

Jurnal Informatika Ekonomi Bisnis

http://www.infeb.org

2025 Vol. 7 Iss. 2 Hal: 304-309 e-ISSN: 2714-8491

Adoption of E-Wallets in Timor-Leste: An Extended UTAUT Approach

Mazarino Neil Araujo Pires Leite Gusmão ¹⊠, Achmad Nizar Hidayanto ², Yugo Kartono Isal ³, Wahyu Catur Wibowo ⁴

^{1,2,3,4}Universitas Indonesia, Faculty of Computer Science

mazarino.neil@office.ac.id

Abstract

This study investigates the factors influencing the adoption of e-wallets in Timor-Leste using an extended Unified Theory of Acceptance and Use of Technology framework. Incorporating context-specific variables digital literacy, trust, inertia, merchant availability, and socialization and campaign the research employs a quantitative approach with data collected from 338 respondents through structured questionnaires. Analysis using Partial Least Squares Structural Equation Modeling reveals that four variables performance expectancy ($\beta = 0.325$), digital literacy ($\beta = 0.161$), socialization and campaign ($\beta = 0.117$), and trust ($\beta = 0.321$) significantly influence intention to use e-wallets. Trust emerged as the most influential factor, underscoring the need for secure, transparent systems to encourage adoption. Surprisingly, effort expectancy, social influence, digital infrastructure, merchant availability, and inertia were found to be non-significant. The model explains 77.1% of the variance in intention to use, with a high predictive relevance ($Q^2 = 0.753$). These findings suggest that user adoption in low-infrastructure contexts depends more on perceived trust and technological competence than on ease of use or peer influence. The results provide strategic insights for policymakers, service providers, and development actors aiming to promote financial inclusion through digital services in emerging economies like Timor-Leste.

Keywords: E-Wallet Adoption, UTAUT, Digital Literacy, Trust, Timor-Leste, Technology Acceptance

INFEB is licensed under a Creative Commons 4.0 International License.



1. Introduction

Over the past decade, electronic wallet (e-wallet) technology has developed rapidly on a global scale as an efficient and inclusive digital payment solution. In many developing countries, e-wallets play a crucial role in promoting financial inclusion, particularly in areas not yet reached by conventional banking services [1][2][3]. Technology adoption models such as the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) have been widely used to analyze the factors that drive or hinder the use of this financial technology [4][5].

In Timor-Leste, e-wallets began to be introduced on a large scale following the launch of Mosan by Telemor in 2018 and T-Pay by Telkomcel in 2019. According to reports from the UNCDF and the Central Bank of Timor-Leste, the number of e-wallet users surged by 111% within two years, reaching more than 180,000 users or around 22% of the adult population. E-wallets in Timor-Leste now surpass other financial services in terms of user reach, as they can be accessed via mobile networks even in remote areas [6][7]. However, a case study in Timor-Leste reveals that this growth does not yet reflect active and sustained usage. Despite high user registration, only 10-15% conduct transactions regularly each quarter. This indicates a gap between registration and the integration of e-wallets into daily financial activities [7]. The types of transactions conducted also indicate specific behavioral patterns:

74% of transactions are peer-to-peer transfers, followed by balance top-ups (10%) and mobile credit recharges (8%). Meanwhile, features such as bill payments, data purchases, and balance inquiries are still rarely used. This supports findings in other developing countries that perceived usefulness, trust, digital literacy, and social influence are key determinants in e-wallet adoption [8][9][10] [11].

The low level of active e-wallet usage in Timor-Leste is influenced by several specific factors that reflect the contextual challenges of a developing country. One of the main factors is the low level of digital literacy, especially among the older population Additionally, socialisation efforts related to advanced e-wallet features are still considered suboptimal, leaving many users unaware of the full potential of these services [6]. Trust is also a significant barrier, as some segments of society remain sceptical about the security and transparency of digital transactions [13]. Furthermore, limited network infrastructure, particularly in remote areas, restricts broad access and usage of e-wallet services [14].

Various previous studies in similar contexts such as India, Kenya, and Indonesia emphasize the importance of contextual approaches that consider cultural, technological, and local behavioral factors in encouraging active e-wallet usage [15][16][17]. Unfortunately, there has been no comprehensive study in Timor-Leste that examines behavioral factors such as performance expectancy, effort expectancy, and social influence, digital infrastructure, as well as trust

and risk perception in an integrated manner within the UTAUT or TAM frameworks.

Therefore, this study aims to analyze the factors influencing the adoption and use of e-wallets in Timor-Leste, referring to an extended UTAUT framework while considering local contextual variables. Globally, the adoption of electronic e-wallets has grown rapidly alongside the rise in mobile device and internet usage. According to a 2023 report by Statista, the total value of e-wallet transactions worldwide is expected to surpass USD 10 trillion by 2025, with particularly strong growth in regions like Asia and Africa. In developing countries, e-wallets play a crucial role in promoting financial inclusion. According to Demirgüç-Kunt et al. [18], e-wallets provide access to financial services without the need for traditional bank accounts an especially valuable solution for unbanked or underbanked populations. This technology enables more efficient and secure digital payments, money transfers, and purchases of essential goods.

However, significant challenges remain, including limited internet access, low levels of digital literacy, and a lack of public trust in digital payment systems [19]. Many people in developing countries continue to rely on cash, which is often seen as safer and more reliable than digital systems that are perceived as complex or vulnerable to fraud [20]. The Unified Theory of Acceptance and Use of Technology (UTAUT), developed by Venkatesh [21], provides a framework for understanding how individuals adopt new technologies. The model includes four core constructs Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC) which influence Behavioral Intention and actual Use Behavior. Numerous studies have applied UTAUT in the context of digital financial services. For example, Oliveira et al. found in their study in Portugal that PE and EE significantly influenced the intention to use mobile payments. In Indonesia, Susanto et al. used UTAUT to analyze the intention to use e-wallets and found that PE and SI were the dominant factors. Next UTAUT model on Figure 1.

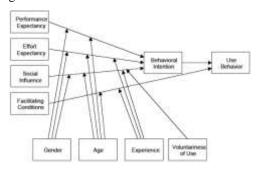


Figure 1. UTAUT Model

Digital literacy refers to an individual's ability to use digital technology effectively and safely. In the context of e-wallet adoption, digital literacy plays a crucial role in shaping users' perceptions of ease of use and trust in the system. Alalwan et al. found that digital literacy

mediates the effect of effort expectancy on the intention to use mobile banking. In Timor-Leste, low levels of education and limited access to digital training remain major barriers to understanding and utilizing e-wallet services.

Trust is a critical element in the adoption of digital financial services. McKnight et al. define trust as the belief that a service provider will act competently and honestly. The dimensions of trust include system security, fee transparency, and user data privacy. Studies by Talwar et al. and Zhou et al. emphasize that trust significantly influences users' decisions to adopt digital payment systems, especially in developing countries where experiences of fraud and low financial literacy are common.

Socialization and educational campaigns serve as vital instruments in raising public awareness and acceptance of new technologies. Governments and service providers play a strategic role in delivering accessible information tailored to local contexts. A study by Kim et al. found that relevant and sustained promotional campaigns can enhance perceived usefulness and trust in technology. In Bangladesh, community-based campaigns for the M-Pesa service significantly boosted user adoption.

2. Research Method

This research adopts an explanatory design within a positivist paradigm to examine the factors influencing e-wallet adoption in Timor-Leste. A quantitative approach was used, employing Partial Least Squares Structural Equation Modeling (PLS-SEM) for data analysis. Data were collected through structured questionnaires from both users and non-users of ewallets using homogeneous purposive sampling. The study has a cross-sectional time horizon. Data were processed using SmartPLS v4 and Microsoft Excel, and conclusions were drawn using a deductive approach. The data collection process was conducted over one month, from November 29 to December 31, 2024. Out of the targeted sample of 368 respondents, a total of 338 valid and complete questionnaire responses obtained. The analysis of demographic characteristics was carried out based on these responses using Microsoft Excel 2023. Respondent demographics on Table 1.

Table 1. Respondent Demographics

Characteristic	N	%
Gender		
Male	176	52,1%
Female	162	47,9%
Age		
Under 20 years old	20	3,0%
20 to 29 years old	131	38,8%
30 to 39 years old	122	36,1%
40 to 49 years old	53	15,7%
50 years old or above	22	6,5%
Education		
Did not complete primary school	2	0,6%
Primary school or equivalent	3	0,3%
Senior high school/vocational school or equivalent	30	8,9%
Diploma I to III	29	8,6%
Bachelor's degree	220	65,1%
Master's degree	54	16,0%
Doctorate	3	0,9%
Do you know the e-wallet applications Mosan and Tpay ?		
Yes	275	81,4%
No	63	18.6%

Table 1 indicates that the gender distribution of respondents is relatively balanced, with 176 males (52.1%) and 162 females (47.9%). In terms of age, most respondents fall within the productive age range of 20 to 39 years. Specifically, 131 respondents (38.8%) were aged between 20 and 29 years, while 122 respondents (36.1%) were aged between 30 and 39 years. Additionally, 53 respondents (15.7%) were aged 40 to 49 years, 22 respondents (6.5%) were aged 50 or older, and only 10 respondents (3%) were under the age of 20.

Regarding educational attainment, most respondents had relatively high levels of education. A total of 220 respondents (65.1%) held a bachelor's degree, 54 respondents (16%) had completed a master's degree, and 3 respondents (0.9%) held a doctoral degree. Meanwhile, only 35 respondents (10.4%) had completed senior high school or lower education levels. In terms of awareness of local e-wallet applications, a majority of respondents 275 individuals (81.4%), reported being aware of the Mosan and T-Pay e-wallet services. Conversely, 63 respondents (18.6%) stated that they were not familiar with either application.

3. Result and Discussion

To assess the reliability and validity of the research instrument, several analytical tests were conducted. Next the structural model of the study on Figure 2.

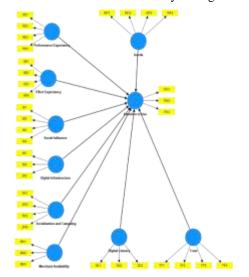


Figure 2. The structural model of the study

Table 2 shows that all indicators showed outer loading values above 0.700, confirming strong convergent validity. Cronbach's Alpha and Composite Reliability (CR) values for all constructs exceeded 0.700, indicating high internal consistency. Average Variance Extracted (AVE) values were above 0.500, meaning each construct was well represented by its indicators. Next Reliability and Validity Measurement on Table 2.

Table 2. Reliability and Validity Measurement

				Convergent Validity	
				Average	Composit
Variabel	Items	Cronbach'	Factor	Variance	e
variabei	nems	s Alpha	Loading	Extracted	Reliability
				(AVE)	(CR)
			0.902		
PE	4	0.951	0.957	0.873	0.953
			0.942		
			0.884		
			0.918		
EE	4	0.923	0.879	0.813	0.926
			0.926		
			0.884		
SI	4	0.888	0.878	0.747	0.894
			0.875		
			0.856		
			0.850		
DI	3	0.904	0.907	0.839	0.907
			0.934		
			0.906		
SC	4	0.924	0.902	0.815	0.925
			0.915		
			0.916		
			0.877		
MA	3	0.917	0.919	0.858	0.924
			0.937		
			0.922		
INT	4	0.902	0.874	0.772	0.913
			0.921		
			0.853		
			0.864		
DL	3	0.889	0.895	0.818	0.897
			0.921		
			0.897		
TT	4	0.946	0.931	0.860	0.946
			0.941		
			0.911		
			0.926		
ITU	3	0.924	0.923	0.867	0.924
			0.936		
			0.935		

Table 3 Heterotrait-Monotrait Ratio (HTMT) showed that all values were below the 0.90 threshold. This indicates that each construct is distinct and effectively represents different variables, with no significant overlap between constructs. Next Heterotrait-Monotrait Ratio on Table 3.

Table 3. Heterotrait-Monotrait Ratio

No		1	2	3	4	6	7	8	9	10	11
1	DI										
2	DL	0.776									
3	EE	0.711	0.758								
4	INT	0.548	0.513	0.341							
5	ITU	0.737	0.799	0.811	0.395						
6	MA	0.825	0.631	0.565	0.531	0.663					
7	PE	0.663	0.696	0.896	0.276	0.853	0.586				
8	SI	0.833	0.703	0.715	0.506	0.764	0.8334	0.730			
9	SC	0.825	0.776	0.794	0.505	0.832	0.744	0.785	0.811		
10	TT	0.835	0.823	0.776	0.461	0.877	0.745	0.792	0.816	0.869	

The author employed the bootstrapping method to evaluate the significance of the path coefficients (β), using 5,000 bootstrap samples in the analysis. Based on Table 4, it is shown that 4 out of the 9 proposed hypotheses were accepted, confirming significant relationships between latent variables at the 5% significance level. However, 5 hypotheses (H2, H3, H4, H6, H7) were rejected, as their t-statistics were

below 1.65 and p-values exceeded 0.05, indicating that these hypotheses did not have a significant effect on the respective latent variables. Next Path Coefficient Model on Table 4.

Table 4. Path Coefficient Model

	Hipotesis	β	T Stat	P Values	Result
H1	PE → <i>ITU</i>	0.325	4.445	0.000	Accept
H2	$EE \rightarrow ITU$	0.037	0.475	0.309	Reject
H3	SI → ITU	0.045	0.831	0.204	Reject
H4	$DI \rightarrow ITU$	-0.050	0.728	0.237	Reject
H5	$SC \rightarrow ITU$	0.117	1.693	0.045	Accept
Н6	$MA \rightarrow ITU$	0.025	0.519	0.308	Reject
H7	INT $\rightarrow ITU$	-0.004	0.119	0.447	Reject
H8	$DL \rightarrow ITU$	0.161	2.887	0.002	Accept
Н9	$TT \rightarrow ITU$	0.321	4.263	0.000	Accept

Figure 3 visualizes the results from Table 4, showing five non-significant hypothesized relationships. Next Result Research on Figure 3.

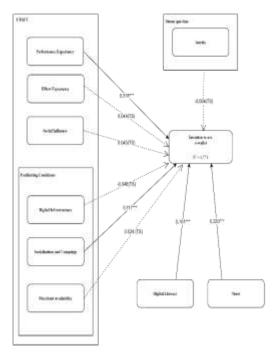


Figure 3. Result Research

The R² value measures a model's predictive power by calculating the squared correlation between predicted and actual values of a given endogenous variable. It indicates how well the exogenous latent variables collectively explain the variance in the endogenous variable. This coefficient is used to assess the model's predictive strength based on the data used in estimation. Predictive relevance can also be evaluated using the Q² value, where positive values for all endogenous variables indicate good predictive relevance. Next Results of Predictive Relevance Assessment on Table 5.

Table 5. Results of Predictive Relevance Assessment

Product	R ²	Description	Q2	Description
Intentio	0.771	Substantial	0.753	Large
to Use				

The analysis of the Intention to Use variable yielded a strong result, with an R² value of 0.771, indicating a substantial level of explanatory power. This suggests that a large portion of the variance in usage intention is effectively explained by the exogenous variables in the model, reflecting the model's theoretical strength in identifying key influencing factors. Furthermore, the Q² value of 0.753 is classified as high reinforces the model's predictive reliability, demonstrating strong predictive capability, good validity, and robustness in forecasting usage intention beyond the sample used for testing.

Among all predictors, trust emerged as the most influential factor ($\beta = 0.321$, p < 0.001, f² = 0.095). In Timor-Leste, where digital financial systems are still in early stages of development and institutional trust is historically fragile, perceived security and transparency are paramount. Citizens remain cautious toward digital services, especially considering frequent internet outages, limited regulatory enforcement, and low awareness of data protection. Trust in the provider's brand reputation, transaction security, and privacy measures such as two-factor authentication and transparent user policies strongly influences adoption. These results are consistent with studies in other lowtrust contexts, reinforcing that secure design and communication strategies are essential for fintech scale-up.

Digital literacy (β = 0.161, p = 0.002, f² = 0.040) also plays a pivotal role. Although Timor-Leste has made significant progress in mobile penetration (reaching over 90% by 2023), disparities in digital literacy remain stark, particularly among rural and low-income populations. Users unfamiliar with digital interfaces or app-based transactions may perceive e-wallets as risky or complicated. Thus, even in areas with adequate connectivity, actual adoption is contingent on individuals' confidence in navigating digital tools. The findings suggest that targeted education and user support, especially in Tetum and local dialects, are necessary to convert access into active use.

Performance expectancy ($\beta=0.325$, p < 0.001, f² = 0.107) confirms the central role of perceived usefulness. In Timor-Leste, where traditional banking services are limited outside urban centers, e-wallets offer tangible benefits: faster money transfers, instant bill payments, and the ability to transact without carrying physical cash. Respondents, mostly in the 20–39 age bracket, value these practical utilities, especially as economic activity increasingly shifts toward mobile and informal platforms. The results validate that digital services perceived as efficient and time-saving can bridge gaps left by an underdeveloped financial infrastructure.

Socialization and campaign (β = 0.117, p = 0.045, f² = 0.015) showed a statistically significant yet practically small effect. This reflects the limited reach and intensity of awareness programs in Timor-Leste. While providers and the government have initiated campaigns through radio and SMS, they are often not sustained or sufficiently localized. In a multilingual and culturally diverse country, generic campaigns may not resonate with specific communities. Therefore, while public outreach contributes to behavioral change, its impact remains muted unless delivered consistently, visually, and in contextually appropriate language.

Unexpectedly, five predictors effort expectancy, social influence, digital infrastructure, merchant availability, and inertia did not show a significant impact on intention to use. Effort expectancy ($\beta=0.044,\ p=0.309$) was not significant, suggesting that ease of use is no longer a key concern for users, possibly due to increasing smartphone familiarity. Many younger users, particularly in Dili and district capitals, are already accustomed to apps like WhatsApp, Facebook, and mobile top-ups, making e-wallet interfaces relatively intuitive.

Social influence ($\beta=0.045$, p=0.204) also lacked significance, contrasting with expectations for collectivist societies. This may be because digital adoption in Timor-Leste is still not widespread enough to generate strong peer pressure. If users' immediate social networks do not actively use e-wallets, the normative influence diminishes. Digital infrastructure ($\beta=-0.050$, p=0.237) was similarly non-significant. While infrastructure challenges persist in rural municipalities, the survey sample drawn largely from urban or peri-urban areas likely experienced relatively stable mobile service, minimizing variation in perceived infrastructure quality.

Merchant availability ($\beta = 0.025$, p = 0.308) failed to affect intention. Although more vendors now accept ewallets in Dili and Baucau, users often revert to cash for practical reasons: lack of transaction incentives, speed of cash handling, or merchant-side technical issues. Thus, availability alone is insufficient without added value. Inertia ($\beta = -0.004$, p = 0.447) was surprisingly non-significant, despite prior literature identifying resistance to change as a major barrier in low-digital societies. One possible explanation is that the population sampled had already engaged with other digital services, such as mobile banking (via BNU) or purchasing electricity tokens online, reducing psychological resistance to e-wallet adoption.

4. Conclusion

This study explored the key factors influencing the adoption of e-wallets in Timor-Leste by extending the UTAUT model with context-specific variables, including digital literacy, trust, socialization and campaigns, merchant availability, and inertia. Using a quantitative approach and PLS-SEM, the research found that trust ($\beta = 0.321$), performance expectancy ($\beta = 0.325$), digital literacy ($\beta = 0.161$), and socialization

and campaigns ($\beta = 0.117$) significantly influence users' intention to use e-wallets. Among these, trust emerged as the most influential predictor, underscoring the importance of perceived security, transparency, and reliability in digital financial services. Conversely, constructs commonly significant in other settings such effort expectancy, social influence, digital infrastructure, merchant availability, and inertia did not show a significant effect in this context. These findings highlight that user intention in low-trust, developing environments like Timor-Leste is shaped more by perceived value and credibility than by ease of use or social norms. From a theoretical standpoint, this study enriches the UTAUT framework by validating the role of digital literacy and trust as essential predictors in under-digitized societies. Practically, it underscores the need for e-wallet providers and policymakers to focus trust-building mechanisms, localized digital education, and context-sensitive campaigns to foster meaningful adoption. A coordinated strategy that combines secure system design, grassroots literacy initiatives, and culturally adapted outreach is vital for transforming user awareness into sustained usage and advancing financial inclusion in Timor-Leste.

References

- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward A Unified View. MIS Quarterly: *Management Information Systems*, 27(3), 425–478. DOI: https://doi.org/10.2307/30036540
- [2] Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. MIS Quarterly: *Management Information Systems*, 13(3), 319–339. DOI: https://doi.org/10.2307/249008
- [3] Kemal, A. A. (2019). Mobile Banking in The Government-to-Person Payment Sector for Financial Inclusion In Pakistan. Information Technology for Development, 25(3), 475– 502. DOI: https://doi.org/10.1080/02681102.2017.1422105
- [4] Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer Acceptance and Use of Information Technology: Extending The Unified Theory of Acceptance and Use of Technology. MIS Quarterly: Management Information Systems, 36(1), 157–178. DOI: https://doi.org/10.2307/41410412
- [5] Gupta, K., & Arora, N. (2020). Investigating Consumer Intention to Accept Mobile Payment Systems Through Unified Theory of Acceptance Model: An Indian Perspective. South Asian Journal of Business Studies, 9(1), 88–114. DOI: https://doi.org/10.1108/SAJBS-03-2019-0037.
- [6] Kumar, A., Dhingra, S., Batra, V., & Purohit, H. (2020). A Framework of Mobile Banking Adoption in India. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(2). DOI: https://doi.org/10.3390/JOITMC6020040.
- [7] Chandran, L., Lundin, L., & Padayatti, G. (2023). Transforming Personal Data Transactions with Auditable, Privacy-Preserving Data Exchange Agreements: Fostering Transparency and Trust in Digital Wallet Ecosystems. In *IEEE International Conference on Emerging Technologies and Factory Automation, ETFA* (Vol. 2023-September). Institute of Electrical and Electronics Engineers Inc. DOI: https://doi.org/10.1109/ETFA54631.2023.10275546.
- [8] Sholihah, E., Antari, I. S. W., Rochimawati, R. F., & Ulwiyyah. (2023). Determinants of BSI Mobile Banking Adoption Intentions: DeLone & McLean and UTAUT Model Integration With Religiosity. Asian Journal of Islamic Management (AJIM), 1–17. DOI: https://doi.org/10.20885/ajim.vol5.iss1.art1.

- [9] Tirado-Morueta, R., Rodríguez-Martín, A., Álvarez-Arregui, E., Ortíz-Sobrino, M.Á., & Aguaded-Gómez, J.I. (2023). The Digital Inclusion of Older People In Spain: Technological Support Services For Seniors As Predictor. Ageing and Society, 43(6), 1409–1435. DOI: https://doi.org/10.1017/S0144686X21001173.
- [10] Prasetya, M. E., & Shuhidan, S. M. (2023). Security, Risk and Trust in E-wallet Payment Systems: Empirical Evidence from Indonesia. *Management and Accounting Review*, 22(1), 349– 374. DOI: https://doi.org/10.24191/mar.v22i01-14
- [11] Jack, W., & Suri, T. (2014). Risk Sharing And Transactions Costs: Evidence from Kenya's Mobile Money Revolution. American Economic Review, 104(1), 183–223. DOI: https://doi.org/10.1257/aer.104.1.183
- [12]El Banna, A., Papadopoulos, N., Murphy, S. A., Rod, M., & Rojas-Méndez, J. I. (2018). Ethnic Identity, Consumer Ethnocentrism, and Purchase Intentions Among Bi-Cultural Ethnic Consumers: Divided Loyalties or Dual Allegiance?. *Journal of Business Research*, 82, 310–319. DOI: https://doi.org/10.1016/j.jbusres.2017.09.010
- [13] Demirguc-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution. The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution. Washington, DC: World Bank. DOI: https://doi.org/10.1596/978-1-4648-1259-0
- [14] Donner, J., & Tellez, C. A. (2008). Mobile Banking and Economic Development: Linking Adoption, Impact, and Use. Asian Journal of Communication, 18(4), 318–332. DOI: https://doi.org/10.1080/01292980802344190.
- [15] Venkatesh, V., Morris, M.G., Davis, G.B., & Davis, F.D. (2003).
 User Acceptance of Information Technology: Toward A Unified

- View. MIS Quarterly: Management Information Systems, 27(3), 425–478. DOI: https://doi.org/10.2307/30036540.
- [16] Oliveira, T., Thomas, M., Baptista, G., & Campos, F. (2016). Mobile Payment: Understanding the Determinants of Customer Adoption and Intention to Recommend The Technology. Computers in Human Behavior, 61, 404–414. DOI: https://doi.org/10.1016/j.chb.2016.03.030.
- [17] Susanto, E., Solikin, I., & Purnomo, B. S. (2022). A Review of Digital Payment Adoption in Asia. Advanced International Journal of Business, Entrepreneurship and SMEs, 4(11),01–15. DOI: https://doi.org/10.35631/aijbes.411001
- [18] Ng, W. (2012). Can We Teach Digital Natives Digital Literacy? Computers and Education, 59(3), 1065–1078. DOI: https://doi.org/10.1016/j.compedu.2012.04.016
- [19] Talwar, S., Dhir, A., Khalil, A., Mohan, G., & Islam, A. K. M. N. (2020). Point of Adoption and Beyond. Initial Trust and Mobile-Payment Continuation Intention. *Journal of Retailing and Consumer Services*, 55. DOI: https://doi.org/10.1016/j.jretconser.2020.102086.
- [20] Venkatesh, V., Thong, J. Y. L., & Xu, X. (2016). Unified Theory of Acceptance and Use of Technology: A Synthesis and The Road Ahead. *Journal of the Association for Information Systems*, 17(5), 328–376. DOI: https://doi.org/10.17705/1jais.00428
- [21] Srivastava, S., Mohta, A., & Shunmugasundaram, V. (2024). Adoption of Digital Payment Fintech Service By Gen Y and Gen Z Users: Evidence From India. *Digital Policy, Regulation and Governance*, 26(1), 95–117. DOI: https://doi.org/10.1108/DPRG-07-2023-0110.