

Reputation, Information Quality and Intended Use of Credit Card The Mediating Role of Perceived Risk

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ABSTRACT: This study aims to clarify the determinants of perceived risk and its impact on Vietnamese consumers' intention to use credit cards. The scholars reveal consumers perceive about credit card-related uncertainty in different way, but they do not mention the reasons for this difference. Therefore, this study examines the factors that influence the perceived risk of credit cards based on data collected from 334 customers who receive salaries through bank accounts. Research results show that the provider's reputation and supplied quality information are two important effects on risk perception about credit cards. The research results also confirm the negative influence of perceived risk on the intention to use credit cards. Based on the research results, banks strengthen propaganda, training, and guidance on credit card use, contributing to improving consumers' assessment of risk, then increasing their intention to use credit cards.

KEYWORD: Risk perception, Credit card, Reputation, Information quality

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I. INTRODUCTION

In recent years, with the strong development of information and telecommunication technology, credit cards have become a popular means of electronic payment in Viet Nam. A credit card is a type of payment card with a "use now, pay later" functionality, meaning that the consumer gets an amount of money in advance by the bank to use, and then repay it in full and on time (Yee et al., 2007). With credit cards, consumers can shop without using cash, even when there is no money in the account (Laudon & Traver, 2021).

Along with the benefits brought by technology, modern society contains many unpredictable issues that can only be limited but cannot be completely eliminated. However, risks will not affect consumers' intentions when they do not perceive them (Humbani, 2021). Even when consumers perceive risk, each individual's level of risk perception is different (Widyanto et al., 2022). This difference stems from their perception of the supplier and the environment in which the transaction takes place (Jadil et al., 2022; Miao et al., 2022; Tran & Nguyen, 2022). Meanwhile, scholars do not mention the antecedents of perceived risk in studies on the intention to use credit cards when they assume that perceived risk is an exogenous variable in the research model (Aida, 2021; Phan et al., 2019; Trinh et al., 2020).

Based on the above issues, this study aims to identify factors that influence perceived risk and its role in the intention to use credit cards. Research results show Vietnamese consumers' concerns about potential losses related to credit cards. The study provides evidence on the causes of differences in risk perception and its impact on Vietnamese consumers' intention to use credit cards. From there, the author offers some recommendations to reduce concerns about credit card-related losses, with contributing to increasing consumers' intention to use credit cards. With this goal, the next parts of the study include: literature review with the development of hypotheses and research model; research methodology with scale development, data and analytical methods; data analysis's results; discussions; conclusions and limitations.

II. LITERATURE REVIEW

II.1. Risk perception

Bauer (1960) proposed the Theory of perceived risk (TPR) with the definition of perceived risk in consumer behavior as perceptions of uncertainty and unfavourably compared to consumer expectations. After that, many scholars continued to clarify this concept in different research fields (Stone & Gronhaug, 1993). Businesses that want to be successful must determine the consequences of perceived risk components, with

promulgating policies to minimize customers' perceived risk of products/services provided by the business (Korgaonkar, 1982).

For traditional purchases, consumers' perceived risk includes financial, operational, psychological, physical, social, and temporal components (Stone & Mason, 1995). As the Internet develops with e-commerce, consumers may ignore physical losses. Instead, they are especially interested in the ability to control personal information and such as the safety level of online trading systems.

Research on perceived risk and consumer behavior of customers focuses on the purchased item itself and the purchasing method. Derbaix (1983) argue that there is no difference in perceived risk for the same product types. Meanwhile, complex products with high economic value are more risky than other products (Mitchell, 1999). Many studies mentioned digital products (computer software, e-books, electronic music discs, etc.), electronic services (online shopping, e-payment, e-banking, etc.), in which perceived risk plays a role as a decisive factor in consumers' intention to use (Humbani, 2021). Not only that, Pham & Ho (2015) assert that electronic services are perceived to be at a higher level of risk than electronic products because of their intangible nature. Empirical evidence shows that perceived risk with the above perceived components has a negative influence on the intention to use e-commerce, e-payment and e-banking (Namahoot & Jantasri, 2023; Phan et al., 2019; Trinh et al., 2020; Zhu et al., 2022).

Perceived risk for credit cards is a consumer's subjective assessment of losses that may arise during credit card use (Varaprasad et al., 2013; Trinh et al., 2020). Consumer damage from operational and system failures is seldom and quickly overcome. Meanwhile, credit card fraud incidents are very serious, affecting all parties involved in credit card payment activities (Miyazaki & Fernandez, 2001). Therefore, the lack of payment system security is of particular concern to consumers when using credit cards (Liebermann & Staskhevsky, 2002). This is also correct with the ability to control personal information. As a result, consumers may refuse to use credit cards when they do not feel secure about this payment instrument (Wang & Lin, 2019; Zhao et al., 2019). Thus, perceived risk can affect the intention to use credit cards with the following hypothesis:

Hypothesis H1: Perceived risk has a negative impact on the intention to use credit cards.

Perceived risk only exists in people's minds (Windschitl & Wells, 1996). Consumers are influenced by the risks they perceive, whether they actually exist or not (Humbani, 2021). However, each individual has a different perception of the uncertainty and potential losses associated with a specific purchase situation (Phan et al., 2019; Trinh et al., 2020; Zhu et al., 2022). The cause of this difference is only mentioned in a few studies on perceived risk in e-commerce (Jadil et al., 2022; Miao et al., 2022; Tran & Nguyen, 2022). Accordingly, consumers' subjective assessment of potential losses in e-commerce is based on the seller's reputation, size, information.

II.2. Seller's reputation and consumer's perceived risk

The buyer's perception of the seller's reputation is the consumer's subjective assessment of the seller's competence, honesty, concern, and goodwill toward the buyer (Doney & Cannon, 1997). Buyers always have a perception about the seller's reputation, and they form this perception on the information they collect from friends, relatives, and colleagues (Lopes et al., 2020). A good reputation is a guarantee of quality and safety for products sold, especially where the buyer has no knowledge or experience in dealing with the seller (Harris et al., 2016). Buyers feel secure when shopping online with sellers who have a history of fulfilling their responsibilities and obligations to customers (Lopes et al., 2020; Santos et al., 2023; Tran & Nguyen, 2022).

Consumers' perceptions of the reputation of suppliers, which in this study are banks and credit card acceptors, reflect consumers' subjective assessments of honesty and integrity. Consumers feel secure when using credit cards issued by well-known banks instead of paying attention to Visa or Master credit card brands, even though these are the two leading card brands in the world (Ahmed et al., 2009; Kim & Lennon, 2013). To build an excellent reputation, banks, as issuers and payment acceptance units, must ensure quality and safety for credit card payment transactions (Harris et al., 2016). Consumers appreciate the commitment to quality and the attention of banks and credit card acceptance units in guiding and supporting customers in making transactions and handling external problems (Nguyen et al., 2022). As a result, consumers may fear the losses that may arise when purchasing from a supplier with a poor reputation (Ghotabadi et al., 2016; Santos et al., 2023; Tran & Nguyen, 2022). Thus, the relationship between seller's reputation and consumer's perceived risk for credit cards is follows:

Hypothesis H2: Supplier reputation has a negative impact on perceived risk of credit cards.

II.3. Seller's size and consumer's perceived risk

The buyer's perception of the seller's size is the consumer's subjective assessment of the seller's market share compared to the market (Jarvenpaa et al., 2000). The size of the seller presents its ability to fulfill commitments and handle problems that may arise during the transaction (Lim & Mali, 2018). From there, consumers feel they can avoid from risks or potential losses when shopping from large-scale retailers. Similarly, Lin & Ho (2019), Jadir et al. (2022) believe that large businesses have full capacity to provide consumers with expected products and support.

Consumers' perception of the supplier's size, in this study banks and credit card acceptors, reflects the consumer's subjective assessment of the supplier's market share (Kim & Park, 2013). Size is determined according to consumers' perception, not according to the actual size of the supplier with two criteria: quantity of goods sold and sales volume (Lin & Ho, 2019; Winsen et al., 2016). This is completely suitable for the credit card market, when consumers do not easily access measurement indicators about the number of cards issued by banks and card payment sales at payment acceptance units. Instead, consumers can evaluate the scale of the bank or payment acceptance unit based on the network of transaction points, the number of products and services provided by these organizations to the market and the number of products and services provided by these organizations to the market. These indicators are publicly available on their website. As a result, consumers feel secure when dealing with large-scale suppliers (Lim & Mali, 2018; Jadir et al., 2022). On that basis, we should consider the relationship between the supplier scale and perceived risk for credit cards with the following hypothesis:

Hypothesis H3: The size of the supplier has a negative impact on the perceived risk of credit cards.

II.4. Seller's information quality and consumer's perceived risk

The buyer's perception of the quality of information provided by the seller is the buyer's level of confidence in the seller's honesty in disclosing information about products, services and other activities related to the seller (Pavlou et al., 2007). In the current world, information becomes very diverse, rich, and even contradictory, making viewers doubt the quality of the product (Miranda & Saunders, 2003). As a result, consumers feel uncertain during data exchange on the Internet when service providers, with advantages in resources and technology, collect some important information but do not make it public (Pavlou et al., 2007). Nicolaou et al. (2013), Yang et al. (2014) believe that capturing accurate, complete and timely information will help consumers worry less about damages during the use of new technology.

The consumer's perception of the quality of information published by the supplier is the consumer's level of confidence in the supplier's honesty in disclosing information about the credit card and its services. Information plays an important role for consumers when making behavioral decisions, especially where they do not have knowledge or experience with that behavior (Li & Yuan, 2018). Quality information is a legitimate requirement of consumers for suppliers (Sharma & Sharma, 2019). However, consumers in some countries around the world always receive incomplete, inaccurate, and inappropriate information about credit cards (Soll et al., 2013; Khalid et al., 2013). The studies of Li & Yuan (2018), Miao et al. (2022) pointed out that customers feel harmed by poor quality information provided by sellers when making online purchases. Therefore, the relationship between the quality of information provided by the seller and the perceived risk of credit cards should be considered with the following hypothesis:

Hypothesis H4: Perceived quality of information published by the supplier has a negative impact on the perceived risk of credit cards.

In summary, e-society contains many undesirable risks. Consumers try to adjust their behaviors based on their perception of risks, which are determined by seller's reputation, size, and information quality. These three constructs play an important role in risk perception on credit card as proposed research model (Figure 1):

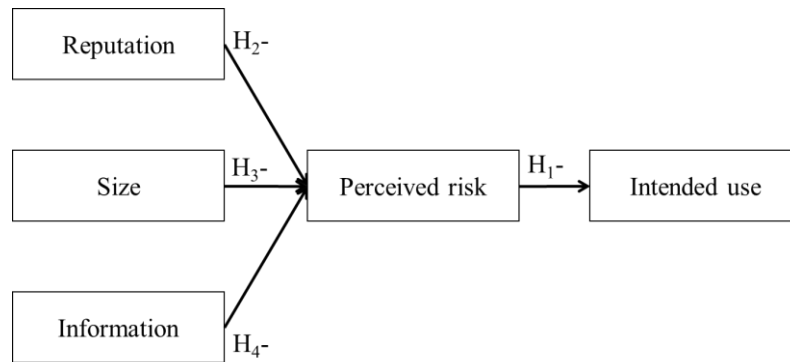


Figure 1: Proposed result model

III. RESEARCH METHODOLOGY

III.1. Measurement development

The study of measuring the intention to use credit cards is a quantitative study of a socio-economic phenomenon. This paper has built theoretical concepts of variables and ways to measure variables in the model. After developing a Vietnamese version corresponding to the English version of the scales inherited from previous studies (Tan et al., 2014; Kim & Lennon, 2013; Kim & Park, 2013; Nicolaou et al., 2013), the author consulted 5 banking experts operating in the credit card industry to ensure that the scales were consistent. There are some adjustments and additions to the content and structure of the measurement based on feedback from experts. The scales, after being adjusted, continued to be tested on 30 customers who have experience using credit cards. They provide some minor changes to complete the measurement with 21 questions focusing on components in the proposed theoretical model, including: Intention to use (4 variables), reputation (3 variables), size (3 variables), information quality (4 variables), and perceived risk (7 variables). The study used a 5-point Likert scale with 1-strongly disagree and 5-strongly agree.

III.2. Research data

This study conducted an online survey of Vietnamese consumers who receive salaries via bank accounts. These people have great potential for applying for and using credit cards. They also have experience in banking services, especially using bank cards to pay for daily consumption. They may swallow an invitation to apply for a new credit card or may use it when they already have at least one.

The online survey results received 426 responses through the convenient sampling. Data were checked and cleaned with the support of statistical processing software SPSS 20 and AMOS 20. Results 334 out of 426 answer sheets had complete information. With 21 observed variables, the required sample size ranges from 63 to 105 (Cattel, 1978). Therefore, data from 334 answer sheets is suitable for testing the hypotheses in the proposed model.

III.3. Analytic methods

Based on the collected data, the author performed Cronbach's Alpha analysis to test the reliability of the scale by determining the ability of observed variables to measure concepts in the model (Bland & Altman, 1997). The measurement is reliable and usable when the Cronbach's Alpha coefficient has a value of 0.6 or higher (Peterson, 1994). The contribution of each observed variable to each concept in the model is expressed through the variable-total correlation coefficient (Nunnally & Bernstein, 1994). Observed variables with variable-total correlation coefficients less than 0.3 are inappropriate, so they should be out of the study (Hair et al., 2014).

Next, the author performed exploratory factor analysis (EFA) to look for associations between observed variables used in measuring latent factors (Fabrigar et al., 1999). On that basis, observed variables with high correlation levels appear in the same factor, corresponding to the concept in the proposed research model (Byrne, 2010). According to Hair et al. (2014), EFA analysis is only suitable for research data when the KMO coefficient (Kaiser-Meyer-Olkin coefficient) is between 0.5 and 1.0, combined with a significant Barlett test. statistics (Sig. < 0.05). Besides, an observed variable is usable when the Factor Loading Coefficient is 0.5 or higher (Hair et al., 2014). The results of EFA factor analysis are acceptable, the latent factors are identified and measured through observed variables, when the latent factors have explained over 50% of the variation of the data, This explanatory power is determined by the total variance extracted of the factors (Anderson & Gerbing, 1988). After that, the authors perform the confirmatory factor analysis method CFA (Confirmatory Factor Analysis) to evaluate the measurement model from the results of the EFA. A fit of the model with market information is determined by fitting indicators, including CMIN/df, CFI index, TLI index, and the RMSEA

index. The model is suitable for market data when $TLI, CFI \geq 0.9$, $CMIN/df \leq 3.0$, $RMSEA \leq 0.08$ (McDonald & Ho, 2002). The concepts identified by the CFA are suitable for structural equation model analysis (SEM) when they meet the reliability standards of the scale (Schumacker & Lomax, 2006), unidimensionality and discriminant validity (Steenkamp & Trijp, 1991), and convergent validity (Anderson & Gerbing, 1988). Finally, the authors use the SEM to test the hypotheses in the proposed research model with complex and flexible relationships between research concepts (Byrne, 2010). Test results using the SEM are only suitable for market data when $TLI, CFI \text{ index} \geq 0.9$, $CMIN/df \leq 3.0$, $RMSEA \leq 0.08$ (McDonald & Ho, 2002).

IV. RESULTS

IV.1. Descriptive statistics

Table I provides detailed information on the demographic characteristics of the study sample, including gender, marital status, occupation, age, education level, place of residence, and fixed income of the respondents. Statistical results show that the most servants are male (52.1%) and married (61.4%) compared to female (47.9%) and single (38.6%). Almost respondents are between 25 and 49 years old (82.5%), with an education level of university or higher (91.2%). Their income is high when the majority have monthly salaries from 10 million to 32 million (67%).

Table I: Descriptive statistics

Variable	Frequency	Percent
Gender		
Female	160	47.9
Male	174	52.1
Marital status		
Single	129	38.6
Married	205	61.4
Age		
Under 25	13	3.9
From 25 to 49	276	82.5
Above 49	45	13.6
Earnings (monthly)		
Under 500\$	74	22.1
From 500\$ to 900\$	149	44.7
From 900\$ to 1600\$	74	22.3
From 1600\$ to 2600\$	30	8.9
Above 2600\$	7	2.0
Education level		
High school or lower	3	0.8
College	27	8.0
University	143	42.7
Post-graduated	161	48.4

IV.2. Factor analyses

The study performs the EFA by extracting Principal axis factoring with Promax rotation for a combination of 17 observed variables. The Bartlett test results are $KMO = 0.873 > 0.5$ with significance level $Sig. = 0.000$. Thus, the hypothesis of uniformity of the overall correlation matrix is not reasonable, the variables in the study are all correlated and satisfy the conditions in factor analysis. Four factors are from the observed variables with loading levels up to $69.430\% > 50\%$ (Anderson & Gerbing, 1988) requirements. In particular, observed variables have factor loading coefficients higher than 0.5 and appear in only one factor (Hair & ctg., 2014).

Performing EFA factor analysis through extracting Principal axis factoring with Promax rotation for the combination of 4 observed variables for the credit card usage intention scale. The results received a KMO coefficient = $0.864 > 0.5$ and significance level $Sig. = 0.000$ in the Bartlett test. Thus, the hypothesis of uniformity of the overall correlation matrix is not reasonable, the variables in the study are all correlated and satisfy the conditions in factor analysis. The observed variables combined one factor with a loading level of up to $81.424\% > 50\%$ according to the requirements of Anderson & Gerbing (1988). In particular, the observed variables have factor loadings greater than 0.5 (Hair et al., 2014) and only appear in one factor. So, the results of the EFA identify 5 concepts measured by 21 observed variables. The extracted factors are all suitable as proposed, they continue to be tested by confirmatory factor analysis CFA.

This study conducts the CFA with the concepts in the proposed research model from the measurement providing in the previous EFA. The resultsshow that the measurement model is consistent with market data with the indexes $CMIN/df = 2.022$; $TLI = 0.916$; $CFI = 0.925$; $RMSEA = 0.047$ (McDonald & Ho, 2002). The measurement model is determined to be reliable because the observed variables have a Correlated item-total coefficient greater than 0.6 (Table II), and the Cronbach's Alpha coefficient of the scales are all greater than 0.7

(Schumacker & Lomax, 2006). The model also achieved convergent validity because the standardized weights of the scales were all high (>0.5) and were statistically significant (Gerbring & Anderson, 1988). Next, the average value of the variance extracted AVE of the latent factors is greater than 0.5 as well as greater than the square of their correlation coefficient, so each factor is a unidimensional and distinct construct (Steenkamp & Trijp, 1991). Thus, the results of the CFA confirm that 21 observed variables combine 5 factors, and the measurement model is consistent with market data, ensuring convergence, unidirectionality, and discrimination.

Table II: The results of EFA and CFA

Constructs	EFA		Reliability		CFA	
	Loading coefficients	Eigenvalues	Correlated item-total	Cronbach's α	Loading coefficients	AVE
Intended use of credit card (IU)		3.440		0.945		0.815
I wish to use a credit card	.901		.868		.905	
I use credit cards as soon as I can	.934		.896		.934	
I will often use credit cards	.917		.882		.914	
I encourage my friends to use credit cards	.856		.830		.855	
Reputation (REP)		1.039		0.778		0.556
Reputable and trustworthy	.709		.637		.780	
Have a good customer support policy	.758		.637		.752	
Experienced in handling complaints	.700		.606		.702	
Size (SIZE)		1.519		0.854		0.703
Has an extensive trading network	.695		.679		.753	
Has many products and services	.889		.768		.873	
Has well-known products and services	.844		.732		.819	
Information quality (IQ)		3.316		0.929		0.768
Always provide complete information	.823		.821		.864	
Always provide timely information	.915		.870		.914	
Always provide accurate information	.861		.827		.861	
Always provide useful information	.792		.823		.866	
Perceived risk (PR)		10.512		0.927		0.670
Credit cards are not secured properly	.848		.775		.781	
I will lose control of my personal details	.809		.756		.755	
Bill cannot be paid by credit cards	.813		.788		.786	
It will cost me money to use credit card	.775		.773		.825	
It takes time to use credit cards	.884		.827		.893	
I look foolish to others by using credit cards	.834		.804		.879	
I feel depressed when using credit cards	.798		.765		.745	

IV.3. Structural equation model

Table III presents detailed results of the SEM analysis. In particular, perceived risk explains 14.6% of the variation in consumers' intention to use credit cards with an influence level of -0.382, hypothesis H1 is accepted. Besides, the seller's reputation and the quality of information provided by the seller are important antecedents of perceived credit card risk with influence levels of -0.225, -0.187, respectively. These factors explain up to 50.7% of the variation in consumers' perceived risk towards credit cards. Hypotheses H2, H4 are accepted. However, the results decline the hypothesis H2, so there is no evidence for the relationship between seller's size and perceived risk about credit card.

Table III: The results of the SEM analysis

Hypothesis	Relationship	Coefficient	S.E.	C.R.	P.	Result
H1	PR → IU	-.382	.088	-6.019	***	Accepted
H2	REP → PR	-.251	.074	-2.881	.004	Accepted
H3	SIZE → PR	.092	.042	1.593	.111	Declined
H4	IQ → PR	-.128	.046	-1.801	.072	Accepted

In summary, the results of the SEM analysis confirm the suitability of the proposed model for data collected from the market. Perceived risk is determined to play a decisive role in consumers’ intention to use credit cards. Perceived risk originates from the seller’s reputation and information quality.

V. DISCUSSION

The EFA analysis through extraction of Principal axis factoring with Promax rotation to evaluate the observed variables in the model. The EFA results show that 17 observed variables combine 4 latent factors, as in the proposed research model. This extraction can explain 69.430% of the variation in data. Similarly, 4 observed variables measuring intention to use credit cards provide 1 factor with a loading level of up to 81.424%. The KMO values corresponding to these two analyzes are 0.873 and 0.864, respectively, with the same significance level $p=0.000$. These results confirm that the EFA analysis is suitable for research data. Thus, the concepts in the proposed model are determined, they continue to be tested by the CFA analysis.

Next, this study conducts the CFA analysis method to evaluate the measurement model of the concepts from the EFA. The results show the explanatory ability of observed variables for latent factors in the theoretical model, with indicators showing the fit between the model and market data (CMIN/df = 2.022; TLI = 0.916; CFI = 0.925; RMSEA = 0.047). CFA analysis results also show that observed variables have correlated item-total coefficient greater than 0.6; The standardized weights of the scales are all greater than 0.5 and are statistically significant; The average value of the variance extracted AVE of the latent factors is greater than 0.5 and greater than the square of their correlation coefficient. Thus, the measurement model of latent factors is consistent with market data, ensuring convergence, unidirectionality, discrimination, and reliability. Therefore, this measurement model is suitable for SEM structural equation modeling analysis.

Finally, SEM structural equation modeling technique is used to test the hypotheses in the research model. SEM analysis results show that this method is suitable for market data (CMIN/df = 2.166; TLI = 0.904; CFI = 0.910; RMSEA = 0.050) and, therefore, the structural model shows a multiplicative relationship. The results between the latent variables are reliable. The results of testing the research hypotheses are as follows:

Hypothesis H1 is accepted and confirms: Perceived risk has a negative impact on the intention to use credit cards of Vietnamese consumers.

SEM analysis results have shown that perceived risk (PR) has a negative influence on the intention to use credit cards of Vietnamese consumers with a significance level of $p = 0.000$ and standardized regression coefficient $\beta = -0.313$. This result is consistent with the studies of Trinh et al. (2020), Wang & Lin (2019), Zhao et al. (2019) when consumers may reduce their intention to use credit cards when their perception of losses related to this means of payment may increase.

Hypothesis H2 is accepted: Perceived reputation of the supplier has a negative impact on the perceived risk of credit cards of Vietnamese consumers.

The negative impact of perceived reputation on perceived risk ($\beta = -0.251, p = 0.004$) confirms that when someone appreciates a supplier’s reputation, they are less concerned about other factors. Potential loss when using that supplier’s products and services. This finding received support from Ghotabadi et al. (2016), Santos et al. (2023), Tran & Nguyen (2022) when consumers feel secure when making transactions with businesses with excellent reputations in the market. Similarly, Lopes et al. (2020) agree that consumers perceive certainty when dealing with suppliers that have a history of fully fulfilling their commitments to customers. In addition, Harris et al. (2016), Nguyen et al. (2022) also suggest that consumers are less concerned about uncertainty when dealing with suppliers that have a good reputation for compliance with contractual commitments, empathy, and supportive actions toward customers.

Hypothesis H3 is not accepted: There is no evidence of the relationship between perceived supplier scale and perceived credit card risk of Vietnamese consumers.

The statistically insignificant relationship between perceived size and perceived risk ($\beta= 0.092$, $p=0.111$) shows that consumers do not care about the size of the suppliers when considering the extent of losses that may arise from using credit cards as claimed by some scholars (Lim & Mali, 2018; Lin & Ho, 2019; Jadil et al., 2022; Winsen et al., 2016). This may stem from the fact that some consumers are concerned about the possibility that banks cannot manage their credit card business well in an increasing number of credit cards being issued, as well as the payment and acceptance network. Card payments are expanding continuously. Weakness in management leads to ineffective card payment systems, wasting customers' money, time and effort, and putting customers at risk of unsafe transactions, and violation of privacy. Some people believe that large-scale banks have enough capacity and resources to ensure the system operates stably and continuously, resolving incidents or complaints promptly, quickly and accurately and then creating certainty in the customer's perception. Meanwhile, small-scale investment banks focus on a few areas with advantages and great development potential; Therefore, they can meet the needs and desires of consumers with quality products and services, secure transaction processes, and the highest level of privacy assurance. There is no basis for concluding that perceived size affects the perceived risk of credit cards.

Hypothesis H4 is accepted: Perceived quality of information published by the supplier has a negative impact on the overall perceived risk of credit cards of Vietnamese consumers.

The negative impact of perceived information quality on perceived risk ($\beta= -0.128$, $p=0.072$) confirms that when someone has faith in the supplier's honesty in reporting publish information in the media, they pay little attention to potential losses when using that supplier's products and services. This finding received support from Pavlou et al. (2007), Yang et al. (2014) when these scholars affirm that accurate, complete and timely information will help consumers worry less about damages during the use of new technology. Besides, with quality information, consumers can shop in a controlled manner instead of creating conditions for suppliers to profit from negligence cause to asymmetric information (Sharma & Sharma, 2019). Similarly, Li & Yuan (2018), Miao et al. (2022) demonstrated that once consumers satisfy with information, they may appreciate certainty, and then accept and use new technology.

In summary, this study confirms the important influence of perceived risk on consumers' intention to use credit cards. In particular, the perceived risk of credit cards is not a single structure but a synthesis of many component perceptions. Each individual's perceived risk is different, depending on the buyer's characteristics, the seller's characteristics and the assurance of the trading environment. The model measuring the concepts was determined to be reliable and consistent with market data, and most of the research hypotheses were accepted.

VI. CONCLUSION

The study proposes a model of antecedents of multidimensional perceived risk in the cause-and-effect relationship with Vietnamese consumers' intention to use credit cards. The concepts in the proposed model are determined by 21 observed variables. Some of them are from previous studies on the intention to use electronic services, others proposed by the author based on their functions. Factor analysis results show that 21 observed variables extract into 5 concepts in the proposed research model. The measurement model of the above mentioned latent factors is determined to be consistent with market data, ensuring convergence, unidirectionality, discrimination and reliability. Finally, SEM analysis shows that perceived risk has a negative impact on Vietnamese consumers' intention to use credit cards, which depends on the service provider's reputation and their provided information quality.

Despite identifying the antecedents of multifaceted perceived risk of credit cards and its negative influence on credit card usage intention, this study still has some limitations. First, this study uses a relatively small sample set compared to the size of the Vietnamese credit card market. Next, analytical data is from an online survey with survey results depending mainly on the subjective feelings of respondents at the time of taking the questionnaire. Finally, this study does not mention the moderating role of demographic factors on the causal relationship between perceived risk and intention to use credit cards. Therefore, further research related to this topic needs to focus on clarifying the influence of perceived risk on the intention to use credit cards according to each consumer group with different demographic characteristics

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