters their trust in the traditional payment methods and their intention to use and recommend them.

Lastly, as found in this study, for cryptocurrency payment methods, Chinese consumers' trust was based on whether they ensured safe

transactions (perceived security) and required minimal effort to learn how to use them (ease of use). Another interesting result of examining Korean consumers' perceptions was that perceived security exerted a significant negative effect on attitude, whereas perceived ease of use had a significant positive influence on attitude. This unexpected result indicated a distinctive aspect of adopting cryptocurrency payments compared to previous studies, whereby high security may not necessarily lead to preference for or satisfaction with the cryptocurrency payment method for Korean consumers. Such an outcome may reflect on the consumption environment in Korea, in which smart payment service is often provided by major domestic companies (Kim, 2021), rather than international payment platforms (e.g., PayPal and CashApp). This may create a relatively safer business environment for domestic consumers.



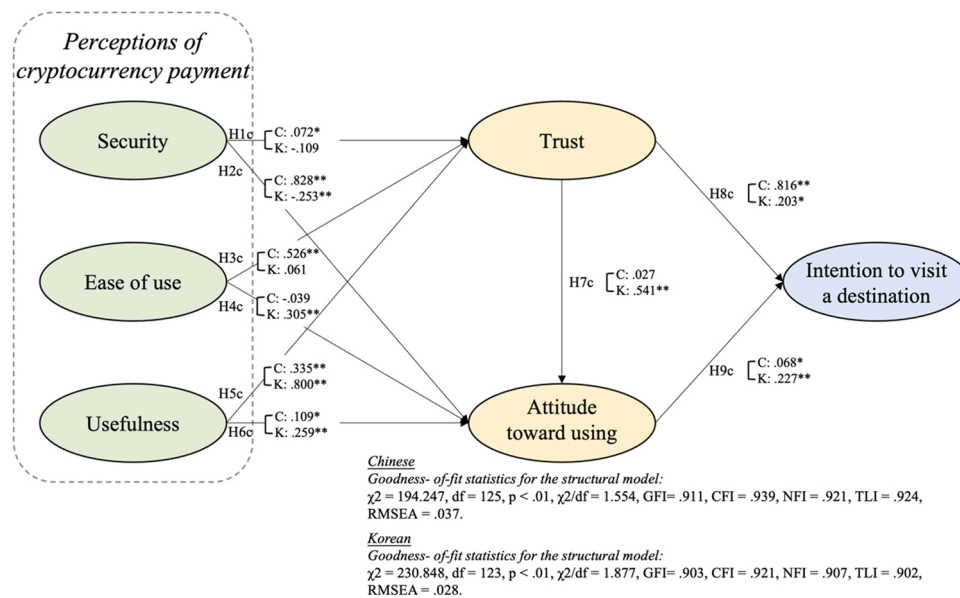


Fig. 4. Results of testing hypotheses for cryptocurrency payment methods based on Chinese and Korean consumers Note: C indicates Chinese consumers, while K indicates Korean consumers.

Table 4  
 Indirect effect and total effect assessment.

Mobile payment						
Indirect effect on TM, AM, and ICM						
Chinese respondents (n = 407)			Korean respondents (n = 378)			
SM	EUM	UM	SM	EUM	UM	
TM	-	-	-	-	-	
AM	0.061 *	0.240 **	0.099 *	0.069	0.016	
ICM	0.732 **	0.100 **	0.141 **	0.099 *	0.111 *	
Total effect on intention: $\beta$ SM = 0.732 **, $\beta$ EUM = 0.100 **, $\beta$ UM = 0.316 **, $\beta$ TM = 0.037, $\beta$ AM = 0.893 **			Total effect on intention: $\beta$ SM = 0.141 **, $\beta$ EUM = 0.099 **, $\beta$ UM = 0.111 **, $\beta$ TM = 0.046, $\beta$ AM = 0.183 **			
Goodness-of-fit indices: $\chi^2/df = 3.18$ ( $\chi^2 = 394.23$ , $df = 124$ , $p < .01$ ), $GFI = 0.914$ , $CFI = 0.931$ , $NFI = 0.912$ , $TLI = 0.917$ , $RMSEA = 0.073$			Goodness-of-fit indices: $\chi^2/df = 1.85$ ( $\chi^2 = 227.31$ , $df = 123$ , $p < .01$ ), $GFI = 0.930$ , $CFI = 0.940$ , $AGFI = 0.917$ , $TLI = 0.948$ , $RMSEA = 0.047$ .			
Traditional payment						
Indirect effect on TT, AT, and ICT						
Chinese respondents (n = 407)			Korean respondents (n = 378)			
ST	EUT	UT	ST	EUT	UT	
TT	-	-	-	-	-	
AT	-0.036	0.014	0.253 **	-0.208 **	0.023 *	
ICT	0.020 *	0.677 **	0.191 *	0.468 **	0.513 **	
Total effect on intention: $\beta$ ST = 0.020 *, $\beta$ EUT = 0.677 **, $\beta$ UT = 0.055 *, $\beta$ TT = -0.040, $\beta$ AT = 0.844 **			Total effect on intention: $\beta$ ST = 0.191 **, $\beta$ EUT = 0.468 **, $\beta$ UT = 0.512 **, $\beta$ TT = 0.450 **, $\beta$ AT = 0.784 **			
Goodness-of-fit indices: $\chi^2/df = 2.24$ ( $\chi^2 = 282.42$ , $df = 126$ , $p < .01$ ), $GFI = 0.901$ , $CFI = 0.936$ , $NFI = 0.930$ , $TLI = 0.928$ , $RMSEA = 0.055$ .			Goodness-of-fit indices: $\chi^2/df = 2.98$ ( $\chi^2 = 375.57$ , $df = 126$ , $p < .01$ ), $GFI = 0.913$ , $CFI = 0.949$ , $NFI = 0.938$ , $IFI = 0.946$ , $RMSEA = 0.072$ .			
Cryptocurrency payment						
Indirect effect on TC, AC, and ICC						
Chinese respondents (n = 407)			Korean respondents (n = 378)			
SC	EUC	UC	SC	EUC	UC	
TC	-	-	-	-	-	
AC	0.002	0.014	-0.059 *	0.033	0.433 **	
ICC	0.115 *	0.426 **	-0.079 *	0.081 *	0.112 **	
Total effect on intention: $\beta$ SC = 0.115 *, $\beta$ EUC = 0.426 **, $\beta$ UC = 0.280 **, $\beta$ TC = 0.816 **, $\beta$ AC = 0.068 *			Total effect on intention: $\beta$ SC = -0.079 *, $\beta$ EUC = 0.081 *, $\beta$ UC = 0.112 **, $\beta$ TC = 0.203 *, $\beta$ AC = 0.227 **			
Goodness-of-fit indices: $\chi^2/df = 1.55$ ( $\chi^2 = 194.25$ , $df = 125$ , $p < .01$ ), $GFI = 0.911$ , $CFI = 0.939$ , $NFI = 0.921$ , $TLI = 0.924$ , $RMSEA = 0.037$ .			Goodness-of-fit indices: $\chi^2/df = 1.88$ ( $\chi^2 = 230.85$ , $df = 123$ , $p < .01$ ), $GFI = 0.903$ , $CFI = 0.921$ , $NFI = 0.907$ , $TLI = 0.902$ , $RMSEA = 0.028$ .			

Note: Perceived security of mobile (SM), traditional (ST), and cryptocurrency (SC) payments; Perceived ease of use of mobile (EUM), traditional (EUT), and cryptocurrency (EUC) payments; Perceived usefulness of mobile (UM), traditional (UT), and cryptocurrency (UC) payments; Trust in mobile (TM), traditional (TT), cryptocurrency (TC) payments; Attitude to mobile (AM), traditional (AT), and cryptocurrency (AC) payment; Intention to visit a destination where convenient mobile (ICM), only traditional (cash/credit card) (ICT), and convenient cryptocurrency (ICC) payment options are available.

\* $p < .05$ , \*\* $p < .01$ .

### 5.1. Theoretical implications

This study provides several important theoretical implications for the hospitality and tourism literature, specifically associated with payment methods. First, this study reveals dynamic perceptions of using different payment methods by using an extended TAM (with the additional variable of perceived security). While limited previous research has systematically explored consumers' perceptions of cryptocurrency payment in hospitality and tourism (Filimonau and Naumova, 2019; Lou and Li, 2017), this study provides empirical evidence of the significant effect of consumers' perceived ease of use and usefulness on behavioral intention regarding cryptocurrency payment. In addition, this study extends the TAM by integrating the perceived security of a payment method, which exerts an impact on trust and attitude depending on the payment method. Furthermore, existing studies indicate that attitudes have a significant positive impact on the behavioral intentions of mobile payment users (Liébana-Cabanillas et al., 2018; Lou et al., 2017). This study explores the factors that could influence Korean and Chinese travelers' attitudes toward adopting cryptocurrency payment methods based on the prospect of contemporary digital payments. It provides a theoretical basis for the extended TAM. Also, perceived security, perceived ease of use, perceived usefulness, trust, and attitude were found to be prominent drivers of behavioral intention.

Second, this study demonstrates significant differences between Chinese and Korean consumers' perceptions of payment methods and outcome variables by analyzing data samples from China and Korea separately. The results show that Chinese consumers' perceived security, ease of use, and usefulness of traditional payment methods significantly influence the development of positive attitudes toward these methods, while in cryptocurrency payment, security and ease of use are critical factors in the development of trust. In comparison, for Korean consumers, perceived usefulness and trust in traditional payment methods are likely to increase their attitude and behavioral intention, whereas perceived ease of use and trust in cryptocurrency payment have a significant contribution to positive attitude. Chinese and Korean consumers' concerns vary on different payment methods, which influence the building of trust or attitudes toward a specific payment method. This contrasts with previous studies that have centered on Chinese consumers' experiences with a particular payment method (Lou and Li, 2017; Park and Tussyadiah 2017; Wu and Tran, 2018) or on comparisons of operational payment procedures in China and Western countries (e.g., the United States and Finland) (Pan et al., 2019; Zhong, 2009). This study reveals the dynamics of Chinese and Korean consumers' perceptions of different payment methods in the hospitality and tourism industries. In turn, this provides a theoretical foundation for the subsequent exploration of cryptocurrency adoption behavior.

Lastly, this study untangles the underlying mechanisms of establishing Chinese and Korean consumers' behavioral intentions toward different payment methods. This study shows that in a mobile payment setting, Chinese consumers' perceived security and ease of use exert an indirect effect on attitude through trust. When it comes to traditional and cryptocurrency payment methods, Chinese consumers' perceived security, ease of use, and usefulness all show an indirect effect on behavioral intention through trust and attitude. Across the three different payment methods, Chinese consumers' perceived security, ease of use, and usefulness have an indirect effect on their behavioral intention through trust and attitude. For Korean consumers, the three antecedents' indirect effect on attitude through trust differs depending on payment methods. This study uncovers the different impacts of context (i.e., payment methods in China and Korea) on consumer perceptions in hospitality and tourism. Insights into consumers' reactions to different payment methods were also provided, adding more knowledge to previous studies that have shown positive and negative perceptions of specific payment methods among Asian consumers (Treiblmaier et al., 2020).

### 5.2. Practical implications

Based on the results, this study offers several meaningful suggestions for hospitality and tourism practitioners. First, hospitality and tourism companies need to carefully build their mobile payment systems with their technology-related collaborators by reinforcing the safety and convenience of payment applications. Previous studies have also emphasized the significance of perceived security, ease of use, and usefulness in mobile payment methods (Ozturk et al., 2016; Peng et al., 2012). This study further shows that when using mobile payment systems, perceived security and ease of use of the systems commonly appear to be critical for both Chinese and Korean consumers' attitudes to and trust in mobile payment methods. Currently, mobile payment methods are pervasive in our daily life, yet there is often a lack of systematic instruction and information about data security provided to consumers. Through cooperation with technicians and engineers, hospitality and tourism practitioners should develop or improve mobile payment systems that consumers can use effortlessly. In addition, hospitality and tourism practitioners need to offer clear demonstrations of how to use mobile payment methods by using a short video, or step-by-step footnotes in the payment process. Such efforts will contribute to increasing Chinese and Korean consumers' preference for and trust in mobile payment methods, which in turn results in increased intention to visit a destination that applies mobile payment methods.

Second, tourism professionals need to focus on different aspects of Chinese and Korean consumers, as implied by the contrasting results from this study. While the Chinese government has proposed a ban against cryptocurrencies, there has been no negative impact on the attitude towards cryptocurrencies. Rather, it has had a positive effect on the intention to use cryptocurrencies. In South Korea, where no specific restrictions are imposed on cryptocurrency transactions, the security of assets has a negative effect on attitudes. As found in this study, Chinese consumers' trust is built on perceived security and ease of use, while Korean consumers' attitude is formed by ease of use and trust in cryptocurrency payment methods. Although blockchain technology (e.g., bitcoin) has been adopted in some industries, in daily transactions, traditional or mobile payment methods seem to be more often used and familiar to consumers in general. To strengthen Chinese consumers' trust and Korean consumers' attitude toward cryptocurrency payment, hospitality and tourism marketers should put effort into providing information about how cryptocurrency payments operate and how they can be easily used by consumers, by using online postings on their social media platforms and face-to-face explanations by employees. In addition, industry professionals can also diversify product or service options (Hautala, 2021), so that consumers can experiment with cryptocurrency payment methods without huge concerns about their money being stolen or their privacy being invaded. Cryptocurrency payment adoption in tourism and hospitality is built on the demand for a new high-tech payment method that is more straightforward. Thus, as mediators in blockchain based transactions, cryptocurrencies enable transfers of value without centralized institutions. Achieving such an approach requires managers in tourism and hospitality industry to have a deeper understanding of cryptocurrencies in order to encourage cryptocurrency payments to be widely used by consumers in tourism activities.

### 5.3. Limitations and suggestions for future research

This study has several limitations. First, although the translation of the online survey was thoroughly checked, there is a possibility of having introduced errors in the translated versions. Second, as this study compared Chinese and Korean consumers in hospitality and tourism, which were located in Asia, the results of this study may differ from those obtained when measuring the perceptions of consumers from Western countries. In this respect, researchers could take a quantitative approach and replicate the conceptual model of this study in different cultural contexts. Third, depending on the accessibility and usability of

cryptocurrency payment methods, the way consumers view them may vary. As these payment methods have only recently emerged, governments and banks are urged to establish relevant regulations (Drakopoulos et al., 2021). In this sense, the digital currencies to be used in payment would be another intriguing topic for future research. The theoretical model proposed in this study can be used as a foundational framework to examine the potential factors that can influence hospitality and tourism consumers' behavioral intention toward a payment method. Lastly, control variables were not considered in the data analysis process in this study, such as demographics (e.g., age and gender) and previous experience, which are considered as control variables in payment-related studies (e.g., Nuryyev et al., 2020; Treiblmaier et al., 2020).

## 6. Conclusion

This research examines both hotel and travel consumers' perceptions and reactions to different payment methods (mobile, traditional and cryptocurrency) by using the TAM, comparing Chinese and Korean consumers' perspectives. We find that both Chinese and Korean consumers focus on the security and ease of use aspects for mobile payment. The functional performance of traditional payments and ease of use (speed of transactions) of payments have a significant effect on consumers' trust levels in both countries. In addition, perceptions of cryptocurrency payment yielded unexpected results in this study, i.e., unlike Chinese consumers who focus on security, highly secure cryptocurrency payment methods did not gain the trust of Korean consumers. This result indicates that there are differences between Chinese and Korean consumers in terms of their attitudes and philosophies, due to different social environments. The cultural background of consumers is also taken into account. Therefore, we expect that the dynamics of the perceptions of different payment methods revealed in this study will contribute to further research on this aspect of hospitality and tourism. A theoretical basis is also provided for appropriate strategies and practices that professionals in the hospitality and tourism industry should implement for the different payment methods.

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