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Customers' Trust in E-payment: The Influence of Security and Privacy

Omkar Poudel[1*], Pradeep Acharya[2] and Daya Simkhada[3]

[1] Birendra Multiple Campus, Tribhuvan University, Bharatpur, Chitwan, Nepal
[2] School of Management Tribhuvan University, Kathmandu, Nepal, E-mail: pradeep.acharya197@gmail.com
[3] James Madison University, USA, E-mail: simkhadr@dukes.jmu.edu
[*]Corresponding author: mail: omkar60475@gmail.com

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Abstract

Security and Privacy are the key factors in the digital payment platform. With the advancement of the technology the use of the digital payment platform has largely increased. How people perceive the security and privacy factors are important determining factors for using and not using the digital payment platform. Perceived ease of use and Perceived Usefulness also have a defining impact on individual's intention to use the digital payment platform. This paper tends to study the impact of security and privacy perceptions on customers trust among digital payment users and also the impact of perceived usefulness and perceived use of use on customers intention to use digital payment. For the purpose of the study 327 samples on the basis of past research conducted were collected and after the reliability and validity test, path analysis was employed to test hypothesis. The result suggests that security and privacy perceptions have significant impact on customers trust and also the trust do have significant positive impact on customer's intention to use. On the other hand perceived ease of use and perceived usefulness also have significant impact on customers intention to digital payment technology.

Keywords: *Digital payment, intention to use, security, privacy, trust, perceived usefulness.*

1. Introduction

When Western Union introduced the electronic fund transfer (EFT) in the United States in 1871, the first electronic payments were made. That was the first time customers could pay for products and services without bodily being there while the transaction took place. Since then, payment methods have changed expressively, with the introduction of the first modern credit card by the Bank of America in 1958. The growth of the e-commerce has the foundation of e-payment system, as many of the corporation and organization express their view in the support of e-payment system for their e-commerce development (Kousaridas et al., 2008).

Many researchers define e-payment in the different ways. Teoh et al. (2013) stated that "e-payment is transfer of an electronic value of payment from a payer to payee through an e-payment channel that allows customers to remotely access and manage their bank accounts and transactions electronically". In another perspective, Peter and Babatunde (2012) viewed e-payment system as "any form of fund transfer via the

internet". Another definition suggests that e-payment systems are "payments made in electronic commerce environment in the form of money exchange through electronic means" (Kaur & Pathak, 2015).

The advancement of the wireless and internet technology has created greater opportunities and challenges in the present situation providing assist to the development of the electronic commerce and service commerce like electronic payment, mobile commerce, online shopping and many more. E-payment systems is a sure way to transform the money from one point to another and also a medium for the development of technology in the field of economy (Slozko & Pelo , 2015). This statement is supported by many others researcher in their studies like, Hsieh (2001) and Peha and Khamitov (2004). Subsequently, with the introduction of e-payment system the world have moved along with the trend of the cashless payment system among the individuals, organizations and governments (Odi & Richard, 2013). As a result of this, the world is changing from the traditional methods of making payment with coin and paper to the electronic payment method causing the more secure mode of payment among the individuals and organizations (Premchand & Choudhry, 2015).

The main objective of the study is to find the impact of the security and security perceptions on customers trust in the context of the e-payment users. With the advancement of time and technology the number of individual using e-payment platform have increased but people till today don't feel safe to provide information to the e-payment service provider because of the trust issues. To increase the participation of individuals in the e-payment platform the service provider need to assure about the security and privacy gaining trust.

2. Literature review

2.1 Perceived security perception

Perceived Security is defined as "the degree to which people believe a technology or service is secured" (Kim et al., 2010). Customer concerns about system security are key impediments to e-commerce transactions (Orni et al., 2004). When clients engage in online activities and e-payment, their concern about security grows (Zhou, 2011). According to Gervey and Lin (2000), security is simply one factor that influences customers' willingness to trust electronic payment transactions. According to Lim's(2003) findings, the presence of security or the feeling of being secure leads to concerns about trust. Additionally, security can act as a mediator between trust and willingness, ultimately leading to trusting behavior when both factors are present together. According to Suh and Han (2003), despite the fact that a higher number of security mechanisms have been established, individuals are still anxious about using the internet as a medium for online banking. Kumar et al. (2012) discovered that security in the perspective of online banking as perceived by consumers lays the groundwork for institutional trust, paving the way for internet banking adoption.

2.2 Perceived privacy perception

According to Margulis (1977), “privacy represents the control of transactions between

person(s) and other(s), the ultimate aim of which is to enhance autonomy and/or minimize vulnerability". In the technology era, an individual's ability to govern his or her information is becoming increasingly important. Researchers have combined security and privacy to examine the risk involved in the connection between e-commerce and m-commerce (Susanto et al. 2012).

However, privacy and security are not identical concepts; there are important distinctions (Veijalainen, 2012). However, Chang et al.(2005) and Vijayasarathy (2004) claimed that security and privacy are two distinct concepts. According to Paola (1999), consumers may be apprehensive about the vendors' intents regarding how they would utilize the information received by them. Siau et al.(2003) postulated that information privacy is a key component of trust development, and that privacy concerns promote privacy. Another study by Piao et al.(2012) Wang, and Yang (2012) indicated that privacy policies play a vital role in trust and had a substantial positive relationship.

2.3 Trust

Due to risk involved in EPS building trust among the customers is a difficult task. Trust has been the important factor impacting customer's intention to use EPS and it is also found that customers having high trust level towards EPS have greater probability of using the system (Kim et al., 2010) . Research has established a correlation between trust and the adoption of m-commerce, highlighting a similar positive relationship between trust and the adoption of mobile payment methods. However, it has been noted that there is a lack of understanding regarding the development of trust and the specific factors that contribute to it (Hollingsworth & Dembla, 2013; Gerpott & Kornmeier, 2009; Wong & Hsu, 2008; Damghanian et al., 2016).

2.4 Perceived ease of use and perceived usefulness

Perceived utility of mobile payment services is determined by the extent to which one feels that "using mobile payment services makes the payment process more efficient and effective" (Phonthanukitithaworn et al., 2015). The perceived usefulness of any payment service defines the context in which the intention to utilize payment services arises.The extent to which perceived utility influences acceptance is demonstrated in study on e-payment acceptance (Francisco et al., 2015), which discovered that consumers' attitudes are highly influenced by perceived usefulness.

According to Rekarti and Hertina (2014), the intention to use a system is defined as an individual's interest in engaging in an activity that is widely favored. Certain constraints of mobile wallet usage, such as operation and intricacy, cannot satisfy consumers who utilize electronic payment systems. According to Dai and Palvi (2009), the simplicity of learning and using the m-wallet is the essential foundation for consumers' adoption, regardless of their degree of expertise with the system. Several prior researches have shown that perceived simplicity of use has a considerable beneficial influence on users' propensity to utilize the offered system (Rigopoulos & Askounis, 2007; Jayasingh & Eze, 2015).

2.5. Intention to use

Shiau (2014) explored that Behavioral Intention is defined as subjective possibility which reflect willingness of an individual to do some particular task. Different factors play vital role in determining the customers intention to use e-payment platform. The same factors are not relevant to everyone, factors giving rise to intention to use certain thing may differ from person to person.

According to Fishbein and Ajzen (2009), intent to use an e-wallet is the strength of the individual's willingness to acquire the goods. Different aspects such as security, danger, lifestyle compatibility, and facilitating conditions influence customers' desire to use in various ways.

2.6 Hypothesis development

On reviewing the previous findings and literature as well as current research framework the following research hypothesis is designed:

E-payment and internet banking security concerns of the customers are concerns about confidentiality, authentication, availability, and fraud (Chen, 2008). The main consideration that needed to be taken care is the security of the customers as it is the critical factor for the trust to exist (Hernandez-Ortega, 2011).

H1: Perceived security perceptions have positive effect on customer's trust towards e-payment.

Privacy concerns of the users is about losing the control over the provided information while conducting the online transactions (Al-Sharafi et al., 2018). Personal information collection, usage, storage, and disclosure are main concerns about the privacy aspect (Featherman & Pavlou, 2003).

H2: Perceived privacy perception has positive effect on customer's trust towards e-payment.

Trust is internet banking is divided in to two concepts, which are trusts in banks or internet banking vendor and trust in the technology used (Yousafzai et al., 2010). Such trustworthiness is important factor for customer's beliefs where users trust in banking has enforced security, privacy usability, reliability, and other attributes of online banking and such attributes determine the level of trust and at the end the adoption intention (Egger, 2000).

H3: Trust has positive impact on customers' intention to use e-payment services.

In numerous studies, it has been commonly employed alongside constructs such as integrity, intention, satisfaction and trust (Hernandez-Ortega, 2011). Flavián et al. (2020) did study on the customer's intention to use mobile payment and concluded that the customer's desire to use mobile payment is highly influenced by perceived ease of use.

H4: The perception of ease of use has positive influence on customer's intention to use.

Sthapit & Bajracharya (2019) tested the intention to adopt the e-banking in case of Kathmandu among the college students and found that perceived usefulness has greater

influence on student's intention to use electronic-banking. In their research, Sariyon et al., (2020) discovered that perceived usefulness has a notably stronger impact on the adoption of internet banking among secondary school teachers.

H5: There is a positive relationship between perceived usefulness and customers' intention to use.

2.7 Conceptual model

The model was constructed based on a framework derived from the existing literature of (Al-Sharafi et al., 2018). Privacy, Security, Trust, Intention to use, Perceived ease of use and Perceived usefulness are the variables for the purpose of the study.

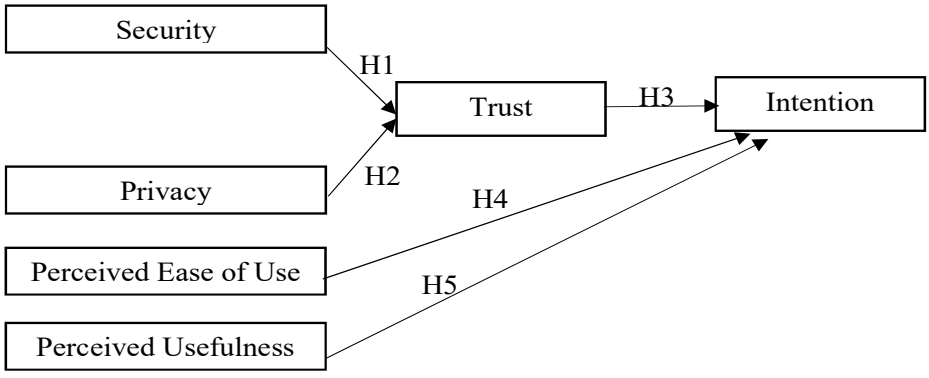

Figure 1: Conceptual Model

3. Methods and materials

3.1 Collection of data

The data was acquired through the use of a self-administered questionnaire, where individuals evaluated the provided items using a Likert scale. To test the hypothesized hypothesis, a questionnaire was created in Google Forms and sent through the internet. Many research (Al-Sharafi et al. 2018; Gerpott & Kornmeier, 2009; Kim et al. 2010; Lee & Chung, 2009) related to customers' acceptance of the digital payment are based on the research with the sample data ranging around 350 sample size with different environment and condition defining the base for the number of responses required for the purpose of the study thus in the context of our country total of 327 samples were collected, and data was gathered and processed (Poudel & Sapkota, 2022).

3.2 Measurement development

The item for the six construct was taken from the previous research related to internet banking adoption. Items were modified to fit with the research topic relating to e-payment adoption. DeSalvo, et al., (2006) stated that this measure has been proven to produce reliable results, and a good discriminant scale. The items for PU, PEOU, ITU are taken from previous research Davis (1989); Venkatesh & Bala (2008) and items for PSC and PPC are taken from Yousafzai et al., (2010) and item for the PT are taken from Lee & Chung (2009).

3.3 Analysis of data and result

The data analysis was done in two stage analytic process as recommended by Gefen et al., (2000). The measurement model is assessed to determine how each items load back to its construct by conducting the convergent validity and discriminant validity test, Composite reliability test and internal consistency reliability test. Next step is the structural model evaluation, which is done through determining the relation between the latent variable.

4 Analysis and result

Demographic data collection and analysis can offer insights into the traits and requirements of various groups, assisting academics, politicians, marketers, and social scientists in making choices and adjusting their approaches to target audiences.

4.1 Demographic features of the respondent

Table 4.1 Profile of the respondent

	Frequency	Percentage
Gender		
Female	154	47.09
Male	173	52.91
Age		
16-26	183	55.96
27-35	113	43.56
36-50	25	7.65
50 above	6	1.83
Education		
SLC	18	5.5
Plus 2	41	12.5
Bachelors	124	37.9
Masters and above	144	44.0

The table 4.1 reflected the demographic features of the survey people, using e-payment platform. From the total of 327 respondents, 173 respondents were male and 154 respondents were female.

4.2 Correlation between variables

An expression of how closely two variables are linearly related—that is, how much they change at the same rate—statistically is called correlation. It is a typical tactic for illustrating straightforward associations without explicitly stating cause and effect (Poudel & Acharya, 2023; Acharya & Poudel 2023).

Table 4.2 Correlation matrix

	ITU	PEOU	PP	PT	PU	SP
ITU	1					
PEOU	0.765	1				
PP	0.611	0.614	1			
PT	0.592	0.602	0.707	1		
PU	0.773	0.785	0.608	0.565	1	
SP	0.633	0.571	0.702	0.678	0.569	1

The connection between the variables is shown in table 4.2, where we can see that intention to use (ITU) has a stronger association with perceived usefulness (r= 0.773) and a correlation value of r= 0.765 with perceived ease of use. Again, PP has a correlation value of 0.707 with trust and SP has a correlation value of 0.678 with trust, indicating that both privacy and security perception have a positive relationship with trust, Similarly, the correlation value of PT with ITU is 0.592, indicating a moderate relationship between Trust and ITU. Many past research like (Al-Sharafi et al. 2018; Kim et al. 2010) have also provided the similar results relating to the variables included in this research.

4.3 Reliability and convergent validity analysis

The consistency and stability of a measuring or assessment instrument are referred to as reliability. The degree to which a measurement properly measures what it is designed to measure is referred to as validity. The construct or notion that a measuring instrument promises to measure must thus truly be measured. The internal consistency, also known as dependability, of a group of survey items is measured by the Cronbach's alpha coefficient. Use this statistic to assess if a group of items consistently captures the same trait (Acharya et al., 2023). These items are of prime important for the research purpose and they are measured through the Cronobachs Alpha, AVE, Composite Reliability, outer loading and discriminant validity which are calculated and displayed in below tables.

Table 4.3 Cronbach's alpha

Construct	Number of Items	Cronbach's Alpha (α)
ITU	3	0.836
PEOU	4	0.905
PP	6	0.88
SP	5	0.848
P T	3	0.825
PU	4	0.894

The Cronbach's alpha values for all six variables exceeded 0.7, indicating that the items demonstrated high reliability and internal consistency, surpassing the acceptable range.

Table 4.4 Composite reliability

Constructs	CR	AVE
ITU	0.902	0.755
PEOU	0.933	0.778
PP	0.909	0.626
PT	0.895	0.741
PU	0.926	0.758
SP	0.892	0.622

Table 4.4 displayed the composite reliability and Average Variance Extracted for all constructions. The Composite Reliability (CR) values were found to be higher than 0.80, while the Average Variance Extracted (AVE) values exceeded 0.60. These

values significantly surpassed the required thresholds, indicating strong reliability and construct validity.

Table 4.5 Outer loading

Constructs	Items	ITU	PP	PEOU	PU	PS	PT
Intention to use							
	ITU1	0.891					
	ITU2	0.788					
	ITU3	0.923					
Perceived privacy							
	P1		0.759				
	P2		0.751				
	P3		0.812				
	P4		0.808				
	P5		0.816				
	P6		0.798				
Perceived ease of use							
	PE1			0.879			
	PE2			0.832			
	PE3			0.926			
	PE4			0.890			
Perceived usefulness							
	PU1				0.876		
	PU2				0.850		
	PU3				0.893		
	PU4				0.864		
Perceived security							
	S1					0.796	
	S2					0.772	
	S3					0.817	
	S4					0.785	
	S5					0.772	
Perceived trust							
	T1						0.854
	T2						0.837
	T3						0.890

The convergent validity of the constructs was assessed using two criteria established by Fornell and Larcker (1981). Primary criterion involved assessing the AVE. According to Hair et al.(2019), an AVE greater than 0.50 is regarded suitable. Secondary criterion involved calculating the total loading of the items onto their respective constructs. According to Barclay et al. (1995), the exterior loading or outside loading must be more than 0.70 in order to be approved.

4.4 Discriminant validity

Table 4.6 Discriminant validity

Constructs	ITU	PEOU	PP	PT	PU	PS
ITU	**0.869**					
PEOU	0.765	**0.882**				
PP	0.611	0.614	**0.791**			
PT	0.592	0.602	0.707	**0.861**		
PU	0.773	0.785	0.608	0.565	**0.871**	
PS	0.633	0.571	0.702	0.678	0.569	**0.789**

In order to ensure better discriminant validity, Fornell and Larcker (1981) recommend that the square root of the Average Variance Extracted for each construct should be greater than the inter-construct correlations. All of the constructions in this case meet the requisite conditions. Henseler et al., (2015), on the other hand, the use of the HTMT scale is advocated for properly testing discriminant validity in variance-based structural equation modeling (SEM). According to Henseler et al., a (2015), the threshold value for discriminant validity using HTMT is 0.90. All of the values driven are below 0.90 that indicate that there is no concern regarding discriminant validity in case of the items and variables included in the research.

Table 4.7 Discriminant validity — Heterotrait–Monotrait Ratio (HTMT) approach.

Constructs	ITU	PEOU	PP	PT	PU	PS
ITU						
PEOU	0.872					
PP	0.714	0.686				
PT	0.708	0.694	0.825			
PU	0.889	0.87	0.682	0.651		
PS	0.753	0.65	0.81	0.809	0.651	

4.5 Structural model

SEM is a tool for determining if a relationship exists between study constructs based on their covariance matrix (Hu et al., 2019).The explanatory power and the t-values of the path coefficients were utilized to assess the structural model. Hair et al. (2016) proposed R^2 values, effect size (f^2), and predictive relevance (Q^2) as Structural Model main criteria for assessment.

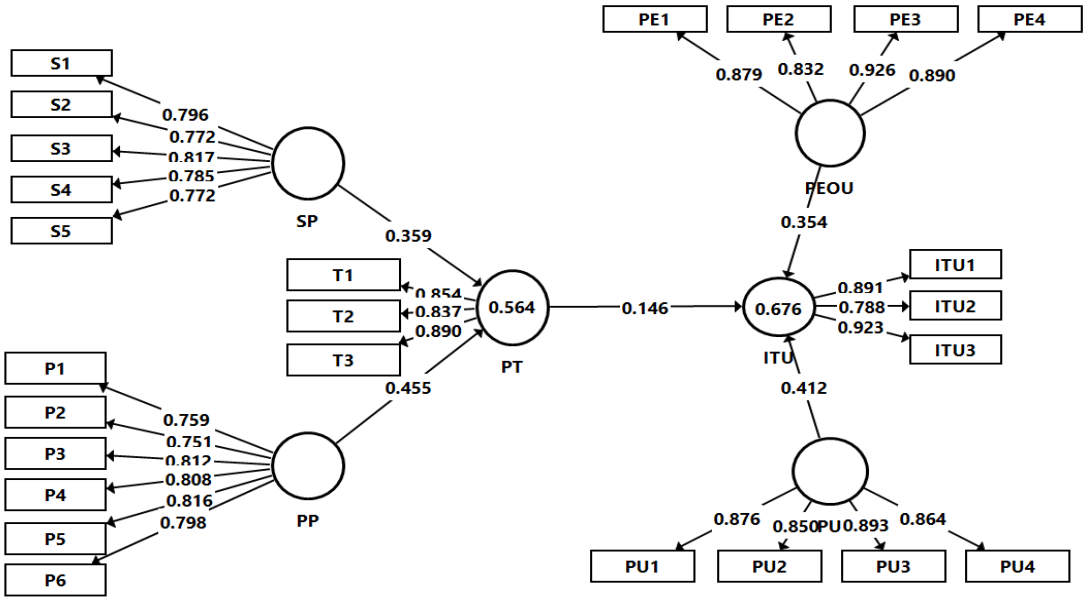

Figure 2: Measurement Model

4.6 Coefficient of determination (R^2)

The coefficient of determination was used to demonstrate the explanatory power of exogenous factors on endogenous variables. The coefficient of determination was employed to gauge the explanatory power of the independent variable on the dependent variable. It indicates the extent to which the independent variables can account for the changes observed in the dependent variable.

Table 4.8 Coefficient of determination

Constructs	R^2	Adjusted R^2
Intention to use (ITU)	0.676	0.673
Perceived trust (PT)	0.564s	0.562

- The coefficient of determination of the variable Intention to use (ITU) was 0.676, which means that the variables that comprise ITU (Perceived Trust, Perceived Ease of Use, and Perceived Usefulness) explained 67.6% of changes in ITU, while the remaining 32.4% of changes were accounted for by variables that were not considered and fell beyond the study's scope.
- The coefficient of determination for the measure of PT was 0.564, indicating that the factors associated with PT i,e, PS & PP accounted for 56.4% of the variations in PT. However, the remaining 43.6% of changes were attributed to variables that were not considered within the scope of the research.

4.7 Effect size: F-square (F^2) and predictive relevance (Q^2)

Cohen (1988) claimed that effect sizes greater than 0.35, 0.15, and 0.02 correspond to large, medium, and modest F^2 effect sizes, respectively. This indicates that the aforementioned values suggest a big, medium, and small impact of the sample on the variables.

Table 4.9 Values of F^2

F^2	Original sample	t- Stat	Prob. values
PEOU -> ITU	0.134	2.368	0.018
PP -> PT	0.24	3.266	0.001
PT -> ITU	0.041	1.538	0.124
PU -> ITU	0.194	2.987	0.003
SP -> PT	0.15	2.46	0.014

Perceived trust and perceived ease of use have little influence on sample size and the remaining variables. The effect size index for perceived privacy, perceived usefulness, and perceived security is medium. Q^2 statistic represents the model's predictive ability in forecasting events. According to Sarstedt et al., (2017), a Q^2 value larger than zero has stronger predictive importance. The value of Q^2 is determined via blindfolding.

Table 4.10 Q- Square values

Constructs	SSO	SSE	Q^2 (=1-SSE/SSO)
ITU	981	490.596	0.5
PEOU	1308	1308	
PP	1962	1962	
PT	981	578.178	0.411
PU	1308	1308	
SP	1635	1635	

The value of Q^2 as determined by the blindfolding procedure. In this case, Q^2 is 0.50 for ITU and 0.411 for PT, both of which are significantly higher than the needed threshold of zero. As a result of the aforesaid computation, it is obvious that the model studied in the research has more predictive value.

4.8 Path coefficient and hypothesis testing

Table 4.11 Path coefficients

Hypothesis	Relationship	Beta	Std. deviation	t-Stat.	Prob. value	Decisions
H_1	**SP -> PT**	0.359	0.062	5.743	0.000	Supported
H_2	**PP -> PT**	0.455	0.06	7.516	0.000	Supported
H_3	**PT -> ITU**	0.146	0.044	3.303	0.001	Supported
H_4	**PEOU -> ITU**	0.354	0.061	5.822	0.000	Supported
H_5	**PU -> ITU**	0.412	0.059	6.954	0.000	Supported

Table 4.11 displayed the route analysis of the study hypotheses from H1 to H5. The route analysis revealed that all of the hypotheses from H1 to H6 are supported. The route from security perception to perceived trust (SP->PT) is positive and significant (=0.359, t-stat=5.743, and p-value0.05), supporting hypothesis H1. Again, path analysis revealed that hypothesis H2 (PP -> PT) is supported, with the relationship between Perceived Privacy and Perceived Trust being positive and statistically significant (=0.455, t-stat=7.516, and p-value0.05) at the 5% confidence level.

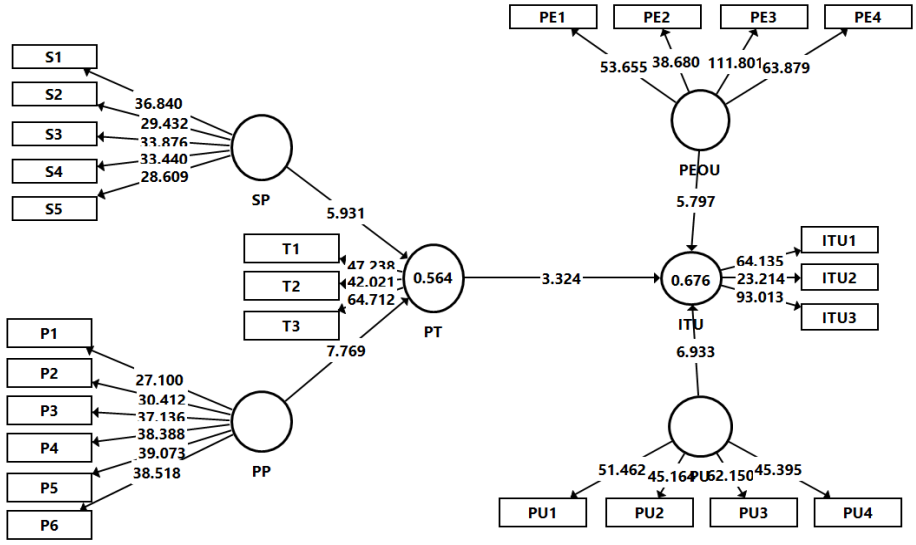

Figure 3: Structural model and path analysis

Similarly, the third hypothesis H3 (PT -> ITU) is validated throughout the path analysis and hypothesis testing, with significant and positive relationship between perceived Trust and intention to use (= 0.146, t-stat = 3.303, and p-value 0.05). Similarly, in the analysis process, it reflected and concluded that both hypothesis H4 (PEOU -> ITU) and H5 (PU -> ITU) are supported since they are significant and have a positive relationship. H4 has (= 0.354, t-stat = 5.822 and p-value 0.05) and H5 has (= 0.412, t-stat = 6.954 and p-value 0.05).

5. Conclusion

The study sought to ascertain the relationship between perceived usefulness, perceived ease of use, perceived trust, privacy perception and security perception. The findings revealed a substantial positive relationship among perceived trust, perceived privacy and security perceptions. It was found that perceived ease of use, perceived trust and perceived utility all have a substantial positive association with intention to use. Individuals' trust in digital payment platforms grows as their security and privacy perceptions improve, which leads to a rise in their desire to utilize digital payment platforms. This study also discovered that perceived simplicity of use and perceived usefulness boost propensity to use. In the current technological landscape, where individuals heavily depend on technology, it has become increasingly challenging to avoid its presence. Technology has become an integral part of daily life for many people. Even in the case of e-payment, technology has surpassed traditional payment methods, with an increasing number of people adopting e-payment platforms.

According to the findings, consumers are more concerned about their privacy than they are about their security. This suggested that individuals are concerned about the possibility of information leaking while using an electronic-payment platform.

Furthermore, this research found that perceived usefulness had a bigger influence on intention to use than perceived ease of use. As a result, clients choose a higher level of helpful e-payment platform to simple and trustworthy e-payment platforms.

According to studies, privacy and security have approximately identical effects on individual trust. As a result, service providers must ensure both the security and privacy components of the transaction process. Similarly, they must focus on building public confidence by providing easy, rapid, and assessable services that satisfy the needs of individuals.

References

Acharya, P., & Poudel, O. (2023). Interplay of financial socialization, financial behavior, and adult financial well-being. *Management Dyamics,* 26(1), 33-42.

Acharya, P., Poudel, O. & Simkhada, D. (2023). What motivates people to use digital transaction? The dynamics of subjective norms, perceived behavior control, trust and attitude. *The OECM Journal of Management, Technology & Social Sciences.* 3(1), 24-32.

Al-Sharafi, M. A., Arshah, R. A., Herzallah, F. A., & Abu-Shanab, E. A. (2018). The impact of customer trust and perception of secuirty and privacy on the acceptance of online banking services. *International Journal of Industrial Management, 4*.

Barclay, D., Higgins, C., & Thompson, R. (1995). The partial least squares (pls) approach to causal modelling: personal computer adoption and use as an illustration. *Technology and Investment, 2*(2), 285-309.

Chang, M.K.,Cheung, W., & Lai, V. S.(2005). Literature derived referance models for the adoption of online shopping. *Information & Management,* 42(4), 543–559.

Chen, L. D. (2008). A model of consumer acceptance of the mobile banking. *International Journal of Mobile Communication, 6*, 32-52.

Cohen, J. E. (1988). *Statistical Power Analysis or the Behavioral Sciences* (Vol. 2). Lawrence Erlbaum Associates.

Dai, H., & Palvi, P. C. (2009). Mobile commerce adoption in China and the United States: A cross-cultural study. *ACM SIGMIS DATABASE: The DATABASE for Advances in Information Systems, 40*(4), 43-61.

Damghanian, H., Zarei, A., & Kojuri, M. S. (2016). Impact of perceived security on trust, perceived risk, and acceptance of online banking in Iran. *Journal of Internet Commerce, 15*, 214-238.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319-340. doi:https://doi org/10.2307/249008.

DeSalvo, K. B., Fisher, W. P., Tran, K., Bloser, N., Merrill, W., & Peabody, J. (2006). Assessing measurement properties of two single-item general health measures. *Quality of Life Research, 15*(2), 191-201.

Egger, F. N. (2000). Trust me I am a online vendor: Towards the model of trust on e-commerce system design. *Extended Abstracts on Human Factors in Computer System.*

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: algebra and statistics. *Journal of Marketing Research, 18*, 382-388.

Featherman, M. S., & Pavlou, P. A. (2003). Predicting e-services adoption: A perceived risk facets prespectives. *International Journal of Human Computer Studies, 59*, 451-474.

Flavián, 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.

Fishbein, M., & Ajzen, I. (2009). *Predicting and changing behavior: the reasoned action approach* (1 ed.). Psychology Press.

Francisco, L. C., Francisco, M. L., & Juan, S. F. (2015). Payment systems in new electronic environments: Consumer behavior in payment systems via SMS. *International Journal of Information Technology & Decision Making, 14*(2), 421-449.

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), 7.

Gerpott, T. J., & Kornmeier, K. (2009). Determinants of customer acceptance of mobile payment system. *International Journal of Electronic Finance, 3*(1), 1-30.

Gervey, B., & Lin, J. (2000). Obstacles on the internet. *Advertising Age, 71*, 12-22.

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*, 2-24. doi:https://doi.org/10.1108/EBR-11-2018-0203

Hair Jr, J. F., Hult, G. T., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM).* Sage publications.

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*, 115-135.

Hernandez-Ortega, B. (2011). The role of post-use trust in acceptance of the technology: Drivers and Consequences. *Technovation, 31*, 523-538.

Hsieh, C. (2001). E-commerce payment systems: critical issues and management strategies. *Human Systems Management, 20*, 131-138.

Hollingsworth, C. T., & Dembla, P. (2013). Toward an understanding why users engage in m-commerce. *Southern Association for Information Systems.* Savannah.

Hu, Z., Ding, S., Li, S., Chen, L., & Yang, S. (2019). Adoption intention of fintech services for bank users: An empirical examination with an extended technology acceptance model. *Symmetry, 11*(3), 340.

Jayasingh, S., & Eze, U. C. (2015). An empirical analysis of consumer behavioural intention towards mobile coupons in Malaysia. *International Journal of Business and Information, 4*(2), 221-242.

Kaur, K., & Pathak, A. (2015). E-payment system on e-commerce in India. *International Journal of Engineering Research and Applications, 5*(2), 79-87.

Kim, C., Tao, W., Shin, N., & Kim, K. (2010). An empirical study of customers' perceptions of security and trust in e-payment systems. *Electronic Commerce Research and Applications, 9*(1), 84-95.

Kousaridas, A., Parissis, G., & Apostolopoulos, T. (2008). An open financial services architecture based on the use of intelligent mobile devices. *Electronic Commerce Research and Applications, 7*, 232-246.

Kumar, M., Sareen, M., & Barquissau, E. (2012). Relationship between types of trust and level

of adoption of Internet banking. *Problems and Perspectives in Management, 10*(1), 82-92.

Lee, K. C., & Chung, N. (2009). Understanding factors affecting trust in and satisfaction with mobile banking in Korea: A modified DeLone and McLean's model perspective. *Interacting with Computers, 21*, 385-392.

Lim, N. (2003). Consumers' perceived risk: Sources versus consequences. *Electronic Commerce Research and Applications, 2*, 216-228.

Margulis, S. T. (1977). Conceptions of privacy: Current status and next steps. *Journal of Social Issues*, *33*(3), 5–21.

Odi, N., & Richard, E. O. (2013). Electronic payment in cashless economy of nigeria: problems and prospects. *Journal of Management Research, 5*(1), 138-151.

Orni, K. O., Kaleva, S., Hirvashniemi, S., & Kortelainen, T. (2004). Usability of websites contributing to trust in e-commerce. *Trust in Knowledge Management and Systems in Organizations*, 125-146.

Phonthanukitithaworn, C., Sellitto, C., & Fong, M. (2015). User intentions to adopt mobile payment services: a study of early adopters in Thailand. *Journal of Internet Banking and Commerce, 20*(1).

Piao, C., Wang, S., & Yang, F. (2012). Research on trust evaluation model for mobile commerce based on structural equation modeling. *IEEE Ninth International Conference on e-Business Engineering.*

Peha, J. M., & Khamitov, I. M. (2004). PayCash: a secure efficient internet payment system. *Electronic Commerce Research and Applications, 3*, 381-388.

Peter, M. O., & Babatunde, P. J. (2012). E-Payment: prospects and challenges in nigerian public sector. *International Journal of Modern Engineering Research, 5*(2), 3104-3106.

Poudel, O., & Sapkota, M.P. (2022). Consumer pereception toward digital payment system. *Management Dynamics,* 25(1), 39-50. https://doi.org/10.3126/md.v25i1.53286

Poudel, O., & Acharya, P. (2023). Trust and security in financial technology: How much does it matter? *International Research Journal of MMC (IRJMMC),* 4(3), 1-11.

Premchand, A., & Choudhry, A. (2015). Future of payments – e-payments. *International Journal of Emerging Technology and Advanced Engineering, 5*, 110-115.

Rekarti, E., & Hertina, L. (2014). Several factors that affect online buying intention. *Journal of Economic and Social Sciences, 2*(3), 311-318.

Rigopoulos, G., & Askounis, D. (2007). A TAM framework to evaluate users' perception towards online electronic payments. *Journal of Internet Banking and Commerce, 12*(3), 1-6.

Sariyon, N., Harun, A., & Seman, N. A. (2020). Factors influencing intention to use mobile payment qr code among teachers in Batu Pahat. *Research Management of Technology and Business, 1*(1), 908-917.

Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Partial least squares structural equation modeling. *Handbook of Market Research*.

Shiau, H. C. (2014). The impact of product innovation on behavior intention: the measurement of the mediating effect of the brand image of japanese anime dolls. *The Anthropologist, 17*(3), 777-788.

Siau, K., Nah,F., & Sheng . H. (2003) Values of mobile applications to end-users. *European Research Consortiun for Informatics and Mathematics (ERCIM)News*,54,50-1.

Slozko, O., & Pelo , A. (2015). Problems and risks of digital technologies introduction into e-payments. *Transformations in Business and Economics, 14*(1), 42-59.

Suh, B., & Han, I. (2003). The impact of customer trust and perception of security control on the acceptance of electronic commerce. *International Journal of Electronic Commerce, 7*(3), 135-161.

Susanto, A., Younghoon, C., Hangjung, Z., & Myeong-Cheol, P. (2012). The role of trust and security in smartphone banking continuance. *IEEE International Conference on Systems, Man, and Cybernetics (SMC)* 2133-2138.

Sthapit, A., & Bajracharya, N. (2019). Customer perception towards adoption of e-banking services in kathmandu: a survey of business school students. *Journal of Business and Social Sciences Research, 4*(1), 13-26.

Teoh, W. M., Chong, S. C., Lin, B., & Chua, J. (2013). Factors affecting consumers' perception of e-payment: An empirical analysis. *Internet Research, 23*(4), 465-485.

Veijalainen, J. (2012). Autonomy, heterogeneity, trust, security, and privacy in mobile P2P environments. *International Journal of Security and its Applications*, *1*(1), 57–72.

Vijayasarathy, L. R. (2004). Predicting consumer intentions to use on-line shopping : The case for an augmented technology acceptance model. *Information & Management,* 41(6),747-762.

Venkatesh, V., & Bala, H. (2008). Technology acceptance model 3 and a research agenda on interventions. *Decision Sciences, 39*(2), 315-374.

Wong, Y., & Hsu, C. (2008). A confidence-based framework for business to consumer (B2C) mobile commerce adoption. *Personal and Ubiquitous Computing, 12*(1), 77-84.

Yousafzai, S. Y., Foxall, G. R., & Pallister, J. G. (2010). Explaining internet banking behavior: Theory of reasoned action, Theory of Planned Behavior, or Technology Acceptance Model? *Journal of Applied Social Psychology, 40*(5), 1172-1202.

Zhou, T. (2011). The effect of initial trust on user adoption of mobile payment. *Information Development, 27*(4), 290-300.