



Post-Pandemic Drivers of E-Wallet Continued Use: Cross-Regional Evidence from Southeast Asia and Sub-Saharan Africa

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ABSTRACT

This study aims to examine and compare the determinants of continued e-wallet usage in the post-pandemic context in Indonesia and Nigeria. Data were obtained from an online survey of 275 respondents across the two countries and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results indicate that perceived ease of use and perceived risk are significant predictors of continued e-wallet use in both countries, highlighting the dual importance of usability and security concerns in sustaining digital payment behavior. Perceived usefulness exerts a positive but relatively weak effect on continuance intention, suggesting that functional benefits alone are insufficient without supportive experiential factors. In contrast, awareness and social influence do not show significant direct effects in the pooled analysis, although awareness becomes relevant in specific contextual conditions. Theoretically, these findings extend post-adoption models of financial technology by demonstrating that core technology acceptance constructs operate differently across emerging economies and by clarifying the limited role of social drivers in the post-pandemic stage. Practically, the study implies that providers should prioritize risk mitigation strategies and interface simplicity in both markets, while tailoring educational and awareness initiatives, particularly for less formally educated users in Nigeria to strengthen sustained usage. The novelty of this study lies in its cross-regional comparison between Southeast Asia and Sub-Saharan Africa, offering rare empirical evidence on post-pandemic e-wallet continuance behavior across distinct emerging market contexts.

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1. INTRODUCTION

Over the past five years, the global payment landscape has shifted dramatically from cash-based transactions toward electronic methods, a change accelerated by the onset of the coronavirus pandemic. Consequently, the World Health Organization has urged nations to expand digital payment technologies and develop policies that reduce disease transmission among their populations (Ather et al., 2020; Brown, 2020). Likewise, during this period, online payment providers and electronic money services were pressured to upgrade their platforms and introduce innovations that accommodate the growing demand for remote payment of goods and services. This pressure sparked a worldwide surge in electronic wallet (EW) systems, and broader adoption of mobile wallets has spread across sectors. Even after the pandemic subsided, consumers and businesses continued to adopt and rely on EW for transferring funds and paying for goods and services.

In Europe and the United States, electronic wallets (EW) and digital money were already approved and legally recognized as tender before the Corona pandemic (European Central Bank, 2012). In contrast, in Southeast Asia and sub-Saharan African developing countries such as Indonesia and Nigeria, non-cash payments began to emerge during the pandemic, and since then, EW and other online platforms have gained popularity among individuals and businesses. For instance, Indonesian companies such as DANA, LinkAja, OVO, and Go-Pay are just a few of the many that provide electronic money services (Aji et al., 2020). In Nigeria, banks and fintech firms created distinct EW services during the COVID-19 pandemic, but these did not become widespread until the government introduced a cashless policy in 2022 that limited cash withdrawals for both people and companies. To help citizens transition, the state rolled out a government-owned EW system called electronic naira (e-naira). Private fintechs such as OPAY, Moniepoint, Palmpay, and others joined the market, yet when compared to Indonesia, Nigeria remains in the early stages of EW adoption (Obiora et al., 2023).

Evidence from earlier research shows that the intention to use electronic payments (e-payment) continuously increased during the coronavirus pandemic for both individuals and organizations (Aji et al., 2020; Janteng and Dino, 2022), even though people still see it as risky and uncertain (Leong et al., 2020). Previous studies indicate that perceptions of usefulness (PRU) (Osman and Yi, 2021; Srivastava, 2023; Wijayanthi, 2019), ease of use (PREU) (Malik and Annuar, 2021; Rewah et al., 2022; Senali et al., 2023; Wardana et al., 2022) and social influence (SOI) (Janteng and Dino, 2022; Nabila and Widodo, 2023; Yang et al., 2021) shape the continuous use of e-wallets (EWCU) by individuals. Additionally, during the pandemic, e-wallet acceptance was driven by the perceived risk (PRR) of handling and interacting with physical cash (Aji et al., 2020). A related study by Aji et al. (2020) found that PRR and PRU both directly influence e-wallet use intention, with no difference between these factors among users in Indonesia and Malaysia. The authors suggest that future research should examine how education and income moderate the relationships between these determinants and e-wallet use intention in both similar and different contexts.

From another angle, researchers suggest that the extent of e-wallet awareness can shape and motivate people to use them (Gupta et al., 2023; Srivastava, 2023), and this awareness appears to be driven by personal traits such as education, financial standing, social exposure, innovativeness and self-efficacy, among others (Janteng and Dino, 2022). Accordingly, education level plays a crucial moderating role, potentially strengthening the link between e-wallet determinants and users'

ongoing intention to use them. To address this gap, the present study compares two countries from different continents to deepen our understanding of these dynamics.

Thus, this study aims to analyze the influence of perceived risk and perceived usefulness on customer intention to use e-wallets after the COVID-19 outbreak and investigates the Indonesian and Nigerian groups in the overall model. The findings of this study are expected to contribute to the development of accounting, especially in the financial accounting discipline, by providing empirical evidence on the role of risk and usefulness on customer intention to use e-wallets. Practically, this study offers recommendations to increase the use of e-wallets in supporting the transformation of digital payments in society, thereby improving financial performance. This research also contributes to the realization of the implementation of the digital economy both in Indonesia and other countries.

2. METHODS

The survey method formed the research design for this study, and it used online questionnaires distributed through Google Forms to gather data from e-wallet users in Indonesia and Nigeria. Respondents comprised public sector and private sector employees, entrepreneurs, students, freelancers, and others. Only users of nonbank server based or fintech companies were included. The Google Form link was shared via the target respondents' social media profiles and email addresses. For analysis, 275 responses were collected: 159 from Indonesia and 116 from Nigeria. PLS SEM, a suitable tool for causal predictive research, was therefore employed to model the continued use of e-wallets in both countries.

The study variables were operationalized as follows: Continuous e-wallet use was defined as users' intention to keep using e-wallets after the pandemic; this was measured with eight items adapted from [Aji et al. \(2020\)](#) and [Kabir et al. \(2017\)](#). Perceived usefulness and perceived ease of use were operationalized in line with [Davis et al. \(1989\)](#), each measured by five items. User awareness of e-wallets, defined as knowledge of an e-wallet's existence was assessed with three items ([Edo et al. \(2023\)](#); [Oyelami et al. \(2020\)](#)). Perceived risk was conceptualized as the fear that virus droplet contamination of paper cash could cause infection, measured by four items ([Olya and Alansi, 2018](#)). Finally, social influence, defined as the impact of family, close relatives, and friends on a person's intent to continue using e-wallets, was adapted from [Zhang et al. \(2023\)](#) and measured with four items.

The study's construct items were taken from earlier research that had already been validated. Each question used a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5) to assess respondents' continuous intentions regarding e-wallet use. Appendix I lists the measurement items for the study variables.

3. RESULTS AND DISCUSSION

3.1. Demography of the Respondents

This section presents an analysis of the data collected from both countries. Two hundred and seventy five responses were collected between January and June 2023 from Indonesia and Nigeria, with 159 Indonesian and 116 Nigerian participants. Among the Indonesian respondents, 75 % (119) were female and 25 % (40) were male. The majority were unmarried, comprising 93 % (147), compared with 6 % (11) married and 0.6 % (1) widowers. Education levels indicated that 57.5 % (92) held a first degree, 31 % (20) had a diploma, 15 % (23) possessed a senior high school certificate, 7 % (12) had a master's degree, and 0.5 % (1) had a doctoral qualification. Most respondents were students, making up 74 % (118) of the sample, while 26 % (41) were non students. All Indonesian

participants (159 or 100 %) reported using e-wallets for transactions. In contrast, the Nigerian respondents were predominantly male, accounting for 62 % (72) of the 116 participants.

Table 1. Respondents' characteristics

Demographics variables	Indonesia		Nigeria	
	N	%	N	%
Gender				
Female	119	74.843%	44	37.931%
Male	40	25.157%	72	62.069%
Marital Status				
Married	11	6.918%	56	48.276%
Single	147	92.453%	53	45.690%
Widowed	1	0.629%	7	6.034%
Educational Qualification				
Senior High School	23	14.465%	6	5.172%
Diploma	31	19.497%	26	22.414%
Bachelor	92	57.862%	67	57.759%
Master	12	7.547%	12	10.345%
PhD	1	0.629%	5	4.310%
Occupation				
Government	23	14.465%	52	44.828%
Student	118	74.214%	12	10.345%
Entrepreneur	5	3.145%	14	12.069%
Private Employees	13	8.176%	38	32.759%
Used e-wallet				
Yes	159	100%	116	100%
No	0	0%	0	0%

Source: Field Survey, 2023

In addition, more respondents were married (56 or 48%) than unmarried (53 or 46%) or widowers (7 or 6%). Similar to Indonesia, the majority of respondents in Nigeria held a first-degree qualification or its equivalent (67% or 58%), followed by those with diplomas (26% or 22%), master's degree holders (12% or 10%), and senior high school certificates (6% or 5%). Unlike Indonesia, the survey found a higher number of respondents with doctoral degrees in Nigeria (5 or 4%). Moreover, most Nigerian respondents were employees in government agencies, followed by those in the private sector and entrepreneurs (104 or 90%), with the remainder being students (12 or 10%). Consistent with Indonesia, all respondents in Nigeria (116 or 100%) used EW applications to conduct transactions. A more detailed breakdown of the respondents' demographics appears in **Table 1**.

3.2. Descriptive Statistics

The descriptive statistics shown in **Table 2** reveal that respondents gave high average scores on all constructs, indicating a positive view of e-wallet use after COVID-19. Awareness (AWR) recorded the highest mean ($M = 4.612$, $SD = 0.082$), meaning that people in both Indonesia and Nigeria are very well-informed about e-wallet services. Next comes Perceived Usefulness (PRU) ($M = 4.603$, $SD = 0.239$) and Perceived Ease of Use (PREU) ($M = 4.410$, $SD = 0.239$), showing that users see e-wallets as useful and easy to use. In contrast, Social Influence (SOI) obtained the lowest mean

($M = 3.767$, $SD = 0.245$), implying that peer or social pressure has a smaller impact on e-wallet adoption in the post-pandemic context.

Table 2. Correlation metrix

Variable	Means	SD	PRR	PRU	AWR	SOI	PREU	EWCU
PRR	4.165	0.245	0.866					
PRU	4.603	0.239	0.387	0.831				
AWR	4.612	0.082	0.269	0.544	0.858			
SOI	3.767	0.245	0.605	0.260	0.130	0.810		
PREU	4.410	0.239	0.469	0.562	0.635	0.312	0.800	
EWCU	4.160	0.478	0.594	0.474	0.344	0.546	0.593	0.852

The correlation coefficients shown above the diagonal are the square roots of the Average Variance Extracted (AVE) and range from 0.800 for PREU to 0.866 for PRR, all above the 0.70 cutoff defined by [Fornell and Larcker \(1981\)](#), which therefore confirms discriminant validity. The correlations below the diagonal reveal the key relationships. For example, perceived risk (PRR) has a moderate positive link with social influence (SOI) ($r = 0.605$) and with E-wallet Continuous Use (EWCU) ($r = 0.594$), suggesting that users' perceptions of risk are closely connected to both social dynamics and ongoing use. Likewise, the perceived ease of use (PREU) is moderately related to awareness (AWR) ($r = 0.635$) and to E-wallet Continuous Use ($r = 0.593$), underscoring how the ease of use supports continued adoption.

Interestingly, Awareness (AWR) shows only weak links to Social Influence (SOI) ($r = 0.130$) and to E-wallet Continuous Use ($r = 0.344$), implying that simply knowing about e-wallets may not drive use without other motivating forces. In contrast, perceived usefulness (PRU) relates moderately to perceived ease of use ($r = 0.562$) and to awareness ($r = 0.544$), confirming that ease of use and knowledge raise the perceived value of the technology.

3.3. Convergence Validity and Construct Reliability

Table 3 displays the convergent validity and construct reliability of the study variables to evaluate internal consistency. The assessment of construct validity and reliability employed factor loadings, composite reliability (CR), and average variance extracted (AVE). The results show that all the constructs meet the widely accepted thresholds for convergent validity and internal-consistency reliability. First, all item loadings exceeded the recommended minimum value of 0.70 ([Hair et al., 2014](#)), ranging from 0.738 (PREU3) to 0.913 (PRR3), indicating that each observed indicator has a strong association with its respective latent construct. Although PREU3 presents the lowest loading (0.738), it still surpasses the acceptable threshold, suggesting that its inclusion remains appropriate for representing the Perceived Ease of Use construct.

Second, the CR values for all constructs ranged from 0.884 (Social Influence) to 0.955 (Continuous Intention), comfortably exceeding the 0.70 minimum criterion set by [Nunnally and Bernstein \(1967\)](#). These results confirm that the measurement items for each construct display a high degree of internal consistency and reliability.

Third, the AVE values for all constructs exceeded the 0.50 benchmark ([Fornell and Larcker, 1981](#)), ranging from 0.800 (Perceived Ease of Use) to 0.866 (Perceived Risk). This shows that each latent variable accounts for more than 80 % of the variance in its indicators, thereby establishing a strong convergent validity.

Table 3. Construct reliability and convergence validity results

Construct	Code	Loadings	CR	AVE
Perceived Risk	PRR1	0.827	0.923	0.866
	PRR2	0.811		
	PRR3	0.913		
	PRR4	0.908		
Perceived Usefulness	PRU1	0.807	0.918	0.831
	PRU2	0.819		
	PRU3	0.834		
	PRU4	0.868		
	PRU5	0.824		
Awareness	AWR1	0.814	0.893	0.858
	AWR2	0.881		
	AWR3	0.877		
Social Influence	SOI1	0.811	0.884	0.810
	SOI2	0.823		
	SOI3	0.828		
	SOI4	0.777		
Perceived Ease of Use	PREU1	0.802	0.898	0.800
	PREU2	0.793		
	PREU3	0.738		
	PREU4	0.806		
	PREU5	0.855		
Continuous Intention	EWCU1	0.886	0.955	0.852
	EWCU2	0.852		
	EWCU3	0.871		
	EWCU4	0.866		
	EWCU5	0.899		
	EWCU6	0.886		
	EWCU7	0.792		
	EWCU8	0.754		

Overall, the findings confirm that the measurement model has satisfactory psychometric properties, satisfying the criteria for convergent validity and reliability, so the constructs are robust and suitable for subsequent structural-model analysis of the determinants of e-wallet continued use in the post-COVID-19 context.

3.4. Measurement Model

SEM is widely regarded as one of the most effective techniques for measurement and structural modeling (Cheung and Lee, 2008; Huh et al., 2009). Statistically, factor loadings, AVE, and other indicators are routinely employed to assess convergent validity, whereas the square roots of the AVE are used to evaluate discriminant validity (Hair et al., 2014). **Table 3** shows that every item loading on its respective factor exceeds 0.70 and that each AVE value is above 0.50; additionally, the construct reliability scores are all greater than 0.70, indicating that the constructs are both consistent and reliable (Hair et al., 2014; Nunnally et al., 1967).

Table 3 demonstrates that the diagonal AVE square root values differ from the other constructs, confirming the discriminant validity (Fornell and Larcker, 1981). The model's goodness of fit was also evaluated, revealing an average path coefficient (APC) of 0.115 ($P = 0.035$), an average R^2 (ARS) of 0.531, and an average VIF (AVIF) of 1.773. accordingly, the model fits well (Hair et al., 2014).

3.5. Structural Model

The results reported in **Table 4** indicate that, in Nigeria, perceived risk positively influences continuous use intention, with a significant effect ($\beta = 0.663$). Likewise, the Indonesian data show that the PRR effects on EWCU are positive and significant, with $\beta = 0.197$. Consequently, hypothesis 1 is confirmed for both Nigeria and Indonesia. However, the Nigerian test found that PERU had no significant impact on EWCU ($\beta = -0.004$, $p = 0.483$), leading to the rejection of hypothesis 2. In contrast, Indonesian respondents give a β of 0.110, which is statistically significant ($p = 0.078$), indicating a positive effect of PERU on EWCU; thus, hypothesis 2 is accepted.

Table 4. Hypotheses testing: direct and indirect

Path	Group 1 Nigeria		Conclusion	Group 2 Indonesia		Conclusion
	Path Coef	P Value		Path Coef	P Value	
Perceived Risk → Continuous Intention	0.663**	<0.001	Highly Significant	0.197	0.005	Highly Significant
Perceived Usefulness → Continuous Intention	-0.004	0.483	Not Significant	0.110	0.078	Weakly Significant
Awareness → Continuous Intention	0.007	0.470	Not Significant	-0.072	0.179	Not Significant
Social Influence → Continuous Intention	0.043	0.322	Not Significant	0.297	<0.001	Highly Significant
Perceived Ease of Use → Continuous Intention	0.160**	0.038	Significant	0.304	<0.001	Highly Significant
Perceived Risk → Education Qualification* Continuous Intention	-0.069	0.226	Not Significant	0.042	0.298	Not Significant
Perceived Usefulness → Education Qualification* Continuous Intention	-0.061	0.253	Not Significant	0.039	0.309	Not Significant
Awareness → Education Qualification* Continuous Intention	0.126*	0.082	Significant	-0.037	0.320	Not Significant
Social Influence → Education Qualification* Continuous Intention	0.028	0.381	Not Significant	0.022	0.390	Not Significant
Perceived Ease of Use → Education Qualification* Continuous Intention	-0.120*	0.092	Weakly Significant	0.052	0.256	Not Significant

The Nigerian survey, which tested the third hypothesis, indicated that AWR had an insignificant effect on EWCU ($\beta = 0.007$, $p = 0.470$), showing that awareness does not influence continuous intention. Similar results were obtained in Indonesia, where the relationship between AWR and EWCU was also insignificant ($\beta = -0.072$, $p = 0.179$), leading to the rejection of H3 in both countries.

The test results for hypothesis four among the Nigerian respondents gave a β of 0.043 and a p value of 0.322, indicating that the SOI did not significantly affect EWCU, so H4 is rejected. These findings highlight a clear difference between the two samples; in contrast, the Indonesian data showed that SOI had a significant impact on EWCU, with a β of 0.297 and a p value below 0.00, an outcome that means H4 is accepted for that set of responses.

The fifth hypothesis test, conducted on data from Nigeria, yielded a coefficient of $\beta = 0.160$ accompanied by a p value of 0.038, indicating a positive effect of the PRU on the EWCU. Interestingly, Indonesia displayed the same trend, with $\beta = 0.298$ and a highly significant p value below 0.001. Considering these results, hypothesis H5 is therefore accepted for both Nigeria and Indonesia. **Figures 1 and 2** are shown below.

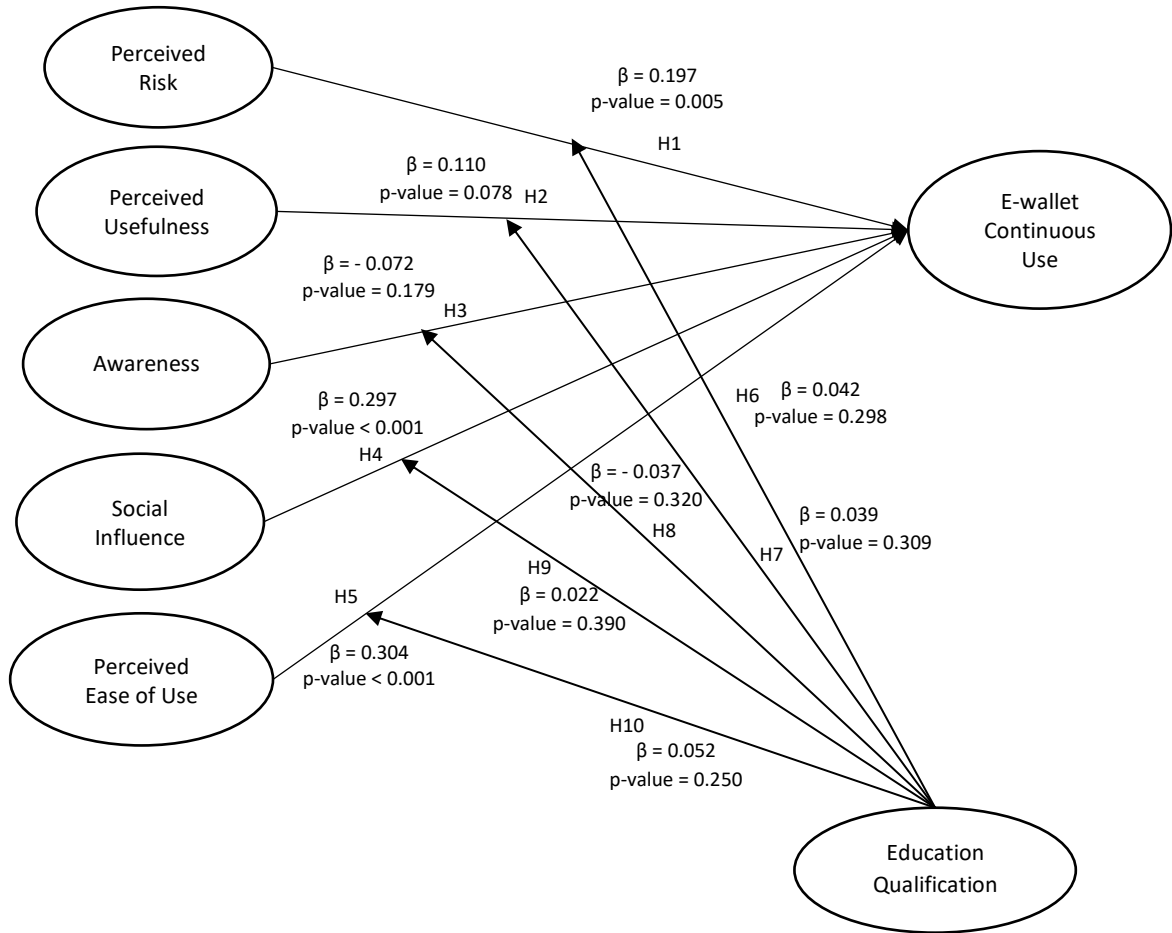


Figure 1. Model Test – Indonesia.

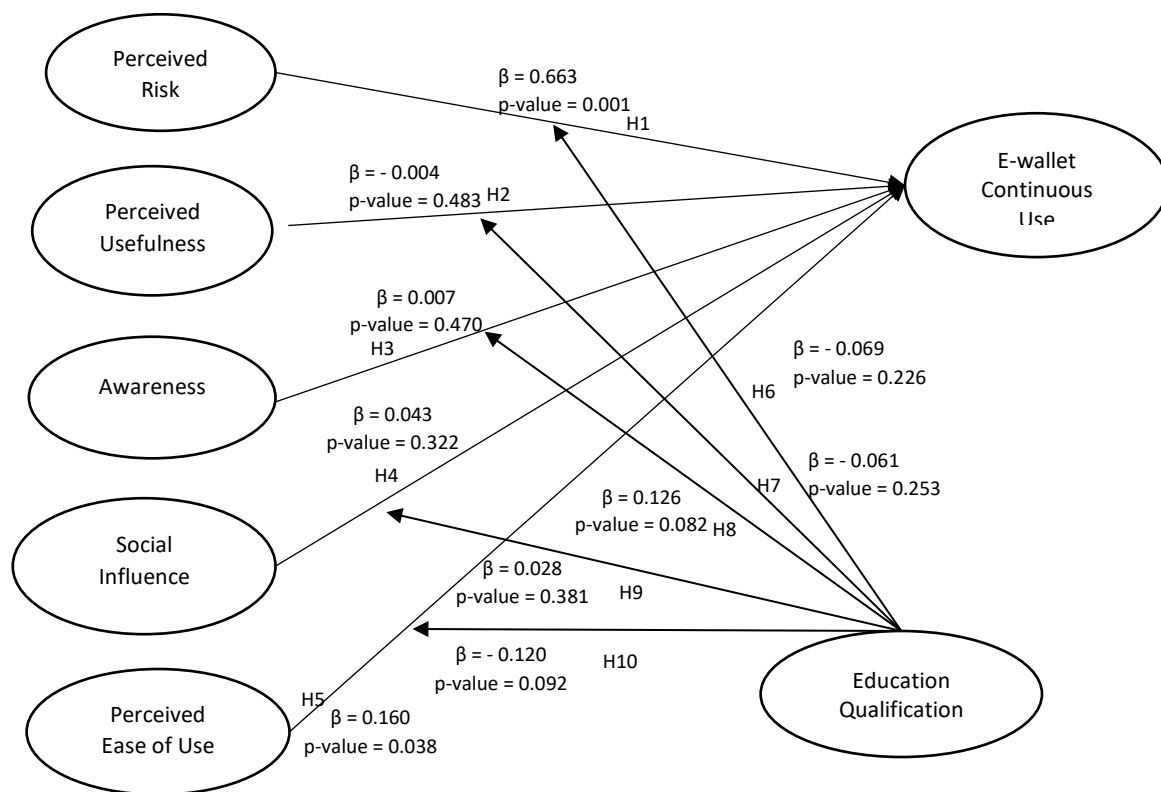


Figure 2. Model Test – Nigeria.

The data from Nigeria indicate that Educational Qualification does not moderate the link between PRR and EWCU ($\beta = -0.069$, $p = 0.226$). A parallel analysis in Indonesia yielded the same pattern, with a coefficient of $\beta = 0.042$ and a p value of 0.298. These consistent outcomes strengthen the case for rejecting hypothesis H6 in both contexts, and this finding aligns with the broader literature, which also suggests that educational background is unlikely to moderate this relationship.

For H7, the Nigerian data yielded $\beta = 0.061$ with a p value of 0.253, while the Indonesian data gave $\beta = 0.039$ and a p value of 0.309; since educational qualification does not strengthen the association between PRR and EWCU, H7 is rejected.

Furthermore, the H8 test shows that in Nigeria, educational qualifications strengthen the connection between AWR and EWCU ($\beta = 0.126$, p value = 0.082), whereas in Indonesia they do not moderate the relationship ($\beta = 0.037$; p value = 0.320). The results for Nigeria and Indonesia presented in Table 4 therefore support H9, as Nigeria's test yielded $\beta = 0.028$ (p value = 0.381) and Indonesia's $\beta = 0.022$ (p value = 0.390).

Finally, the Nigerian respondents' data show a value of $\beta = -0.120$, significant at $p = 0.092$, which indicates that higher educational qualifications strengthen the link between PRR and EWCU. Thus, H10 is deemed acceptable. However, the Indonesian data yield $\beta = 0.052$ with $p = 0.256$, which leads to the rejection of H10.

3.6. Discussion

This study investigates the factors that shape individuals' intention to continue using e wallets after the coronavirus pandemic, focusing on the interaction between Southeast Asia and Sub Saharan Africa by using Indonesia and Nigeria as representative cases. Previous research has already explored the drivers of e-payment acceptance and use, but the recent surge in alternative e

payment options prompted by the pandemic has been a global challenge, and among these options, the e wallet system lets users and businesses store money and pay for goods and services, prompting IS researchers to examine patterns of acceptance, intention, and usage during the pandemic's peak; however, few studies have addressed e wallet continuous use in the post pandemic period, and there is also a shortage of empirical work that compares this trend across continents where behaviors, cultures, government regulations, and environments differ. Therefore, this research describes the hypotheses and gathers data from Indonesia and Nigeria to enable such a comparative analysis.

In this study, five hypotheses were formulated to examine how perceived risk, social influence, perceived usefulness, ease of use, and awareness (the independent variables) relate to continuous e wallet use (the dependent variable) after the COVID 19 pandemic in both countries. Looking at Table 4 in the preceding section where the hypothesis tests were presented, only two of the five hypotheses were significant, and educational qualifications were used to test the indirect relationships between the independent and dependent variables by developing five similar hypotheses, but the results in Table 4 again reveal that only two of those hypotheses are partially accepted.

Observing direct relationships shows that the effect of PRR on e-wallet use, expressed through EWCU, was significant in both Indonesia and Nigeria, thereby supporting Hypothesis 1 and aligning with earlier studies (Aji et al., 2020; Edo et al., 2023; Hapsari et al., 2023; Malik and Annuar, 2021; Nabila and Widodo, 2023; Rahi et al., 2023; Senali et al., 2023), because the COVID 19 pandemic has increased the fear of handling physical cash, leading people to prefer electronic wallets for transactions.

The Nigeria results from the Hypothesis 2 test show that PRU does not significantly impact EWCU. In contrast, the Indonesian findings present an opposite pattern. Consequently, the Nigerian data conflict with many earlier studies—Gajanayake et al. (2013); Jahangir and Begum (2008); Osman and Yi (2021); Purnawirawan et al. (2012); Srivastava (2023)—yet they align with the findings of Edo et al. (2023). Excluding the Indonesian sample, it is striking that Nigerian e wallet users fail to see their utility. This suggests that the pandemic and subsequent government mandates drove adoption and that the removal of these incentives likely led to a decline in use. Therefore, Nigerians appear more cautious than Indonesians regarding favoring cash transactions and maintaining a preference for cash over digital alternatives. Thus, the cultural and regulatory context appears to shape these habits more strongly in Nigeria than previously observed in this analysis.

Results from Indonesia and Nigeria both show that the AWR has no significant effect on the EWCU, thereby not supporting H3 and contradicting the studies of Brown (2020) and Srivastava (2023). This suggests that user awareness may not be crucial for continued use because the system is already familiar to users.

The direct relationship between SOI and EWCU among Nigerian users shows no association, and therefore hypothesis 4 is not supported, whereas the Indonesian data reveal a relationship that aligns with earlier studies (Janteng and Dino, 2022; Khan and Abideen, 2023; Nabila and Widodo, 2023; Yang et al., 2021), a difference attributed to the strong influence of close social groups in encouraging continued EW use in Indonesia—a dynamic not observed in Nigeria; across both countries, the results indicate that perceived relative usability (PRU) significantly affects EWCU, corroborating many previous findings (Ather et al., 2020; Malik and Annuar, 2021; Rewah et al., 2022; Senali et al., 2023; Wardana et al., 2022) and suggesting that EW applications in both Indonesia and Nigeria have straightforward features that make them easy to use.

The indirect relationship was moderated by educational qualification, following the recommendation of Aji et al. (2020), and the results show that this moderation applies only to the link between AWR and EWCU among Nigerian users. While no direct connection was identified, the

findings suggest that educational qualifications play a vital role in enhancing the impact of AWR and EWCU in Nigeria, and they further explain that compared to Nigerians, Indonesians are markedly more aware of EW irrespective of their level of education.

Thus, these findings provide input for the Indonesian, Nigerian, and other governments to strengthen community support and focus on measurable benefits, so that people can directly experience the benefits of using digital payments. In this regard, the government can also encourage people to use digital payments, such as e-wallets and other digital payment methods, to improve financial performance.

4. CONCLUSION

The results of this study indicate that there is a significant influence with a path coefficient of 0.197 (Indonesia) and 0.663 (Nigeria) between perceived risk (PRR) and perceived usefulness (PREU) on the continued use of e-wallet (EWCU) with a path coefficient of 0.304 (Indonesia) and 0.160 (Nigeria) among users in Indonesia and Nigeria. We found that perceived effectiveness of technology (PRU) with a path coefficient of 0.110 and social influence (SOI) significantly with a path coefficient of 0.297 affect EWCU in Indonesia, but not in Nigeria. In addition, privacy anxiety (AWR) does not have a significant impact on EWCU in both countries. This study shows that educational qualification strengthens the relationship between awareness and PRU on EWCU in Nigeria with a path coefficient of 0.126, but has no effect in Indonesia; furthermore, education does not moderate the relationship between PRR, SOI, or PRU and EWCU in both countries. This study also explains 49.9% of the variation in e-wallet usage in Indonesia and 60.2% in Nigeria, highlighting the importance of incorporating variables such as perceived risk, perceived usefulness, social influence, privacy concerns, and educational qualifications to increase the effectiveness of e-wallet usage in developing countries, particularly Indonesia and Nigeria.

The study advises that firms working with non-bank payment providers should craft fresh marketing strategies that leverage people's social networks, because social-media content now wields a stronger influence on EWCU in the post-coronavirus era, thereby reflecting changing consumer behaviour. The study's main limitation is that it only surveyed Indonesian participants (159 cases) and Nigerian participants (116 cases), used just five independent variables, and considered only educational attainment as a moderator. Future research should expand the sample, explore additional contextual variables, and include other demographic factors beyond education to better examine their moderating effects, as this study has begun to do.

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