

The influence of consumer trust on the drivers of electronic wallet transactions

Ariana Valeria Vera-Acevedo* , María Fernanda Iparraguirre-Piedra 

Universidad de Lima (Peru)

*Corresponding author: 20202226@aloe.ulima.edu.pe
20201059@aloe.ulima.edu.pe

Received December, 2024

Accepted April, 2025

Abstract

Purpose: This study aims to analyze the relationship between consumer trust and the transactions carried out involving Fintech apps, such as electronic wallets. The context of this paper is the use of these applications in Peru, where the focus is on studying variables such as perceived quality and user experience as predictors, perceived risk as a moderator and electronic word-of-mouth as a dependent variable of consumer trust.

Design/methodology/approach: To obtain the required data, an online survey was distributed to 386 individuals between the ages of 18 and 40 who reside in the Lima Metropolitan area and have used e-wallets in the last 3 months. To calculate the sample size, the simple random sampling technique was used and a descriptive analysis of the data was carried out using JASP. Additionally, SmartPLS was used to measure validity, consistency, and hypothesis testing.

Findings: The model shows acceptable internal consistency; furthermore, it has acceptable convergent validity and most of the items do not demonstrate collinearity. In general terms, it has acceptable discriminant validity. Hypotheses 1, 2, and 4 are accepted, and are related to perceived quality, user experience, and electronic word-of-mouth, respectively.

Originality/value: The contribution made by this research is by addressing the knowledge gap caused by the lack of studies on consumer trust in Fintech applications in Peru. The importance of these topics lies in the accelerated evolution and widespread use of digital wallets, and thus the study of these variables is relevant for the contribution of knowledge in the field and the reinforcement of their use.

Keywords: Consumer trust, Electronic wallets, Technological change, Emerging countries

Jel Codes: M31, E42, L81, O33

To cite this article:

Vera-Acevedo, A.V., & Iparraguirre-Piedra, M.F. (2025). The influence of consumer trust on the drivers of electronic wallet transactions. *Intangible Capital*, 21(3), 427-449. <https://doi.org/10.3926/ic.3195>

1. Introduction

In recent decades, “Consumer behavior” has become a key topic for the analysis of consumer conduct (Ieiri, Yamaki & Hishiyama, 2024), in addition to the evolution of e-commerce and new shopping trends (Larios,

2020). This term is crucial for understanding how to generate strategies with a customer-centered focus (Ong, German, Almario, Vistan, Galang, Dantis, et al., 2024; Lisun, Semenova, Kudyrko, Kovalchuk & Semchuk, 2024). Accordingly, sparked by the evolution of e-commerce, consumer behavior has undergone changes worthy of study (Elshaer, Alrawad, Lutfi & Azazz, 2024; Al-Kairy, Shuhaiber, Al-Khatib & Alrabee, 2023; Hartanto, Mani, Jati, Josephine & Hidayat, 2022).

Specifically, “Trust” plays an important role in digital platform interactions (Teo & Liu, 2007), thus representing a relevant line of study on consumers (Khamitov, Rajavi, Huang & Hong, 2024; Wu & Huang, 2023). Trust is defined as the notion that the provider of a product or service will offer a subsequent benefit with the said transaction (McKnight & Chervany, 2001). It should be stressed that a robust theoretical base has been identified for the factors that motivate or undermine it; however, the opportunity still exists to study emerging countries, taking into account cultural or regional factors (Sánchez-Alzate & Montoya, 2017).

Based on the aforementioned term, the “Consumer trust” variable will be approached as a key factor in purchasing decisions (Petrova & Mayia, 2020). Through the contribution of authors such as Salam, Iyer, Palvia, and Singh (2005), Rousseau, Sitkin, Burt, and Camerer (1998), we have managed to conceptualize the variable. Thus this term is defined as the security that the provider conveys by delivering what it promises (Sirdeshmukh, Singh & Sabol, 2018). This has been investigated in specific contexts, such as tourism (Maia, Lunardi, Dolci & Añaña, 2022), the banking sector (van Zeeland & Pierson, 2024; Martínez-Navalón, Fernández-Fernández & Alberto, 2023), retail (Cuesta-Valiño, Gutiérrez-Rodríguez, García-Henche & Núñez-Barriopedro, 2024), and the food sector (Bai, Zhang, Han & Yu, 2023), among others.

On the other hand, a variety of articles that focus on the relationship between trust and e-commerce has been identified (Wu & Huang, 2023; Li, Ma, Zhou & Yuan, 2023; Kurniadi & Rana, 2023; To, Cao, Nguyen, Troung & Nguyen, 2023; Strzelecki & Rizun, 2022; Falahat, Lee, Foo & Chia, 2019; Tran, Tran, Nguyen & Favia, 2014). They provide evidence of certain predictors, such as perceived quality (Escobar-Rodríguez & Carvajal-Trujillo, 2014; Palvia, 2009), user experience (Corbitt, Thanasankit & Yi, 2003; Nielsen, Molich, Snyder & Farrell, 2000; Alben, 1996), perceived risk (Sharma & Kurien, 2017; Xu, Chong, Krilavicius & Man, 2015; Bianchi & Andrews, 2012) and electronic word-of-mouth (Hernández, 2023; Goyette, Ricard, Bergeron & Marticotte, 2010; Hennig-Thurau, Gwinner, Walsh & Gremler, 2004; Ismagilova, Rana, Slade & Dwivedi, 2021). However, few articles have been identified that study Fintech applications in emerging or Latin American countries (Oliveira, Alhinho, Rita & Dhillon, 2017). The contribution of this study is therefore based on an innovative conceptual model that offers a new perspective through new variables and connections in an unexplored geographical context. These differences make this research a unique contribution to the literature.

The current context in Peru shows a clear trend in the use of digital wallets (Ramos-Zaga, 2022), which experienced a 20 % growth in users between 2021 and 2023, while “heavy users” grew by 36 % (Credicorp, 2023b). According to Agur, Martinez, and Rochon (2020), this expansion was accentuated during the pandemic, with an average of 15.8 million transactions being recorded each day in 2024 (Instituto Peruano de Economía, 2024). However, a certain percentage of the Peruvian population has no access to banking services or financial education; therefore, digital wallets have enabled them to carry out transactions without being associated with any bank. To meet this need, various institutions have launched applications, including Yape from the BCP; Tunki, which is associated with Interbank; Agora Pay, which is linked to VISA; and Plin, which is managed by BBVA, Interbank, and Scotiabank. The main functions are payments and collections for services or products, promotions, and money withdrawals (Gobierno del Perú, 2024).

The purpose of this research is to verify the proposed causal model that implies different predictors of trust. For this reason, the focus is on the use of digital wallets in the Lima Metropolitan area; the target population consists of users between 18 and 40 years of age, in order to close the identified gap. Today it is essential for companies to develop a bond of trust with this application to generate loyalty and continuity, achieving a more effective approach (Martínez-Navalón et al., 2023).

With this approach in mind, the following research questions are proposed: In the proposed model, what variables have the greatest effect on building consumer trust in the digital wallet sector?; Can the perceived risk be considered a moderating variable in the relationship between user experience and consumer trust?; Does consumer trust represent

an influential factor in the construction of electronic word-of-mouth?; What limitations are identified to the study, which is conducted in an emerging country?; and What research opportunities might arise from the present article?

Finally, the article includes a “Literature review” section that considers the research on factors that have an influence on consumer trust and play a role in the formulation of hypotheses. Following this, the “Methodology” section details the data extraction method, the research tool, and the information processing. Similarly, the “Results” section examines the most relevant indicators in terms of validity and consistency. Finally, “Discussion and conclusions” are offered, relating the contributions in comparison to other studies, implications, limitations, and future research.

2. Literature Review

“Consumer trust” is a factor that is frequently studied in the area of e-commerce (Kim & Peterson, 2017), and therefore the construction of a conceptual model is viable (Anaya-Sánchez, Molinillo, Aguilar-Illescas & Liébana-Cabanillas, 2019). Concerning the context, the authors determined that there are precedents from authors such as Alhajjaj and Ahmad (2022), Shahzad, Zahrullail, Akbar, Mohelska and Hussain (2022), and Urus, Kurniasari, Nazri, Utomo, Othman, Jimmy et al. (2022). To this end, theories have been included that show acceptance of this type of tool (Yamin & Abdalatif, 2024).

Primarily, the Technology Acceptance Model (TAM) has been considered, which states that the acceptance of technology tools by users is related to intentions regarding their behavior and perceptions of their utility and ease of use (Davis, Bagozzi & Warshaw, 1989). This model has been used in research where the focus is on the use of financial applications as a means of purchase or payment, which is compatible with the present study (Cha, Kotabe & Wu, 2023). Based on this, it is established that those perceptions form part of the “user experience” variable, which when positive triggers a “trust” effect, which translates into the same users making positive or negative statements about the object of the transaction or provider through digital platforms, which is referred to as electronic word-of-mouth (Hennig-Thurau et al., 2004). In addition, other related variables can be added to it, such as “perceived quality” (Tian, Chan, Suki & Kasim, 2023), since as a predictor, when it is favorable, it plays a role in user opinions, encouraging them to use the applications. Finally, based on these predictors, it becomes possible to form “electronic word-of-mouth”, as a way to recommend the use of Fintech applications to other users.

On the other hand, reference can be made to other compatible theories, which include: the Technological - Personal - Environmental framework (Alhajjaj & Ahmad, 2022; Jiang, Chen & Lai, 2010); the Theory of Reasoned Action (Flavian, Guinaliu & Lu, 2020; Acikgoz, Elwalda & De-Oliveira, 2023); and the Theory of Planned Behavior (Ajzen & Fishbein, 2005).

Constructs	Definitions
Perceived Service Quality (PSQ)	PSQ refers to the gap that is generated between the expectations of users and their perceptions of the service when the service in question is consumed (Parasuraman, Zeithaml & Berry, 1985).
Perceived Information Quality (PIQ)	PIQ is considered to be the suitability that the user assigns to the information that is deployed in the medium through which a certain product or service is received (Freberg, Graham, McGaughey & Freberg, 2011).
User Experience (UE)	UE is the result of the interaction between the service offered and the user, where the latter perceives different characteristics such as quality, design, and other factors (Gronroos, 1988). It is suggested that it is a combination of affective and cognitive aspects as the cause of satisfaction, purchase intention, loyalty, and electronic word-of-mouth (Roy, 2018).
Perceived Risk (PR)	PR alludes to the potential loss from the consumer's point of view when engaging in transactions in any digital or physical environment (Izquierdo-Yusat & Martínez-Ruiz, 2009; Jarvenpaa & Todd, 1997).
Consumer Trust (CT)	CT refers to a changing process, the product of the user's predisposition to depend on the reliability and security that is offered by the seller or counterpart in the transaction, thus taking into account their credibility (Akter, D'Ambra & Ray, 2011; Mayer, Davis & Schoorman, 1995).
Electronic Word-of-Mouth (e-WoM)	e-WoM is considered to be the evolution of traditional word-of-mouth, as it is no longer an interpersonal oral exchange, but rather recommendations and opinions that are transmitted by telephone, e-mail, or other means of communication (Cheung & Lee, 2012; Chan & Ngai, 2011; Goyette et al., 2010).

Table 1. Definition of the constructs

Based on the theories presented, a conceptual model has been developed (see Figure 1) that establishes that the perceived quality and user experience contribute to the creation of trust, which in turn contributes to the generation of electronic word-of-mouth. The constructs and their definitions are shown in the Table 1.

2.1. Theoretical Research and Development of Hypotheses

2.1.1. Relationship between Perceived Quality and Consumer Trust

Based on the literature review, a relationship is shown to exist between perceived quality and consumer trust, which presents two dimensions: the perceived service quality (Ratnasari, Siregar & Maulana, 2021; Falahat et al., 2019; Ghosh, 2018) and of the information (Escobar-Rodríguez & Carvajal-Trujillo, 2014). The new contribution was generated in this manner, integrating both dimensions in the causal relationship, where they are adapted to the environment of study: digital wallets. In an effort to understand that relationship, it is important to emphasize the definition of perceived quality as the evaluation made by the consumer of a product or service, considering the level of excellence or superiority it has as compared to other similar products or services (Zeithaml, 1988). For this reason, it is important to stress that this term differs from the quality promised by the provider, as customer perceptions are different from the description of the proposal (Keller, 1993). In the case of the perceived service quality, it is seen as an evaluation that consumers make regarding the efficiency and efficacy offered on digital platforms, as well as the availability of important information, the speed in responding to questions and queries, and trust in the transactions, among other aspects (Ratnasari et al., 2021). Likewise, the perceived information quality has a great influence on trust, given that consumers require the information needed to make different decisions; this information must be current, accurate, and above all, relevant (Escobar-Rodríguez & Carvajal-Trujillo, 2014). In this sense, perceived quality is proposed as a predictor of trust, since, as has been demonstrated by authors such as Hassan, Manna, and El-Ebiary (2017), a positive impact is generated on the central variable, either by the information or by the service offered by the application (Chek & Ho, 2016). For this reason, when it is perceived that the information provided by the application is of high quality and is consistent, trust is strengthened; likewise, this also occurs when quality of service is perceived (Santosa, Mudiantono, Murniyono, Hersugondo & Soesanto, 2020).

H1: The perceived service quality and service generates the formation of consumer trust in Fintech applications such as digital wallets.

2.1.2. Relationship between User Experience and Consumer Trust

Based on what has been defined above, this concept is based on significant factors such as accessibility, quality information, fast browsing, and security standards (Chen & Yang, 2021). To generate a positive experience in electronic banking, it is key to provide security and privacy for the customer's personal and financial data, since this is one of the main factors so that customers feel secure and satisfied; likewise, if queries are resolved quickly and effectively, this generates customer trust, even in complex situations (Ghali, 2021). However, incorrect information can undermine user trust, so it is important to optimize the platform, provide alternative channels, and maintain the confidentiality of user information, as has been suggested by authors such as Ghali (2021) and To et al. (2023). It is for this reason that the user experience has levels of knowledge that generate consumer trust and improve it when engaging in online transactions (Martínez-Navalón et al., 2023; Masoud & AbuTaqa, 2017; Corbitt et al., 2003).

H2: The personal experience of a user when performing virtual transactions increases trust in the use of digital wallets.

2.1.3. Moderating Relationship of the Perceived Risk between the User Experience and Consumer Trust

Based on the research consulted, it is evident that perceived risk is one of the main predictors of user trust in the use of e-commerce platforms, which is detrimental to its formation and the intent to purchase (Singh, Raghuwanshi, Sharma, Khare, Singhal, Tripathi, et al., 2023). If consumers observe financial, security, performance, or privacy risks during their online experience, this can generate uncertainty with regard to the platform's quality, thus generating fear and mistrust towards it (Xu et al., 2015). On the other hand, it is also presented as a moderating variable between technology adaptation and intent to purchase, as proposed by the authors Habib and Hamadneh (2021). Encompassing the existing relationships with other secondary variables, it has been shown that perceived risk, when reduced, generates a significant increase in trust (Macdonald & Sharp,

2000). Therefore, the opportunity arises to propose a moderating relationship of perceived risk between user experience and consumer trust, because of the negative effect it generates on the central variable (Agag & El-Masry, 2017).

H3: The risk perceived by the user when using electronic wallets has a negative influence on the relationship between the user experience and the building of trust.

2.1.4. The Relationship between Consumer Trust and Electronic Word-Of-Mouth

Electronic word-of-mouth (e-WoM) goes by different names, such as electronic voice-to-voice, online ratings, and electronic references (Hernández, 2023). For this reason, in electronic contexts, e-WoM is fundamental, as it involves the communication of experiences through digital platforms, electronic banks, digital wallets, and electronic commerce, among others, allowing consumers to share and help other consumers make decisions (Goyette et al., 2010). There are two types of e-WoM: shallow, which is based on a quick action that requires little effort, such as “liking” or “sharing” a post, while deep e-WoM is focused on leaving comments, which requires greater cognitive effort and lasts longer (Ismagilova et al., 2021). Previous research has presented this term as a predictor, due to the need perceived by the user to make a recommendation (Matute, Redondo & Utrillas, 2015). There is evidence of a correlation between trust and the generation of e-WoM, influencing the information exchange with other consumers, as proposed by Yeh and Choi (2010).

H4: The building of user trust generates a positive impact on the generation of electronic word-of-mouth in electronic wallet users.

In summary, the following diagram illustrates the causal relationships between the variables, along with their respective hypotheses, the existence of which has been previously analyzed in the existing literature.

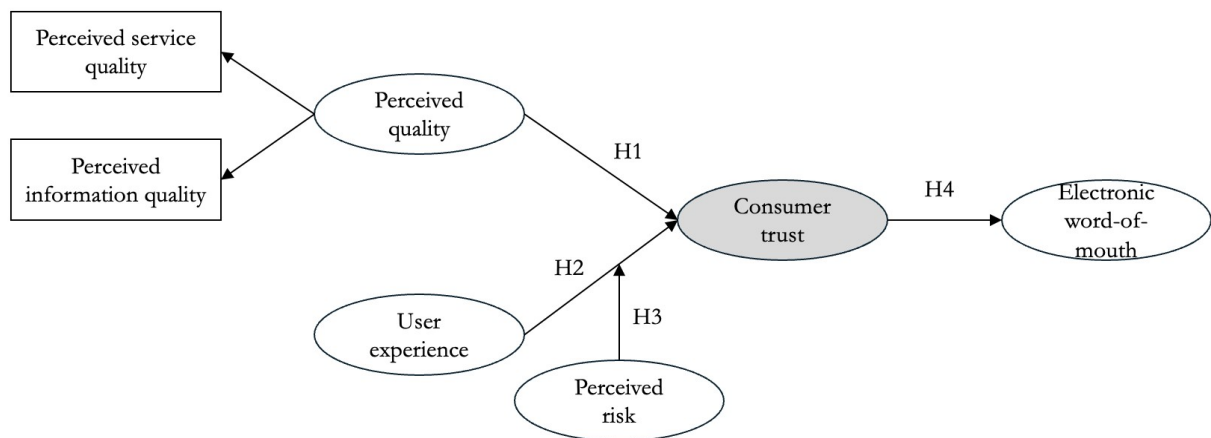


Figure 1. Conceptual model - Consumer trust in E-Commerce platforms

3. Methodology

3.1. Research Design and Measurement Tool

A survey was designed with 25 items validated by a panel of experts in the retail and marketing industry in Peru. These items were measured using a 5-point Likert scale ranging from 1 = Totally disagree to 5 = Totally agree. The responses recorded to these questions helped evaluate the constructs being considered: perceived quality (Escobar-Rodríguez & Carvajal-Trujillo, 2014; Palvia, 2009), user experience (Corbitt et al., 2003), perceived risk (Amaro & Duarte, 2015; Shim, Eastlick, Lotz & Warringt, 2001), consumer trust (Jiang, Jun & Yang, 2016; Hur, Ko & Valacich, 2011; McKnight, Choudhury & Kacmar, 2002) and electronic word-of-mouth (Goyette et al., 2010). The survey was designed based on these authors; therefore, it is supported by the existing literature, which minimizes the bias (Churchill, 1979).

After fine-tuning the tool, a pilot test was conducted with 30 participants to measure its internal consistency, extracting between 5 % and 10 % of the ideal sample (Hair, Risher, Sarstedt & Ringle, 2019; Hair, Sarstedt, Ringle & Mena, 2012), which is equal to a range of between 19 and 38 respondents, from a total of 384 people.

Furthermore, in terms of the validity of the construct, the KMO (Kaiser, Meyer, and Olkin) contrast was calculated, which refers to the measure of the adequacy of the sample. This value is calculated for each variable and takes on a value between 0 and 1; if the standard value of 0.5 is exceeded, the study is deemed appropriate for factor analysis (Kaiser, 1974). Results can be seen in the Table 2.

Constructs	MSA
Perceived Service Quality (PSQ)	0,771
Perceived Information Quality (PIQ)	0,735
User Experience (UE)	0,744
Perceived Risk (PR)	0,701
Consumer Trust (CT)	0,786
Electronic Word-of-Mouth (e-WoM)	0,788
Overall instrument	0,625

Note: Authors' own work, using JASP statistical software.

Table 2. Kaiser-Meyer-Olkin contrast (KMO)

Following this calculation, the overall KMO of the instrument is shown to be greater than 0.5, and thus the data are acceptable for carrying out factor analysis (Kaiser, 1974). The separate KMO for each variable shows that PSQ, CT, and e-WoM are appropriate variables for conducting factor analysis; however, the other variables are also acceptable. As a result, it was not necessary to remove any variable from the analysis. In addition, the following values were extracted using the JASP software (Table 3).

X ²	gl	p
724.314	300.000	< .001

Note: Authors' own work, using JASP statistical software.

Table 3. Bartlett contrast

By applying the Bartlett contrast in which the Chi-squared is 724.31, it is shown that there is an intercorrelation among the variables. For this reason, it is reiterated that it is appropriate to apply factor analysis (Table 4).

	Rotated solution			
	Eigenvalues	Sums of squared weights	Proportion of var.	Cumulative
Factor 1	11.720	8.701	0.348	0.348
Factor 2	2.927	4.323	0.173	0.521
Factor 3	2.042	2.645	0.106	0.627

Note: Authors' own work, using JASP statistical software.

Table 4. Characteristics of the factors

Finally, based on the previous table, the information from the study variables has been summarized in 3 factors, which account for 62.7 % of the information. In the same way, these factors and the representation of the variables can be observed in the Route Diagram.

3.2. Population Statistics and Sample, Collection Method, and Data Analysis

Taking into account the limitations of resources, time, and research capacity, a non-probabilistic convenience sample was used, as in other similar studies (Alhajjaj & Ahmad, 2022; Matute et al., 2015). This is because this sampling makes it possible to achieve greater accessibility to the public of interest in a short period. In order to reduce the bias inherent to this type of sampling, certain measures were taken, such as establishing clear criteria for the inclusion of participants in the study, for the purpose of ensuring results pertaining to the desired

objective. Likewise, it was possible to balance the proportion of men versus women among the respondents, who voluntarily answered the survey anonymously through a mass e-mail, so that the influence of the researcher was minimal. It should be noted that through a statistical calculation, it was possible to reach the ideal sample size to obtain valid results to be considered as a contribution to the literature.

	Factor 1	Factor 2	Factor 3	Uniqueness
e-WoM 5	0.816			0.316
e-WoM 3	0.810			0.287
CT 3	0.757			0.257
CT 1	0.738			0.395
CT 5	0.727			0.365
CT 6	0.720			0.387
UE2	0.715			0.324
CT 2	0.697			0.337
e-WoM 6	0.694			0.501
PIQ 2	0.674			0.271
CT 4	0.658	0.538		0.269
PIQ 3	0.648	0.454		0.361
UE3	0.648			0.362
e-WoM 1	0.644			0.457
e-WoM 4	0.629			0.591
PIQ 1	0.587	0.471		0.396
UE1	0.563			0.444
e-WoM 2	0.507			0.651
PSQ 4		0.908		0.079
PSQ 3		0.850		0.266
PSQ 1		0.712		0.396
PSQ 2		0.647		0.500
PR 1			0.860	0.250
PR 2			0.804	0.340
PR 3			0.682	0.530

Note: Authors' own work, using JASP statistical software and with a *varimax* rotation method.

Table 5. Factor Loadings

A target population was considered that included current Peruvian users of digital wallets between the ages of 18 and 40, who reside in the Lima Metropolitan area, as they represent the key target market for Fintech applications (Urus et al., 2022). It should be pointed out that said age range does not represent the entire target, as its purpose is to expand financial inclusion (Julião, Ayllon & Gaspar, 2023). However, this segment is the one with the greatest loyalty, thus representing its driving force (Abu-Daqar, Arqawi & Karsh, 2020). The sample consists of electronic wallet users in Peru, including the Yape, Plin, Tunki, and Agora Pay systems. These offer a service backed by a banking institution that allows financial transactions to be made without the use of cash. According to the Financial Inclusion Index, 1 out of every 4 Peruvians used these applications to manage their money in 2023, making them the second most used means of payment.

With regard to the sampling technique, a simple random sample was used as described by Krejcie and Morgan (1970), calculating the total population size (N) of the Lima Metropolitan area for the target age range of 18-40 years to be N = 3,912,591 people projected for the year 2024 (INEI, 2020). Later, using as reference parameters from previous research, such as the study by authors Sánchez-Alzate and Montoya (2017), the sample of the finite population was calculated to be approximately n = 384.

Following the data collection, the proposed quantity was exceeded. The Table 6 shows the demographic characteristics of those surveyed.

A total of 405 surveys were administered, of which 9 respondents exceeded the age limit, 5 did not live in the Lima Metropolitan area and 1 had not used digital wallets, thus resulting in 386 valid surveys being obtained.

Characteristics		Frequency	Percentage (%)
Gender	Male	193	50 %
	Female	193	50 %
Age	18-24 years	340	88.08 %
	25-29 years	34	8.81 %
	30-34 years	5	1.30 %
	35-40 years	7	1.81 %

Note: Authors' own work, using data taken from the administered survey.

Table 6. Demographic data of the sample

3.3. Structure of the Model

In the proposed model, the constructs proposed by authors of similar research studies have been adapted in an effort to provide relevant information within the context of digital wallets. All the constructs were measured on a 5-point Likert scale and are detailed in the Operationalization Matrix (see Appendix A).

In order to carry out the descriptive analysis, as a preliminary measure, the JASP statistical program was used, as in other studies (Duc, Tran & Anh, 2022). This tool was used to process the data obtained from the pilot surveys (Goss-Sampson, 2024).

Furthermore, for the inferential analysis, Structural Equation Modeling was performed using SmartPLS software, which is used for exploratory research. Furthermore, it permits the implementation of constructs measured reflectively or formatively (Hair et al., 2019). According to Hair et al. (2019), in order to analyze these constructs on the level of the selected sample, different indicators must be examined, which will be discussed in the following section.

4. Results

The evaluation of the conceptual model using the PLS-SEM model focuses on analyzing the external measurement model and the internal structural model. This model has a more complex and sophisticated regression, as it makes it possible to obtain more precise estimates between the items and the constructs (Hair et al., 2019). In other research on Fintech applications, such as that conducted by Alhajjaj and Ahmad (2022) and Martínez-Navalón et al. (2023), the structural equations model was also used due to the flexibility it offers.

4.1. Evaluation of the Measurement Model

According to Hair et al. (2019), the first step is to obtain the results of the measurement model to examine the reliability indicators of internal consistency, convergent validity, collinearity, and discriminant validity. As shown in Table 7, Cronbach's alpha for all variables exceeds the threshold value of 0.70, which according to Hair, Ringle & Sarstedt (2011) is a measure of internal consistency to evaluate the reliability of the items and how they are related to one another; therefore, it can be seen that the model has an acceptable internal consistency.

Furthermore, composite reliability has also been used, which focuses on the variance of the construct and the comparison with the variance due to error; this measure must have a value greater than 0.7, but not greater than 0.95 to be satisfactory (Bagozzi & Yi, 1988; Jöreskog, 1971). In this manner, it is shown that all the variables have acceptable composite reliability since they have values within the suggested range, which when exceeded would indicate abnormal patterns in the responses (Diamantopoulos & Winklhofer, 2001).

Likewise, in order to identify the convergent validity, the average variance extracted (AVE) must be evaluated, which represents the alignment of the items with the construct; they are considered acceptable when obtaining a value of 0.5 or higher (Bagozzi & Yi, 1988; Fornell & Larcker, 1981). Therefore, all the constructs are acceptable,

demonstrating that more than 50 % of the variance of the indicators is explained by the construct and thus they are representative of the construct (Hair et al., 2019).

Furthermore, to detect whether the model has collinearity or multicollinearity among the independent variables, the VIF test is used, which is a model that measures the increase in the variance of a coefficient estimated by the collinearity of other variables (Gujarati & Porter, 2009). If this value is close to 1, it indicates that collinearity does not exist; meanwhile, a value greater than 5 or 10 shows a problematic collinearity that suggests the exclusion of the variable. It can be shown that collinearity does not exist in the model in most of the items since these values are between 1 and 3, except for items e-WoM 3, e-WoM 4, and e-WoM 5 (Hair et al., 2011).

With regard to discriminant validity, factor loadings are calculated which must have higher values on their own factors than on other constructs, given that this indicates the level of correlation that exists between an item and its construct, and these loadings must also be greater than 0.7 to be acceptable. All the variables showed loadings higher than 0.7 and a greater value on their own constructs than on others; in other words, the values presented in Table 7 show that the model has acceptable discriminant validity (Hair, Black, Babin & Anderson, 2010).

Constructs and items	Factor loadings	VIF	Cronbach's Alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average Variance Extracted (AVE)
Electronic Word-of-Mouth			0.923	0.927	0.940	0.723
e-WoM 1	0.847	2.749				
e-WoM 2	0.810	2.310				
e-WoM 3	0.853	3.409				
e-WoM 4	0.873	3.700				
e-WoM 5	0.887	3.520				
e-WoM 6	0.829	2.625				
Consumer Trust			0.894	0.899	0.918	0.653
CT 1	0.790	2.070				
CT 2	0.756	1.943				
CT 3	0.796	2.335				
CT 4	0.838	2.662				
CT 5	0.828	2.408				
CT 6	0.836	2.492				
Perceived Information Quality			0.876	0.877	0.924	0.802
PIQ 1	0.879	2.236				
PIQ 2	0.903	2.477				
PIQ 3	0.904	2.755				
Perceived Service Quality			0.833	0.836	0.889	0.667
PSQ 1	0.836	1.924				
PSQ 2	0.852	2.120				
PSQ 3	0.750	1.595				
PSQ 4	0.824	1.893				
User Experience			0.825	0.827	0.896	0.741
UE 1	0.896	2.323				
UE 2	0.865	1.989				
UE 3	0.820	1.655				
Perceived Risk			0.831	0.922	0.888	0.728
PR 1	0.910	2.160				

Constructs and items	Factor loadings	VIF	Cronbach's Alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average Variance Extracted (AVE)
PR 2	0.912	1.995				
PR 3	0.725	1.725				

Note: Author's own work using SmartPLS software, where PSQ = Perceived Service Quality; PIQ = Perceived Information Quality; UE = User Experience; PR = Perceived Risk; CT = Consumer Trust; e-WoM = Electronic Word-of-Mouth.

Table 7. Statistics measuring the scales of constructs

Another method to measure the discriminant validity of the model is the Fornell and Larcker criterion (1981), which says that the amount of variance of each construct must be greater than the variance that it shares with the other constructs to determine whether these are unique or they are broadly correlated. In other words, this method makes it possible to verify whether the constructs are different enough to be interpreted correctly. The evidence indicates that the discriminant validity is also considered to be acceptable (see Table 8).

	e-WoM	PSQ	PIQ	CT	UE	PR
e-WoM	0.850					
PSQ	0.431	0.817				
PIQ	0.337	0.648	0.895			
CT	0.529	0.683	0.661	0.808		
UE	0.383	0.616	0.608	0.592	0.861	
PR	0.291	0.032	0.084	0.121	0.096	0.853

Note: Authors' own work, using SmartPLS software.

Table 8. Fornell and Larcker criterion (1981)

On the other hand, according to Cepeda-Carrión, Henseler, Ringle, and Roldán (2016), it is preferable to use the HTMT test to check the discriminant validity, which is defined as the mean of the correlations of the items among the constructs. This value must be less than 0.90 for the model to proceed and be accepted; as a result, it can be seen that all the values fall below the limit and the model is accepted. This matrix, as shown in Table 9, is presented as a more robust method, as it has greater sensitivity in detecting high levels of correlation and greater precision in models with a large number of constructs and complexity (Henseler, Ringle & Sarstedt, 2015).

	e-WoM	PSQ	PIQ	CT	UE	PR	PR X UE
e-WoM							
PSQ	0.493						
PIQ	0.372	0.758					
CT	0.574	0.788	0.742				
UE	0.439	0.739	0.714	0.686			
PR	0.334	0.058	0.080	0.127	0.102		
PR X UE	0.118	0.295	0.304	0.293	0.305	0.177	

Note: Authors' own work, using SmartPLS software.

Table 9. Heterotrait-monotrait (HTMT) ratio

4.2. Evaluation of the Structural Model

In order to define the rejection or acceptance of the hypotheses, the P-value indicator is observed- If it is less than 0.05, it would be accepted as a reflection of the level of significance (Hair et al., 2019). Therefore, it is evidenced that the perceived quality and user experience have a significant influence on consumer trust, while confidence as such also influences electronic word-of-mouth.

Likewise, the T-value was calculated; since it is greater than 3 in hypotheses 1, 2, and 4, this reflects a P-value very close to zero and establishes that the effect is highly significant (Neyman & Pearson, 1933). Therefore,

Table 10 shows that hypotheses 1, 2 and 4 are accepted. With regard to hypothesis 3, associated with the perceived risk as a moderating variable between user experience and consumer behavior, shows a P-value greater than 0.05 and a low T-value, which would represent rejection, since it does not represent a significant impact as a moderator in the relationship (Neyman & Pearson, 1933). It should be mentioned that said relationship is negative since the perceived risk would complicate the relationship, representing an obstacle between user experience and trust.

Hypothesis	Effect	Coefficient	T Statistic	P-value	
H1	PC -> CT	0.615	12.887	0	Accepted
H2	UE -> CT	0.155	3.245	0.001	Accepted
H3	PR x UE -> CT	-0.054	1.409	0.159	Rejected
H4	CT -> e-WoM	0.529	11.744	0	Accepted

Note: Authors' own work, using SmartPLS software.

Table 10. Results of the hypothesis test

With regard to the F^2 (F-squared), the effect size of a predictor on a dependent variable is measured, making it possible to evaluate the practical importance of each one in the explanation of the variance of the model, independently of whether it is statistically significant (Cohen, 1988). If this measure is greater than or equal to 0.02, 0.15, or 0.35 it will be interpreted as a weak, moderate, or strong effect size, respectively (Gefen, Straub & Boudreau, 2000; Cohen, 1988). Thus, by observing the results of Table 11, it can be seen that most of these values have a strong effect size on the dependent variables, except for the weak effect size of User Experience (UE) on Consumer Trust (CT) and the moderate Perceived Risk (PR) variable, which does not have a significant effect on the relationship between User Experience (UE) and Consumer Trust (CT).

	e-WoM	PQ	PIQ	PSQ	CT	UE	PR	PR x UE
e-WoM								
PQ			4.423	4.942	0.467			
PIQ								
PSQ								
CT	0.388							
UE					0.03			
PR x UE					0.013			

Note: Authors' own work, using SmartPLS software.

Table 11. F-squared values

R^2 (R-squared) (Shmueli & Koppius, 2011) was used to define the level of explanation of the model. This measure represents the proportion of total variability of the dependent variable which is explained by the independent variables; accordingly, values of 0.75, 0.50, and 0.25 are considered substantial, moderate, and weak, respectively. If these values are greater than 0.90, they are considered indicative of overfitting (Hair et al., 2010). Therefore, it is evidenced that the dependent variables Perceived Information Quality (PIQ) and Perceived Service Quality (PSQ) have values greater than 0.75 and less than 0.90, which shows that they are substantial values. On the other hand, Consumer Trust (CT) has a moderate value, since it is greater than 0.50; meanwhile, Electronic Word-of-Mouth (e-WoM) is considered a weak value since it is close to the threshold limit of 0.25 (see Table 12).

Likewise, to evaluate the predictive capacity of the structural model, the measurement Q^2 predict has been used, which makes it possible to validate the predictions and complements the R^2 , as it establishes a broader perspective on the effectiveness of the model (Henseler, Ringle & Sinkovics, 2009; Hair et al., 2019). If these values are greater than 0, they are considered to have predictive relevance and values greater than 0,

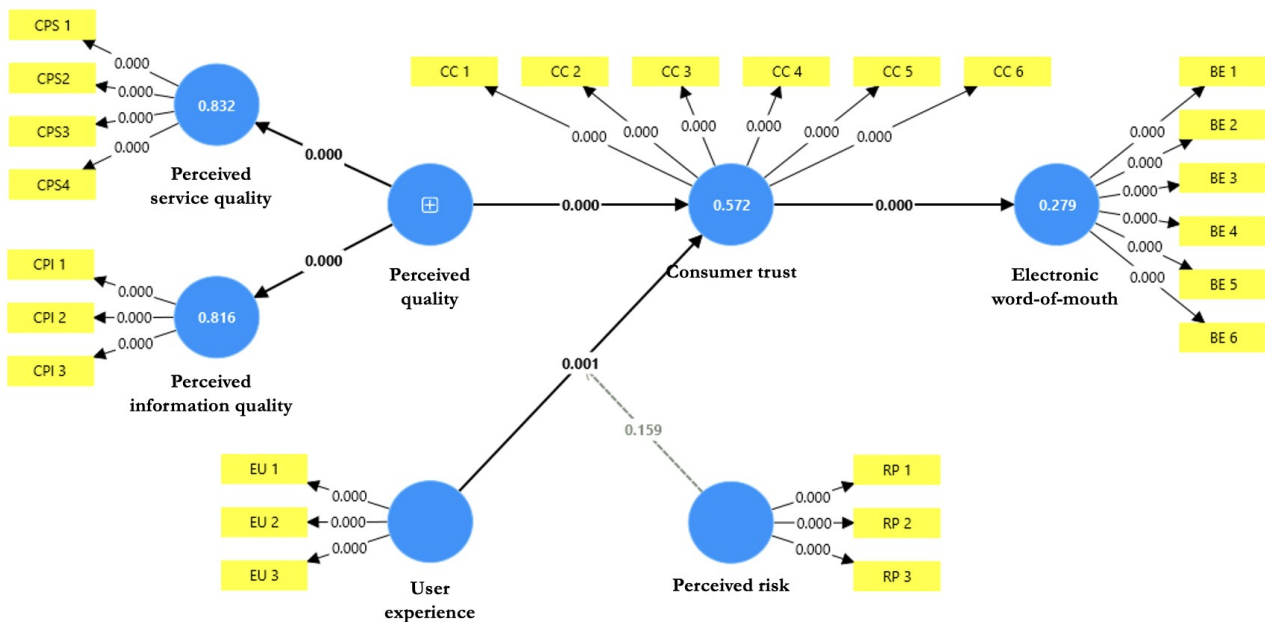
0.25, and 0.50 represent low, medium, and high levels of prediction, respectively (Hair et al., 2019; Henseler et al., 2009; Chin, 1998). According to the values obtained, the model has dependent variables with great predictive capacity, such as PIQ, PSQ, and CT, while the e-WoM variable has a low level of prediction (see Table 12).

Finally, the results of the model are shown graphically, where the R^2 (R squared) values of each construct, and the P values of the measuring and structural models can be seen.

	R squared	Adjusted R squared	Q ² predict
e-WoM	0.279	0.277	0.202
PIQ	0.832	0.831	0.815
PSQ	0.816	0.815	0.832
CT	0.572	0.568	0.557

Note: Authors' own work, using SmartPLS software.

Table 12. Predictive relevance



Note: Authors' own work, using SmartPLS software.

Figure 2. Results of the structural model

5. Discussion and Conclusions

5.1 Contrast of Hypotheses with Other Research

Hypothesis 1 (H1), which explores whether there is an influential relationship between Perceived Quality (PQ) and Consumer Trust (CT) was corroborated. The findings are in agreement with previous research on similar topics (Falihat et al., 2019; Sánchez-Torres, Canada, Sandoval & Alzate, 2018; Escobar-Rodríguez & Carvajal-Trujillo, 2014; Palvia, 2009). These results may be related to the growing importance of the quality of products and services on digital platforms, given that it is impossible to physically determine or corroborate the quality of a service or product, thus making consumers feel more comfortable (Hassan et al., 2017; Chek & Ho, 2016). It has been demonstrated that the perceived service quality (PSQ) and perceived information quality (PIQ) are relevant dimensions for the quality perceived by the user. This refers to the fact that when considering the use of digital wallets, consumer trust is influenced by the perceived quality of the application on previous occasions. These findings may reflect the barriers of technological ignorance that generate different needs, such as information and services on digital banking platforms (Martínez-Navalón et al., 2023). This hypothesis highlights the two dimensions of quality considered important and influential on the

generation of trust in the use of digital wallets; this analysis permits an innovative focus with respect to the current literature. These aspects were considered due to the advancement of technology, stressing the importance of the service and information provided, shifting from traditional methods to modern and technological ones.

Hypothesis 2 (H2) considers the User Experience (UE) as a predictor of the increase in Consumer Trust (CT) in the use of digital wallets, where it was evidenced that the relationship is very significant. Other studies, such as those conducted by To et al. (2023), Ghali (2021), and Roy (2018), have proven these causal relationships of the model, which reinforces the idea that user experience is a crucial factor for strengthening the relationship between the application and the user. However, this relationship changes according to the type of service that is offered, since each has unique factors that influence the perception of the user experience. Therefore, these items also point to the importance of adapting the service or product according to the specific needs of each segment. Likewise, User Experience (UE) has proven to be another relevant predictor variable in forming trust. The findings obtained coincide with previous studies, where a good experience using digital wallets was considered decisive in order to perceive reliability; however, the importance of identifying the segment and designing or adapting the service or products to these characteristics is also stressed. Specifically, it has been evidenced that the experiences before using digital wallets and the practice of their use facilitate the building of trust (Masoud & AbuTaqa, 2017).

Hypothesis 3 (H3) refers to the Perceived Risk (PR) as a moderating variable between user experience (UE) and the building of Consumer Trust (CT). This hypothesis has not been previously researched, so this relationship is innovative. However, it has been observed that this variable can be used as a predictor with a negative influence in articles by Islam, Hasan, Tawfiq, Bhuiyan and Faisal-E-Alam (2024), Gómez-Hurtado, Gálvez-Sánchez, Prados-Peña and Ortiz-Zamora (2024), Singh et al. (2023), and Agag and El-Masry (2017). In these studies, it is observed that the perceived risk is considered to be a factor that hinders trust and that it negatively affects the use of digital platforms, thus reducing its acceptance, and so users need greater guarantees in order to promote this use (Singh et al., 2023). In this research, this “obstacle” relationship was considered, triangulating it with user experience, in an attempt to find additional solid predictors of the formation of trust and how the combination with other variables increases (or fails to increase) the final effect. This perspective challenges the models reviewed in the literature opening up the possibility of building networks with other variables to study different combinations and their impact on the central variable of study. On the other hand, it was observed that like in the articles by Islam et al. (2024) and Gómez-Hurtado et al. (2024), the hypothesis that includes perceived risk is rejected with a high P value. This finding is justified in the context that there is a strong integration between the financial sectors and mobile banking services and the high educational level of the sample, which leads to higher levels of tolerance to risk. Likewise, in a past study carried out by Gbongli, Xu, Amedjonekou, and Kovács (2020), Consumer Behavior Theory is mentioned as supporting the idea that consumers are usually more motivated to avoid mistakes or failure than they are to seek benefits from the utility of a product or service; therefore, the perceived risk acts more as a direct inhibitor than as a conditioning factor of trust. Another possible explanation of this non-significant effect is that user experience may be encompassed within perceived risk, and so the direct relationship between user experience and trust would be strong enough that it would mask any moderating effect of risk.

Finally, hypothesis 4 (H4) considers the relationship between consumer trust (CT) and electronic word-of-mouth (e-WoM), generating a positive impact on the formation of the latter. These results have also been evaluated by authors such as Hernández (2023), Ismagilova et al. (2021), Cheung and Lee (2012), and Goyette et al. (2010), who have concluded that consumer trust is a key factor for the development of e-WoM, given that it causes interactions with digital platforms to be seen as secure, thus resulting in recommendations being made, supported by the security of the platform. According to Goyette et al. (2010), consumers are more willing to use digital platforms when they see comments from users with no commercial intent, such as a sincere opinion on their experience. Compared to the existing literature, this proposed relationship delves deeper into the study of the impact of trust in the generation of recommendations about the service in social media or comments with people in their closest circle, such as family or friends, and not the opposite, which is commonly studied on

digital platforms. Likewise, this relationship makes it possible to reverse this association and continue to extend the causal chain, with the possible inclusion of other dependent variables.

5.2. Theoretical Implications

In general, this article makes a contribution to the literature based on the knowledge generated about the factors that motivate the formation of user trust, which represents an important insight to consider in order to improve the services and functionalities of digital wallets, and also for the design of user outreach strategies (Alhajjaj & Ahmad, 2022).

Based on the proposed conceptual model, the research has managed to differentiate itself from previous studies, especially due to the presence of perceived risk as a moderating variable. This is also because it sets out to challenge the paradigm and investigate the role of moderators in response to the growing interest in addressing these topics (Suryono, Budi & Purwandari, 2020; Sánchez-Torres et al., 2018).

5.3. Practical Implications

The present article highlights the importance of generating trust in users by implementing Fintech platforms, focusing on Peru, where there are still strong barriers to financial inclusion and mistrust of non-traditional means of payment. This study and its findings have significant value for various companies in the Fintech sector and their managers who use these mobile ecosystems as banks and loan funds or to promote their businesses since the need is stressed to generate trust in order to encourage positive comments about these platforms. Similarly, the study evidences a relationship between financial technology innovation and user trust, which supports the initiative to develop new technologies in order to be able to influence this variable in a positive manner. The study also leads to improvements in the user experience on Fintech platforms, which must be intuitive, agile, and accessible. Accordingly, to have a good user experience, there must be visual elements that can communicate clarity and professionalism. Also emphasized is the implementation of strategies that increase the perceived safety through security protocols and data and privacy protection policies, among others. These not only protect the users, but they also increase trust in Fintech applications. As an external factor, financial regulations also have an influence on this trust, as Fintech companies are expected to have an acceptable level of regulatory compliance. It is for this reason that these companies must align themselves with these regulations and achieve significant transparency.

In this way, variables are provided that have been considered important by the literature so that these organizations can have greater knowledge about the implementation of new technologies in the current markets. In order to build this trust, these profiles must consider those predictors and integrate them into their strategies. With this in mind, an analysis is offered based on the perception of users, which could be seen as a framework of requirements to overcome the barriers of mistrust, particularly in emerging markets like Peru.

5.4. Limitations to the Study

In spite of the different contributions it makes, this research presents certain limitations of different natures. First of all, the article is limited to the study of the sector that uses Fintech applications as a means of payment, collections, and everyday monetary transactions, as a complement to or substitute for cash. For this reason, the results cannot be fully generalized to other sectors or platforms, due to the characteristics of the sector and the perceptions of its users regarding its functionalities.

Secondly, another limitation is the sample and methodological design, as the research only covers a small segment of the Peruvian population, which would not be representative of the entire country, due to educational and socioeconomic differences on a regional level, for example. According to the INEI (2024b), urban areas in Peru are home to a larger proportion of the population with higher education, which is equivalent to 36.5 %, while in rural areas, this proportion decreases to 12.6 %. In addition, Internet access in Peru is limited and varies greatly, as only 57.6 % of homes have an Internet connection, with the Lima Metropolitan area concentrating the most users (INEI, 2024a). These results cannot therefore be extrapolated as a whole to other geographic areas.

Thirdly, it should be mentioned that the differentiation between genders and the results that can arise from them is irrelevant to this study, as the focus targets a general public that is not segmented by gender. Furthermore, the data collection by means of surveys took place between the months of July and October 2024 from those persons to whom the researchers have the greatest access through social media, by email, or through acquaintances. For this reason, the indicators and results may evolve with the growth of these applications in Peru, as well as for the emergence of additional applications, other market fluctuations, or due to the peculiarities of the sample environment.

Fourthly, this study focuses on a limited population between 18 and 40 years of age, as they represent the majority group in the use of digital wallets (Credicorp, 2023a). However, as it does not cover the entire Peruvian population, it may not completely reflect the use of digital wallets in other age groups, thus limiting the generalization of the results. Similarly, the study may be limited by convenience sampling, since the participants were not randomly selected and it may not represent the diversity of the population. By including a broader random population, the analysis could be more detailed and not limited to the basic demographic data of the chosen sample.

5.5. Future Research

New research on a similar topic could focus on other emerging countries like Bolivia, Ecuador, Chile, and Uruguay, where the knowledge gap is tangible (Hernández, 2023). Similarly, this research could be replicated in other regions of Peru, making a distinction between urban and rural areas or natural regions: the coast, mountains, and jungle, where the sociocultural differences are noticeable and could be compared to other regions. This way the result would have an international scope and better results could be achieved on a national level, taking into account the variations in the results due to the sociodemographic factor.

Expanding diversity could also be considered, including age groups and factors such as educational level or socioeconomic level, which could directly influence the barriers and opportunities associated with financial digitalization. This extension of sociodemographic moderating variables can provide a more complete vision of the use of these financial technologies, as well as a comparison on a larger scale to other regions.

On the other hand, the opportunity has been identified to explore the role of perceived risk as a predictor variable instead of a moderating one, as a factor that makes it impossible to establish trust. In order to reinforce this, it should be determined which other constructs could strengthen the model, based on other studies. On a similar note, it would be relevant to be able to replicate this study with different digital wallets, as this would permit making a comparative analysis between the different applications, obtaining information in specific economic contexts. Furthermore, the opportunity has been identified to study other predictor variables such as reputation, brand awareness, and perceived usefulness of the tool, to complement and strengthen the current conceptual model.

In the same way, in order to strengthen the model, other theories on trust could be applied in order to explore other relationships of interest. For example, the Theory of Planned Behavior could be considered, which would make it possible to evaluate the impact of sociodemographic factors on the formation of attitudes and behaviors, as well as the effect on the behavior and formation of trust in the use of Fintech applications (Ajzen & Fishbein, 2005).

Finally, it is proposed to complement the techniques used through in-depth interviews and longitudinal studies that can provide more detailed evidence, as well as enable the comparison of the results over time and identify differences between periods. In this way, we could choose to migrate from a transactional methodology to a longitudinal one, to consider evaluating the evolution of the use of these applications. These qualitative techniques will enable us to know the perceptions that might not be evident with quantitative techniques; it would also reduce even further the bias associated with a non-probabilistic sample, ensuring the triangulation of the data obtained.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

References

- Abu-Daqar, M.A.M., Arqawi, S., & Karsh, S.A. (2020). Fintech in the eyes of Millennials and Generation Z (the financial behavior and Fintech perception). *Banks and Bank Systems*, 15(3), 20-28. [https://doi.org/10.21511/bbs.15\(3\).2020.03](https://doi.org/10.21511/bbs.15(3).2020.03)
- Acikgoz, F., Elwalda, A., & De-Oliveira, M.J. (2023). Curiosity on cutting-edge technology via theory of planned behavior and diffusion of innovation theory. *Internal Journal of Information Management Data Insights*, 3(1), e100152. <https://doi.org/10.1016/j.ijimei.2022.100152>
- Agag, G.M., & El-Masry, A.A. (2017). Why Do Consumers Trust Online Travel Websites? Drivers and Outcomes of Consumer Trust toward Online Travel Websites. *Journal of Travel Research*, 56(3), 347-369. <https://doi.org/10.1177/0047287516643185>
- Agur, I., Martinez, S., & Rochon, C. (2020). *Digital Financial Services and the Pandemic: Opportunities and Risks for Emerging and Developing Economies*. International Monetary Fund.
- Ajzen, I., & Fishbein, M. (2005). The influence of attitudes on behavior. In Albarracín, D., Johnson, B.T., & Zanna, M.P. (Eds.), *The handbook of attitudes* (173-221). Lawrence Erlbaum Associates.
- Aker, S., D'Ambra, J., & Ray, P. (2011). Trustworthiness in mHealth information services: an assessment of a hierarchical model with mediating and moderating effects using partial least squares (PLS). *Journal of the American Society for Information Science and Technology*, 62(1), 100-116. <https://doi.org/10.1002/asi.21442>
- Al-Kfairy, M., Shuhaiber, A., Al-Khatib, A.W., & Alrabae, S. (2023). Social Commerce Adoption Model Based on Usability, Perceived Risks, and Institutional-Based Trust. *IEEE Transactions on Engineering Management*, 71, 3599-3612. <https://doi.org/10.1109/TEM.2023.3341900>
- Alben, L. (1996). Defining the criteria for effective interaction design. *Interactions*, 3(3), 11-15. <https://doi.org/10.1145/235008.235010>
- Alhajjaj, H., & Ahmad, A. (2022). Drivers of the consumers adoption of Fintech services. *Interdisciplinary Journal of Information, Knowledge, and Management*, 17, 259-285. <https://doi.org/10.28945/4971>
- Amaro, S., & Duarte, P. (2015). An Integrative Model of Consumers' Intentions to Purchase Travel Online. *Tourism Management*, 46, 64-79. <https://doi.org/10.1016/j.tourman.2014.06.006>
- Anaya-Sánchez, R., Molinillo, S., Aguilar-Illescas, R., & Liébana-Cabanillas, F. (2019). Improving travellers' trust in restaurant review sites. *Tourism Review*, 74(4), 830-840. <https://doi.org/10.1108/TR-02-2019-0065>
- Bagozzi, R., & Yi, Y. (1988). On the Evaluation of Structural Equation Models. *Journal of the Academy of Marketing Science*, 16, 74-94. <https://doi.org/10.1007/BF02723327>
- Bai, S., Zhang, X., Han, C., & Yu, D. (2023). Research on the Influence Mechanism of Organic Food Attributes on Customer Trust. *Sustainability*, 15(8), e6733. <https://doi.org/10.3390/su15086733>
- Bianchi, C., & Andrews, L. (2012). Risk, trust, and consumer online purchasing behaviour: A Chilean perspective. *International Marketing Review*, 29(3), 253-275. <https://doi.org/10.1108/02651331211229750>
- Cepeda-Carrión, G., Henseler, J., Ringle, C.M., & Roldán, J.L. (2016). Prediction-oriented modeling in business research by means of PLS path modeling: Introduction to a JBR special section. *Journal of Business Research*, 69(10), 4545-4551. <https://doi.org/10.1016/j.jbusres.2016.03.048>

- Cha, H., Kotabe, M., & Wu, J. (2023). Reshaping Internationalization Strategy and Control for Global ECommerce and Digital Transactions: A Hayekian Perspective. *Management International Review*, 63(1), 161-192. <https://doi.org/10.1007/s11575-022-00494-x>
- Chan, Y.Y.Y., & Ngai, E.W.T. (2011). Conceptualising electronic word of mouth activity: An input-process-output perspective. *Marketing Intelligence & Planning*, 29(5), 488-516. <https://doi.org/10.1108/02634501111153692>
- Chek, Y.L., & Ho, J.S.Y. (2016). Consumer electronics e-retailing: Why the alliance of vendors' e-service quality, trust and trustworthiness matters. *Procedia - Social and Behavioral Sciences*, 219, 804-811. <https://doi.org/10.1016/j.sbspro.2016.05.083>
- Chen, N., & Yang, Y. (2021). The impact of customer experience on consumer purchase intention in cross-border E-commerce - Taking network structural embeddedness as a mediator variable. *Journal of Retailing and Consumer Services*, 59. <https://doi.org/10.1016/j.jretconser.2020.102344>
- Cheung, C.M.K., & Lee, M.K.O. (2012). What drives consumers to spread electronic word of mouth in online consumer-opinion platforms. *Decision Support Systems*, 53(1), 218-225. <https://doi.org/10.1016/j.dss.2012.01.015>
- Chin, W.W. (1998). The Partial Least Squares Approach to Structural Equation Modeling. *Modern Methods for Business Research*, 2, 295-336.
- Churchill, G. (1979). A Paradigm for Developing Better Measures of Marketing Constructs. *Journal of Marketing Research*, 16, 64-73. <https://doi.org/10.2307/3150876>
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Hillsdale, NJ: LEA.
- Corbitt, B.J., Thanasankit, T., & Yi, H. (2003). Trust and e-commerce: A study of consumer perceptions. *Electronic Commerce Research and Applications*, 2(3), 203-215. [https://doi.org/10.1016/S1567-4223\(03\)00024-3](https://doi.org/10.1016/S1567-4223(03)00024-3)
- Credicorp (2023a). *Billeteras móviles: 1 de cada 3 peruanos cuenta con una y la usa de manera habitual*. Grupo Credicorp. Available at: <https://grupocredicorp.com/noticias/billeteras-moviles-1-de-cada-3-peruanos-cuenta-con-una-y-la-usa-de-manera-habitual/#:~:text=Seg%C3%BAn%20el%20informe%2C%20ho%20y%20o%20aplicativos%20de%20entidades%20bancarias>
- Credicorp (2023b). *Inclusión Financiera en el Perú 2023*. Game Changers. Available at: <https://grupocredicorp.com/indice-inclusion-financiera/#estudios>
- Cuesta-Valiño, P., Gutiérrez-Rodríguez, P., García-Henche, B., & Núñez-Barriopedro, E. (2024). The impact of corporate social responsibility on consumer brand engagement and purchase intention at fashion retailers. *Psychology & Marketing*, 41(3), 649-664. <https://doi.org/10.1002/mar.21940>
- Davis, F.D., Bagozzi, R.P., & Warshaw, P.R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982-1003. <https://doi.org/10.1287/mnsc.35.8.982>
- Diamantopoulos, A., & Winklhofer, H.M. (2001). Index Construction with Formative Indicators: An Alternative to Scale Development. *Journal of Marketing Research*, 38, 269-277. <https://doi.org/10.1509/jmkr.38.2.269.18845>
- Duc, P.M., Tran, D., & Anh, D.N. (2022). Integrated marketing communications for Fintech products: Empirical study on Agribank eMobile banking by VNPAY. *Journal of System and Management Sciences*, 4, 147-174. <https://doi.org/10.33168/JSMS.2022.0410>
- Elshaer, I.A., Alrawad, M., Lutfi, A., & Azazz, A.M. (2024). Social Commerce and Buying Intention Post COVID-19: Evidence from a Hybrid Approach Based on SEM-fsQCA. *Journal of Retailing and Consumer Services*, 76. <https://doi.org/10.1016/j.jretconser.2023.103548>
- Escobar-Rodríguez, T., & Carvajal-Trujillo, E. (2014). Online purchasing tickets for low cost carriers: an application of the unified theory of acceptance and use of technology (UTAUT) model. *Tourism Management*, 43, 70-88. <https://doi.org/10.1016/j.tourman.2014.01.017>
- Falahat, M., Lee, Y., Foo, Y., & Chia, C. (2019). A model for consumer trust in e-commerce. *Asian Academy of Management Journal*, 24(2), 93-109. <https://doi.org/10.21315/aamj2019.24.s2.7>

- Flavian C., Guinaliu M., & Lu, Y. (2020). Mobile payments adoption – introducing mindfulness to better understand consumer behavior. *International Journal of Bank Marketing*, 38(7), 1575-1599. <https://doi.org/10.1108/IJBM-01-2020-0039>
- Fornell, C., & Larcker, D.F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.2307/3151312>
- Freberg, K., Graham, K., McGaughey, K., & Freberg, L.A. (2011). Who are the social media influencers? A study of public perceptions of personality. *Public Relations Review*, 37(1), 90-92. <https://doi.org/10.1016/j.pubrev.2010.11.001>
- Gbongli, K., Xu, Y., Amedjonekou, K.M., & Kovács, L. (2020). Evaluation and Classification of Mobile Financial Services Sustainability Using Structural Equation Modeling and Multiple Criteria Decision-Making Methods. *Sustainability*, 12(4), 1288. <https://doi.org/10.3390/su12041288>
- Gefen, D., Straub, D., & Boudreau, M.C. (2000). Structural equation modeling and regression: Guidelines for research practice. *Communications of the Association for Information Systems*, 4(1). <https://doi.org/10.17705/1CAIS.00407>
- Ghali, Z. (2021). Motives of customers' e-loyalty towards e-banking services: a study in Saudi Arabia. *Journal of Decision Systems*, 30(2-3), 172-193. <https://doi.org/10.1080/12460125.2020.1870063>.
- Ghosh, M. (2018). Measuring electronic service quality in India using E-S-QUAL. *International Journal of Quality and Reliability Management*, 35(2), 430-445. <https://doi.org/10.1108/IJQRM-07-2016-0101>
- Gobierno del Perú (2024). *Conocer más sobre las billeteras digitales disponibles en el Perú*. Available at: <https://www.gob.pe/14930-conocer-mas-sobre-las-billeteras-digitales-disponibles-en-el-peru>
- Gómez-Hurtado, C., Gálvez-Sánchez, F.J., Prados-Peña, M.B., & Ortiz-Zamora, A.F. (2024). Adoption of e-wallets: trust and perceived risk in Generation Z in Colombia. *Spanish Journal of Marketing - ESIC*. <https://doi.org/10.1108/SJME-01-2024-0017>
- Goss-Sampson, M.A. (2024). *Statistical Analysis in JASP: A Guide for Students*. JASP
- Goyette, I., Ricard, L., Bergeron, J., & Marticotte, F. (2010). e-WOM Scale: Word-of-Mouth Measurement Scale for e-Services Context. *Canadian Journal of Administrative Sciences*, 27, 5-23. <https://doi.org/10.1002/CJAS.129>
- Gronroos, C. (1988). Service quality: *The six criteria of good perceived service*. Review of business, 9(3), 10.
- Gujarati, D.N., & Porter, D.C. (2009). *Basic econometrics* (5th ed.). McGraw-Hill/Irwin.
- Habib, S., Hamadneh, N.N. (2021). Impact of Perceived Risk on Consumers Technology Acceptance in Online Grocery Adoption amid COVID-19 Pandemic. *Sustainability*, 13, 10221. <https://doi.org/10.3390/su131810221>
- Hair, J.F., Black, W.C., Babin, H.J., & Anderson, R.E. (2010). *Multivariate Data Analysis* (7th ed.). Upper Saddle River, NJ: Prentice Hall.
- Hair, J.F., Ringle, C.M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-151.
- Hair, J.F., Risher, J.J., Sarstedt, M., & Ringle, C.M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hair, J.F., Sarstedt, M., Ringle, C.M., & Mena, J.A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40, 414-433. <https://doi.org/10.1007/s11747-011-0261-6>
- Hartanto, N., Mani, L., Jati, M., Josephine, R., & Hidayat, Z. (2022). Factors Affecting Online Purchase Decision, Customer Satisfaction, and Brand Loyalty: An Empirical Study from Indonesia's Biggest E-Commerce. *Journal of Distribution Science*, 20(11), 33-45. <https://doi.org/10.15722/jds.20.11.202211.33>
- Hassan, A.H., Manna, R.F., & El-Ebiary, Y. (2017). The Effect of Trust Based Factors on Using Mobile Commerce in Jordan. *International Journal on Contemporary Computer Research (IJCCR)*, 1(2), 1-7.

- Hennig-Thurau, T., Gwinner, K.P., Walsh, G., & Gremler, D.D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet? *Journal of Interactive Marketing*, 18(1), 38-52. <https://doi.org/10.1002/dir.10073>
- Henseler, J., Ringle, C.M., & Sarstedt, M. (2015). A New Criterion for Assessing Discriminant Validity in Variance-based Structural Equation Modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <https://doi.org/10.1007/s11747-014-0403-8>
- Henseler, J., Ringle, C.M., & Sinkovics, R.R. (2009). The Use of Partial Least Squares Path Modeling in International Marketing. *Advances in International Marketing*, 20, 277-319. [https://doi.org/10.1108/S1474-7979\(2009\)0000020014](https://doi.org/10.1108/S1474-7979(2009)0000020014)
- Hernández, L. (2023). Evaluación de los efectos de la confianza del consumidor sobre el boca-oído electrónico (e-WoM) en tiendas de comercio electrónico en Colombia. *Innovar*, 33(87), 123-137. <https://doi.org/10.15446/innovar.v33n87.105513>
- Hur, Y., Ko, Y.J., & Valacich, J. (2011). A structural model of the relationships between sport website quality, e-satisfaction, and e-loyalty. *Journal of Sport Management*, 25(5), 458-473. <https://doi.org/10.1123/jsm.25.5.458>
- Ieiri, Y., Yamaki, K., & Hishiyama, R. (2024). Community-based management for low-digitalized communities using cross-cutting purchasing behavior. *Humanities and Social Sciences Communications*, 11, e21. <https://doi.org/10.1057/s41599-023-02511-2>
- INEI (2020). PERÚ: *Estimaciones y Proyecciones de Población Departamental por Años Calendario y Edad Simple 1995-2030*. Boletín Especial, 25. Available at: https://www.inei.gob.pe/media/MenuRecursivo/publicaciones_digitales/Est/Lib1722/
- INEI (2024a). *Aumentó la población usuaria de Internet en todos los grupos de edad en el primer trimestre de 2024*. Available at: <https://m.inei.gob.pe/media/MenuRecursivo/noticias/nota-de-prensa-n-101-2024-inei.pdf>
- INEI (2024b). *Perú: Indicadores de Educación según Departamentos, 2013-2023*. Available at: <https://cdn.www.gob.pe/uploads/document/file/7043096/6061323-peru-indicadores-de-educacion-segun-departamentos-2013-2023.pdf?v=1728072117>
- Instituto Peruano de Economía (2024). *En un día se registran 15.8 millones de transacciones con billeteras móviles*. Available at: <https://www.ipec.org.pe/portal/en-un-dia-se-registran-15-8-millones-de-transacciones-con-billeteras-moviles/>
- Islam, K.M.A., Hasan, Z., Tawfiq, T.T., Bhuiyan, A.B., & Faisal-E-Alam, M. (2024). Bank becomes cashless: Determinants of acceptance of mobile banking (fintech) services among banking service users. *Banks and Bank Systems*, 19(2), 30-39. [https://doi.org/10.21511/bbs.19\(2\).2024.03](https://doi.org/10.21511/bbs.19(2).2024.03)
- Ismagilova, E., Rana, N.P., Slade, E.L., & Dwivedi, Y.K. (2021). A meta-analysis of the factors affecting eWOM providing behaviour. *European Journal of Marketing*, 55(4), 1067-1102. <https://doi.org/10.1108/EJM-07-2018-0472>
- Izquierdo-Yusat, A., & Martínez-Ruiz, M.P. (2009). Análisis de los factores que condicionan la elección del canal de compra por parte del consumidor: evidencias empíricas en la industria hotelera. *Cuadernos de Economía y Dirección de la Empresa*, 41, 93-122. [https://doi.org/10.1016/S1138-5758\(09\)70049-0](https://doi.org/10.1016/S1138-5758(09)70049-0)
- Jarvenpaa, S., & Todd, P.A. (1997). Consumer Reactions to Electronic Shopping on the World Wide Web. *International Journal of Electronic Commerce*, 1(2), 59-88.
- Jiang, L., Jun, M., & Yang, Z. (2016). Customer-perceived value and loyalty: How do key service quality dimensions matter in the context of B2C e-commerce? *Service Business*, 10(2), 301-317. <https://doi.org/10.1007/s11628-015-0269-y>
- Jiang, Y., Chen, D., & Lai, F. (2010). Technological-personal-environmental (TPE) framework: A conceptual model for technology acceptance at the individual level. *Journal of International Technology and Information Management*, 19(3), e5. <https://doi.org/10.58729/1941-6679.1087>
- Jöreskog, K.G. (1971). Simultaneous factor analysis in several populations. *Psychometrika*, 36(4), 409-426.

- Julião, J., Ayllon, T., & Gaspar, M. (2023). Financial inclusion through digital banking: The case of Peru. In Machado, J., Soares, F., Trojanowska, J., Ivanov, V., Antosz, K., Ren, Y. et al. (Eds.), *Innovations in industrial engineering II* (294-304). Cham, Switzerland: Springer International Publishing. https://doi.org/10.1007/978-3-031-09360-9_24
- Kaiser, H.F. (1974) An index of factorial simplicity. *Psychometrika*, 39, 31-36. <http://dx.doi.org/10.1007/BF02291575>
- Keller, K.L. (1993). Conceptualizing, measuring, and managing Customer-Based Brand equity. *Journal of Marketing*, 57(1), 1-22.
- Khamitov, M., Rajavi, K., Huang, D.W., & Hong, Y. (2024). Consumer Trust: Meta-Analysis of 50 Years of Empirical Research. *Journal of Consumer Research*, 51(1), 7-18, <https://doi.org/10.1093/jcr/ucad065>
- Kim, Y., & Peterson, R. (2017). A meta-analysis of online trust relationships in e-commerce. *Journal of Interactive Marketing*, 38, 44-54. <https://doi.org/10.1016/j.intmar.2017.01.001>
- Krejcie, R.V., & Morgan, D.W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30(3), 607-610. <https://doi.org/10.1177/001316447003000308>
- Kurniadi, H., & Rana, J.A.S. (2023). The power of trust: How does consumer trust impact satisfaction and loyalty in Indonesian digital business? *Innovative Marketing*, 19(2), 236-249. [https://doi.org/10.21511/im.19\(2\).2023.19](https://doi.org/10.21511/im.19(2).2023.19)
- Larios, E. (2020). Comportamiento de compra ante el COVID-19: un estudio transversal latinoamericano desde un enfoque del marketing sanitario. *Horizonte Sanitario*, 20(1), 105-120. <https://doi.org/10.19136/hs.a20n1.3967>
- Li, X., Ma, J., Zhou, X., & Yuan, R. (2023). Research on Consumer Trust Mechanism in China's B2C E-Commerce Platform for Second-Hand Cars. *Sustainability*, 15(5). <https://doi.org/10.3390/su15054244>
- Lisun, Y., Semenova, L., Kudyko, O., Kovalchuk, S., & Semchuk, D. (2024). The Role of Social Networks in Shaping Consumer Trends and Developing the Advertising Industry. *Economic Affairs*, 69, 10-10. <https://doi.org/10.46852/0424-2513.1.2024.2>
- Macdonald, E. K., & Sharp, B. M. (2000). Brand Awareness Effects on Consumer Decision Making for a Common, Repeat Purchase Product: A Replication. *Journal of Business Research*, 48, 5-15. [https://doi.org/10.1016/S0148-2963\(98\)00070-8](https://doi.org/10.1016/S0148-2963(98)00070-8)
- Maia, C., Lunardi, G., Dolci, D., & Añaña, E. (2022). The effects of brand and online reviews on consumer trust and purchase intentions in developing countries: the case of the online travel agencies in Brazil. *Brazilian Business Review*, 19(3), 288-308. <https://doi.org/10.15728/bbr.2022.19.3.4>
- Martínez-Navalón, J.G., Fernández-Fernández, M., & Alberto, F.P. (2023). Does privacy and ease of use influence user trust in digital banking applications in Spain and Portugal? *International Entrepreneurship and Management Journal*, 19, 781-803. <https://doi.org/10.1007/s11365-023-00839-4>
- Masoud, E., & AbuTaqa, H. (2017). Factors affecting customers' adoption of E-banking services in Jordan. *Information Resources Management Journal*, 30(2), 44-60. <https://doi.org/10.4018/IRMJ.2017040103>
- Matute, J., Redondo, Y., & Utrillas, A. (2015). Las características del boca-oido electrónico y su influencia en la intención de recompra online. *Revista Europea de Dirección y Economía de la Empresa*, 24(2), 61-75. <https://doi.org/10.1016/j.redec.2015.03.002>
- Mayer, R.C., Davis, J.H., & Schoorman, F.D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709-734. <https://doi.org/10.2307/258792>
- McKnight, D.H., & Chervany, N.L. (2001). What Trust Means in E-Commerce Customer Relationships: An Interdisciplinary Conceptual Typology. *International Journal Electronic Commerce*, 6(2), 35-59. <https://doi.org/10.1080/10864415.2001.11044235>

- McKnight, H.D., Choudhury, V., & Kacmar, C. (2002). Developing and validating trust measures for e-commerce: An integrative typology. *Information Systems Research*, 13(3), 334-359. <https://doi.org/10.1287/isre.13.3.334.81>
- Neyman, J., & Pearson, E.S. (1933). On the problem of the most efficient tests of statistical hypotheses. *Philosophical Transactions of the Royal Society of London*, 231, 289-337. <https://doi.org/10.1098/rsta.1933.0009>
- Nielsen, J., Molich, R., Snyder, C., & Farrell, S. (2000). *E-commerce user experience* (1-51). Nielsen Norman Group.
- Oliveira, T., Alhinho, M., Rita, P., & Dhillon, G. (2017). Modelling and testing consumer trust dimensions in e-commerce. *Computers in Human Behavior*, 71, 153-164. <https://doi.org/10.1016/j.chb.2017.01.050>
- Ong, A., German, J., Almario, A., Vistan, J.M., Galang, J., Dantis, J. et al. (2024). Consumer Behavior Analysis and Open Innovation on Actual Purchase from Online Live Selling: A case study in the Philippines. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(2). <https://doi.org/10.1016/j.joitmc.2024.100283>
- Palvia, P. (2009). The role of trust in e-commerce relational exchange: A unified model. *Information & Management*, 46, 213-220. <https://doi.org/10.1016/j.im.2009.02.003>
- Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4), 41-50. <https://doi.org/10.2307/1251430>
- Petrova, E., & Mayia, A. (2020). Psychological Factors of Trust Syrian Youth in Russian Mass Media. *Contemporary Problems of Social Work*, 6(1), 99–107. <https://doi.org/10.17922/2412-5466-2020-6-1-99-107>
- Ramos-Zaga, F.A. (2022). Los Factores de uso y adopción de las billeteras digitales en el Perú. *Newman Business Review*, 8(1), 83-106. <https://doi.org/10.22451/3002.nbr2022.vol8.1.10073>
- Ratnasari, I., Siregar, S., & Maulana, A. (2021). How to build consumer trust towards e-satisfaction in e-commerce sites in the covid-19 pandemic time? *International Journal of Data and Network Science*, 5(2), 127-134. <https://doi.org/10.5267/j.ijdns.2021.2.001>
- Rousseau, D.M., Sitkin, S.B., Burt, R.S., & Camerer, C. (1998). Not so different after all: a crossdiscipline view of trust. *The Academy of Management Review*, 23(3), 393-404. Available at: <https://www.jstor.org/stable/259285>
- Roy, S. (2018). Effects of customer experience across service types, customer types and time. *Journal of Services Marketing*, 32(4), 400-413. <https://doi.org/10.1108/JSM-11-2016-0406>
- Salam, A.F., Iyer, L., Palvia, P., & Singh, R. (2005). Trust in E-commerce. *Communications of the ACM*, 48(2), 72-77. <https://doi.org/10.1145/1042091.1042093>
- Sánchez-Alzate, J.A., & Montoya, L.A. (2017). La confianza como elemento fundamental en las compras a través de canales de comercio electrónico. Caso de los consumidores en Antioquia (Colombia). *Innovar*, 27(64), 11-22. <https://doi.org/10.15446/innovar.v27n64.62365>
- Sánchez-Torres, J.A., Canada, F.J.A., Sandoval, A.V., & Alzate, J.A.S. (2018). E-banking in Colombia: factors favouring its acceptance, online trust and government support. *International Journal of Bank Marketing*, 36(1), 170-183. <https://doi.org/10.1108/IJBM-10-2016-0145>
- Santosa, S., Mudiantono, M., Murniyono, C., Hersugondo, H., & Soesanto, H. (2020). Increasing consumers to consumers (C2C) e-commerce in central Java, Indonesia. *Accounting*, 6(5), 753-762. <https://doi.org/10.5267/j.ac.2020.6.008>
- Shahzad, A., Zahrullail, N., Akbar, A., Mohelska, H., & Hussain, A. (2022). COVID-19's impact on Fintech adoption: Behavioral intention to use the financial portal. *Journal of Risk and Financial Management*, 15(10). <https://doi.org/10.3390/jrfm15100428>
- Sharma, J., & Kurien, D. (2017). Perceived Risk in E-Commerce: A Demographic Perspective. *Nmims Management Review*, 34(1), 31-57.

- Shim, S., Eastlick, M.A., Lotz, S.L., & Warringt, P. (2001). An Online Prepurchase Intentions Model: The Role of Intention to Search. *Journal of Retailing*, 77(3), 397-416. [https://doi.org/10.1016/S0022-4359\(01\)00051-3](https://doi.org/10.1016/S0022-4359(01)00051-3)
- Shmueli, G., & Koppius, O.R. (2011). Predictive Analytics in Information Systems Research. *MIS Quarterly*, 35(3), 553-572.
- Singh, A.K., Raghuwanshi, S., Sharma, S., Khare, V., Singhal, A., Tripathi, M. et al. (2023). Modeling the nexus between perceived value, risk, negative marketing, and consumer trust with consumers' social cross-platform buying behaviour in India using Smart-PLS. *Journal of Law and Sustainable Development*, 11(4), 01-24. <https://doi.org/10.55908/sdgs.v11i4.488>
- Sirdeshmukh, D., Singh, J., & Sabol, B. (2018). Consumer trust, value, and loyalty in relational exchanges. *Journal of Marketing*, 66(1), 15-37. <https://doi.org/10.1509/jmkg.66.1.15.18449>
- Strzelecki, A., & Rizun, M. (2022). Consumers' Change in Trust and Security after a Personal Data Breach in Online Shopping. *Sustainability*, 14(10). <https://doi.org/10.3390/su14105866>
- Suryono, R., Budi, I., & Purwandari, B. (2020). Challenges and trends of financial technology (Fintech): A systematic literature review. *Information*, 11(12). <https://doi.org/10.3390/info11120590>
- Teo, T.S.H., & Liu, J. (2007). Consumer trust in e-commerce in the United States, Singapore and China. *Omega. The International Journal of Management Science*, 35(1), 22-38. <https://doi.org/10.1016/j.omega.2005.02.001>
- Tian, Y., Chan, T.J., Suki, N.M., & Kasim, M.A. (2023). Moderating role of perceived trust and perceived service quality on consumers' use behavior of Alipay e-wallet system: The perspectives of technology acceptance model and theory of planned behavior. *Human Behavior and Emerging Technologies*, 2023(1), 5276406. <https://doi.org/10.1155/2023/5276406>
- To, A.T., Cao, T.L., Nguyen, K.Q.T., Troung, T.T.V., & Nguyen, T.T. (2023). How Customer Experiences Influence Consumer Trust toward Local Clothing Brands. *Journal Of System and Management Sciences*, 13(3), 325-336. <https://doi.org/10.33168/JSMS.2023.0322>
- Tran, D., Tran, Q., Nguyen, L., & Favia, M. (2014). Factors influencing consumer's trust in e-commerce: An empirical examination in Vietnam. *International Journal of Business Research*, 14(2), 41-52. <https://doi.org/10.18374/IJBR-14-2.4>
- Urus, S., Kurniasari, F., Nazri, S.N.F., Utomo, P., Othman, I.W., Jimmy, S.Y. et al. (2022). A comparative study of fintech payment services adoption among Malaysian and Indonesian fresh graduates: through the lens of UTAUT theory. *Eastern-European Journal of Enterprise Technologies*, 5(13), 73-88. <https://doi.org/10.15587/1729-4061.2022.265662>
- van Zeeland, I., & Pierson, J. (2024). Changing the whole game: effects of the COVID-19 pandemic's accelerated digitalization on European bank staff's data protection capabilities. *Financial Innovation*, 10, e29. <https://doi.org/10.1186/s40854-023-00533-y>
- Wu, Y., & Huang, H. (2023). Influence of Perceived Value on Consumers' Continuous Purchase Intention in Live-Streaming E-Commerce—Mediated by Consumer Trust. *Sustainability*, 15(5). <https://doi.org/10.3390/su15054432>
- Xu, Y., Chong, T.W., Krilavicius, T., & Man, K.L. (2015). Perceived Benefits, Risks and Trust on Online Shopping Festival. *Springer, Cham*, 538, 225-235. https://doi.org/10.1007/978-3-319-24770-0_20
- Yamin, M.A.Y., & Abdalatif, O.A.A. (2024). Examining consumer behavior towards adoption of quick response code mobile payment systems: transforming mobile payment in the fintech industry. *Humanities and Social Sciences Communications*, 11, e675. <https://doi.org/10.1057/s41599-024-03189-w>
- Yeh, Y.H., & Choi, S.M. (2010). MINI-lovers, maxi-mouths: An investigation of antecedents to eWOM intention among brand community members. *Journal of Marketing Communications*, 17(3), 145-162. <https://doi.org/10.1080/13527260903351119>

Zeithaml, V.A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2-22. <https://doi.org/10.1177/002224298805200302>

Appendix A

Operationalization matrix of the variable

Constructs and items
<p>Perceived Service Quality (PSQ) (Adapted from Palvia, 2009)</p> <ul style="list-style-type: none"> PSQ 1: The time it takes me to carry out transactions on digital wallet applications is very reasonable. PSQ 2: The effort involved in carrying out transactions on digital wallet applications is worth it. PSQ 3: The experience of using digital wallet applications is excellent. PSQ 4: I found significant value in carrying out transactions on digital wallet applications. <p>Perceived Information Quality (PIQ) (Adapted from Escobar-Rodríguez & Carvajal-Trujillo, 2014)</p> <ul style="list-style-type: none"> PIQ 1: In general, I believe that digital wallet applications inform me completely about the transaction and its final verification. PIQ 2: In general, I believe that digital wallet applications are easy to navigate and the content allows me to know in a detailed and accurate manner all the necessary information. PIQ 3: In general, I believe that digital wallet applications offer me accurate and up-to-date information on their services and news.
<p>User Experience (UE) (Adapted from Nielsen et al., 2000)</p> <ul style="list-style-type: none"> UE 1: I consider myself fairly experienced in the use of digital wallets. UE 2: I consider myself fairly experienced in the use of the Internet. UE 3: I have used digital wallets for a long time.
<p>Perceived risk (PR) (Adapted from Amaro and Duarte, 2015; Shim et al., 2001)</p> <ul style="list-style-type: none"> PR 1: I believe that the risk of carrying out transactions with digital wallets is very high. PR 2: There is a lot of uncertainty related to transactions from digital wallet applications. PR 3: Transactions with digital wallets are riskier than with other means (cash, mobile banking, agencies, cards).
<p>Consumer Trust (CT) (Adapted from Jiang et al., 2016; Hur et al., 2011; McKnight et al., 2002).</p> <ul style="list-style-type: none"> CT 1: The digital wallets that I use always perform honestly on every transaction. CT 2: My online transactions are always secure when I use a digital wallet. CT 3: It is easy for me to carry out transactions using digital wallets. CT 4: I have been able to meet my needs when using digital wallets. CT 5: The information contained in the digital wallets is very detailed. CT 6: The information on products within the digital wallets is complete.
<p>Electronic Word-of-Mouth (E-WoM) (Adapted from Goyette et al., 2010)</p> <ul style="list-style-type: none"> e-WoM 1: I talk about how easy it is to use digital wallets. e-WoM 2: I talk about the security of digital wallet transactions. e-WoM 3: I talk about the prices of products or services offered through digital wallets. e-WoM 4: I talk about the variety of products or services offered by digital wallets. e-WoM 5: I talk about how easy it is to use digital wallets to carry out transactions. e-WoM 6: I talk about the notoriety of the companies that use digital wallets.

Intangible Capital, 2025 (www.intangiblecapital.org)



Article's contents are provided on an Attribution-Non Commercial 4.0 Creative commons International License. Readers are allowed to copy, distribute and communicate article's contents, provided the author's and Intangible Capital's names are included. It must not be used for commercial purposes. To see the complete license contents, please visit <https://creativecommons.org/licenses/by-nc/4.0/>.