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Extending Technology Continuance Theory to Mobile Stock Investment Applications: Evidence from Low-Income and Low Financial Literacy Users

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Abstract: The rapid growth of financial technology has significantly expanded retail investor participation through mobile stock investment applications. While these platforms lower traditional barriers to financial markets, their sustained use among individuals with limited financial literacy remains uncertain. This study aims to examine the determinants of continuance usage of mobile stock investment applications among low-income and low–financial literacy users. Drawing on the Theory of Planned Behavior (TPB) and integrating the construct of Quality of Information from the Information Systems Success Model, this research investigates how informational and psychosocial factors influence users' behavioral intention and continuance usage. A quantitative survey was conducted among active mobile stock investment application users in Central Java, Indonesia. A total of 180 valid responses were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results indicate that Perceived Behavioral Control significantly influences Intention to Use, while Quality of Information and Perceived Behavioral Control have significant direct effects on Continuance Usage. However, Attitude, Subjective Norms, and Intention to Use do not demonstrate significant effects in the proposed model. These findings suggest that users' perceived capability and the availability of clear and reliable financial information play a critical role in sustaining engagement with mobile investment platforms. This study contributes to the literature by extending the TPB framework in the context of fintech continuance behavior and provides insights for designing more inclusive digital investment services.

Keywords: Mobile Stock Investment Applications, Information Quality, Theory of Planned Behavior, Intention to Use, Continuance Usage.

INTRODUCTION

The rapid expansion of digital financial services has significantly reshaped retail participation in capital markets through the emergence of mobile stock investment applications (Ben-Ahmed et al., 2022; Yu et al., 2022). By enabling real-time market access and simplified

trading interfaces, these platforms have lowered traditional barriers to stock market participation in emerging economies (Lyons et al., 2022). Indonesia provides a relevant context for this transformation, where national initiatives such as the *Yuk Nabung Saham* campaign have accelerated the growth of mobile investment application usage, attracting first-time investors from non-metropolitan and lower socioeconomic backgrounds (Nair et al., 2023). While this expansion promotes financial inclusion, it also raises concerns regarding the sustainability of investment participation among users with limited financial knowledge (Yadav et al., 2026).

Despite the extensive use of behavioral intention models in explaining technology usage, existing studies largely assume that intention is sufficient to predict continued behavior (Adam & Ikhsan, 2023; Ikhsan et al., 2025). However, this assumption may not hold in high-risk financial environments, such as mobile stock investment, where users are required to continuously interpret complex information and manage uncertainty (Lusardi & Mitchell, 2014). These challenges are particularly pronounced among individuals with low financial literacy, who face greater difficulty in evaluating investment outcomes (Fan, 2022). In such contexts, the relationship between intention and actual behavior may weaken, resulting in a critical intention–behavior gap (Bahmani & Bhatnagar, 2023; Shah et al., 2025). This raises an important gap in the literature regarding whether traditional intention-based models, such as the Theory of Planned Behavior, are adequate to explain continuance usage in digital investment platforms.

This study contributes by explicitly examining the intention-behavior gap in high-risk fintech contexts, particularly among low-income and low-literacy users, a setting that remains underexplored in continuance usage research. To address this gap, the present study extends the Theory of Planned Behavior (Ajzen & Driver, 1991) by incorporating Quality of Information from the Information Systems Success Model (Petter et al., 2008). In high-risk financial contexts, continuance usage may not rely solely on users' behavioral intention, but also on their perceived capability and the clarity of information provided by the system (Nair et al., 2023; Tam et al., 2020). Accordingly, this research examines the extent to which intention-based explanations remain applicable in digital investment environments, particularly among low-income and low-literacy users.

Therefore, this study aims to examine the determinants of continuance usage of mobile stock investment applications among low-income and low-literacy users in Central Java, Indonesia. Based on the proposed framework, quality of information, attitude, subjective norms, and perceived behavioral control are hypothesized to influence intention to use. In addition, quality of information and perceived behavioral control are proposed to directly influence continuance usage, reflecting the importance of capability and informational support in sustaining user engagement.

METHOD

This study adopts a quantitative explanatory design to examine the relationships among factors influencing intention to use and continuance usage of mobile stock investment applications (Hair & Alamer, 2022). The study utilizes a cross-sectional survey design, collecting respondents' perceptions based on their actual experiences with mobile stock investment applications. The primary objective of this study is to investigate how Quality of Information, Attitude, Subjective Norms, and Perceived Behavioral Control influence Intention to Use and subsequently Continuance Usage.

The population of this study consists of retail investors who actively use mobile stock investment applications. The research specifically focuses on users located in Central Java, Indonesia. This region represents a demographic with relatively lower income levels and

varying degrees of financial literacy compared to metropolitan areas, making it a relevant context for examining investment behavior among vulnerable investors.

A purposive sampling technique was employed to ensure that respondents met specific eligibility criteria relevant to the study objectives. To participate in the study, respondents were required to (1) actively use a mobile stock investment application, (2) have conducted at least one investment transaction through the application, and (3) currently reside in Central Java.

The minimum sample size was determined based on recommendations for Partial Least Squares Structural Equation Modeling (PLS-SEM). Following the "ten-times rule" (Hair et al., 2019), the minimum sample size must be at least ten times the maximum number of structural paths directed at a latent construct. In this study, four paths point to Intention to Use, resulting in a minimum required sample of 40 respondents. The data collection process yielded 180 valid responses, which exceeds the minimum requirement.

Primary data were collected using a structured questionnaire distributed through an online survey platform. The survey link was disseminated to relevant investor communities and respondents who met the predefined purposive sampling criteria.

Participation was voluntary and anonymous. In addition to primary data collection, secondary data were obtained from peer-reviewed journal articles, academic publications, and official financial reports to support the theoretical framework and contextualize the research findings.

All research constructs were measured using multi-item scales adapted from established prior studies and contextualized for the mobile stock investment application environment. Respondents evaluated each item using a five-point Likert scale, ranging from 1 ("strongly disagree") to 5 ("strongly agree") (Hair & Alamer, 2022).

The measurement model consists of six constructs, namely Quality of Information, Attitude, Subjective Norms, Perceived Behavioral Control, Intention to Use, and Continuance Usage. Each construct was operationalized using multiple indicators to ensure that the latent variables were adequately represented. Such measurement practices are widely recommended in behavioral and technology usage research (Hair et al., 2019).The collected data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). Data were analyzed using PLS-SEM (Hair & Alamer, 2022). The analysis followed a two-stage evaluation procedure. In the first stage, the measurement model (outer model) was evaluated to ensure the reliability and validity of the constructs. This evaluation involved assessing indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. Indicator reliability was assessed through factor loadings, while internal consistency reliability was evaluated using composite reliability values. Convergent validity was assessed using the Average Variance Extracted (AVE), ensuring that each construct explains a sufficient proportion of variance in its indicators.

In the second stage, the structural model (inner model) was evaluated to examine the relationships among the latent constructs. This stage involved assessing the path coefficients, coefficient of determination (R^2), and the statistical significance of the proposed hypotheses. The significance of the structural relationships was tested using a bootstrapping procedure. This analytical procedure follows the recommended guidelines for PLS-SEM analysis in behavioral and information systems research (Hair et al., 2019).

RESULTS AND DISCUSSION

Demographically, the sample consists of 180 respondents with a relatively balanced gender distribution, comprising males (55.00%) and females (45.00%). The majority of respondents fall within the productive age group, predominantly aged 26–30 years (35.00%) and 21–25 years (23.89%), followed by those aged 31–40 years (21.11%) and above 40 years (17.78%), while respondents under 20 years old account for the smallest proportion (2.22%).

Regarding educational background, most respondents hold a bachelor's degree (68.89%), followed by master's degrees (15.00%), senior high school education (6.11%), and doctoral or diploma qualifications (5.00% each). In terms of occupation, private sector employees dominate the sample (53.33%), followed by self-employed individuals (20.56%), professionals (16.67%), government employees (6.67%), and students (2.78%), with no respondents categorized as unemployed.

Concerning non-routine monthly expenditure, the largest proportion of respondents reported spending less than IDR 499,000 (37.78%), followed by those spending more than IDR 1,500,000 (26.67%), IDR 500,000–999,999 (23.33%), and IDR 1,000,000–1,499,999 (12.22%). This distribution indicates that the sample is predominantly composed of individuals with relatively limited discretionary financial capacity, aligning with the study's focus on low-income users. In terms of application usage frequency, the largest proportion reported using mobile stock investment applications twice per week (33.89%), followed by once per week (28.89%), three times per week (21.67%), and four times per week (15.56%). This pattern suggests that most users engage with investment platforms at a moderate frequency, reflecting periodic and cautious participation rather than intensive trading behavior. A comprehensive breakdown of the respondents' demographic characteristics is presented in Table 1.

Table 1. Profile of Respondents

Description			
Gender	Male	99	55%
	Female	81	45%
Age (Year)	< 20	4	2.22%
	21 – 25	43	23.89%
	26 – 30	63	35.00%
	31 – 40	38	21.11%
	> 40 Years Old	32	17.78%
Education	Senior High School	11	6.11%
	Diploma	9	5.00%
	Bachelor	124	68.89%
	Master	27	15.00%
Occupation	Doctoral	9	5.00%
	Private Sector Employee	96	53.33%
	Self-Employed	37	20.56%
	Professional	30	16.67%
	Government Employee	12	6.67%
	Student	5	2.78%
	Unemployed	0	0.00%
Expenditure	< Rp499.000	68	37.78%
	Rp500.000 – Rp999.999	42	23.33%
	Rp1.000.000 – Rp1.499.999	22	12.22%
	> Rp1.500.000	48	26.67%
App Use Frequency	1x per week	52	28.89%
	2x per week	61	33.89%
	3x per week	39	21.67%
	4x per week	28	15.56%

Source: Research data

Table 2 presents the results of the measurement model evaluation. All indicator loadings exceed the recommended threshold of 0.70, ranging from 0.736 to 0.830, indicating adequate

indicator reliability. The variance inflation factor (VIF) values range from 1.261 to 1.494, suggesting no multicollinearity issues. All constructs demonstrate strong internal consistency, with composite reliability values above 0.70. In addition, the AVE values range from 0.626 to 0.633, exceeding the minimum threshold of 0.50, indicating adequate convergent validity. Overall, the measurement model meets the required reliability and validity criteria and is suitable for further structural model analysis.

Table 2. Validity & Reliability Analysis

Variabel	Items	LF	VIF	CR	AVE
Attitude	AT1	0.808	1.433	0.837	0.632
	AT2	0.757	1.301		
	AT3	0.818	1.459		
Continuance Usage	CU1	0.815	1.444	0.838	0.633
	CU2	0.776	1.341		
	CU3	0.795	1.389		
Intention To Use	INT1	0.830	1.494	0.836	0.631
	INT2	0.766	1.325		
	INT3	0.785	1.373		
Percieved Behavioral Control	PBC1	0.807	1.410	0.835	0.627
	PBC2	0.789	1.365		
	PBC3	0.780	1.342		
Quality of Information	QIN1	0.763	1.311	0.834	0.626
	QIN2	0.784	1.363		
	QIN3	0.825	1.467		
Subjective Norms	SN1	0.816	1.466	0.835	0.629
	SN2	0.824	1.487		
	SN3	0.736	1.261		

Source: Research data

Table 3 presents the results of the discriminant validity assessment using the cross-loading criterion. The findings indicate that all indicators load higher on their respective constructs compared to other constructs. For instance, the indicators of Attitude (AT1–AT3) show the highest loading values on the Attitude construct (ranging from 0.757 to 0.818) compared to their loadings on other constructs. Similarly, the indicators of Continuance Usage (CU1–CU3), Intention to Use (INT1–INT3), Perceived Behavioral Control (PBC1–PBC3), Quality of Information (QIN1–QIN3), and Subjective Norms (SN1–SN3) consistently demonstrate higher loading values on their respective constructs than on other latent variables.

Although several indicators exhibit moderate cross-loadings with other constructs, their primary loadings remain substantially higher on the intended constructs, thereby satisfying the recommended criteria for discriminant validity. This pattern confirms that each construct is empirically distinct and measures a unique concept within the model. Therefore, it can be concluded that the measurement model has achieved adequate discriminant validity, indicating that all constructs are well differentiated and suitable for further structural model analysis.

Table 3. Validity & Reliability (Cross Loading) Analysis

	AT	CU	INT	PBC	QIN	SN
AT1	0.808	0.393	0.256	0.302	0.217	0.042

	AT	CU	INT	PBC	QIN	SN
AT2	0.757	0.371	0.291	0.415	0.280	0.045
AT3	0.818	0.468	0.061	0.287	0.321	0.008
CU1	0.308	0.815	0.146	0.384	0.273	0.120
CU2	0.449	0.776	0.193	0.438	0.341	0.134
CU3	0.482	0.795	0.160	0.313	0.250	0.109
INT1	0.165	0.196	0.830	0.217	0.134	-0.009
INT2	0.227	0.120	0.766	0.189	0.016	0.053
INT3	0.211	0.179	0.785	0.230	0.227	0.070
PBC1	0.299	0.403	0.183	0.807	0.268	0.153
PBC2	0.329	0.386	0.281	0.789	0.235	0.220
PBC3	0.368	0.339	0.172	0.780	0.223	0.119
QIN1	0.268	0.331	0.164	0.239	0.763	0.173
QIN2	0.363	0.276	0.153	0.317	0.784	0.105
QIN3	0.187	0.254	0.065	0.174	0.825	0.097
SN1	-0.026	0.115	0.069	0.186	0.031	0.816
SN2	0.001	0.091	0.004	0.114	0.169	0.824
SN3	0.129	0.160	0.038	0.198	0.178	0.736

Note : Attitude (AT), Continuance Usage (CU), Intention to Use (IN), Perceived Behavioral Control (PBC), Quality of Information (QIN), Subjective Norms (SN)
Source: Research data]

Table 4 presents the results of the discriminant validity assessment using the heterotrait–monotrait ratio (HTMT). The HTMT values for all construct pairs range from 0.111 to 0.732, which are below the commonly recommended threshold of 0.85 (or the more conservative threshold of 0.90). The highest HTMT value is observed between Continuance Usage and Attitude (0.732), while the lowest value is found between Subjective Norms and Attitude (0.111). Despite some moderate relationships among certain constructs, all HTMT values remain well within acceptable limits.

These results indicate that each construct is empirically distinct from the others, confirming that the model satisfies the requirement for discriminant validity based on the HTMT criterion (Hair Joseph et al., 2019). Therefore, it can be concluded that there are no issues related to construct overlap or multicollinearity at the latent variable level, and all constructs are adequately differentiated. Consequently, the measurement model is considered valid and appropriate for further structural model evaluation.

Table 4. Heterotrait-monotrait ratio (HTMT)

	ATT	**CU**	**INT**	**PBC**	**QIN**	**SN**
ATT						
CU	0.732					
INT	0.363	0.295				
PBC	0.598	0.673	0.379			
QIN	0.490	0.516	0.252	0.438		
SN	0.111	0.218	0.112	0.298	0.229	

Source: Research data

Table 5 presents the results of the direct hypothesis testing using the structural model analysis. The findings indicate that only a subset of the proposed hypotheses are statistically supported. Specifically, Perceived Behavioral Control has a significant positive effect on Intention to Use (β = 0.188, p = 0.041), supporting H4, although the effect size is relatively small (f^2 = 0.030). In addition, Quality of Information significantly influences Continuance Usage (β = 0.233, p = 0.000), supporting H5, with a moderate effect size (f^2 = 0.068). Furthermore, Perceived Behavioral Control demonstrates a strong and significant effect on Continuance Usage (β = 0.386, p = 0.000), supporting H6, with the largest effect size among all relationships (f^2 = 0.178), indicating its critical role in predicting continuance behavior.

On the other hand, several hypotheses are not supported. Quality of Information does not significantly affect Intention to Use (β = 0.049, p = 0.551) (H1), and Attitude shows a positive but insignificant effect on Intention to Use (β = 0.157, p = 0.057) (H2). Similarly, Subjective Norms have no significant effect on Intention to Use (β = -0.006, p = 0.935) (H3), indicating that social influence does not play a substantial role in shaping users' intention in this context. Moreover, Intention to Use does not significantly influence Continuance Usage (β = 0.069, p = 0.260) (H7), suggesting that intention alone may not be sufficient to drive sustained usage behavior.

Overall, the results highlight that Perceived Behavioral Control emerges as the most influential predictor, particularly for both intention and continuance usage, while Quality of Information plays a significant role only in driving continuance usage rather than initial intention. These findings suggest that users' perceived ability and control over the system are more critical determinants of sustained usage compared to attitudinal or social factors within this research context.

Table 5. Direct Hypotheses Testing Result

Hypothesis		Path Coefficient	*P* values	95% Confidence Interval Path Coefficient		*f* Square
				Lower Bound	Upper Bound	
H1	Quality Of Information -> Intention To Use	0.049	0.551	0.024	0.264	0.002
H2	Attitude -> Intention To Use	0.157	0.057	0.113	0.384	0.021
H3	Subjective Norms -> Intention To Use	-0.006	0.935	-0.161	0.095	0.000
H4	Perceived Behavioral Control -> Intention To Use	0.188	0.041	0.064	0.346	0.030
H5	Quality Of Information -> Continuance Usage	0.233	0.000	0.381	0.583	0.068
H6	Perceived Behavioral Control -> Continuance Usage	0.386	0.000	0.095	0.367	0.178
H7	Intention To Use -> Continuance Usage	0.069	0.260	0.261	0.549	0.006

Source: Research data

Table 6 presents the results of the indirect (mediation) hypothesis testing. The findings indicate that none of the proposed mediation effects are statistically significant. Specifically, the indirect effect of Attitude on Continuance Usage through Intention to Use (β = 0.011, p = 0.403) is not supported, as the p-value exceeds the significance threshold and the confidence interval

includes zero. Similarly, Perceived Behavioral Control does not demonstrate a significant indirect effect on Continuance Usage through Intention to Use (β = 0.013, p = 0.357), indicating the absence of mediation.

Furthermore, Subjective Norms also fail to show a significant indirect effect (β = 0.003, p = 0.670), suggesting that social influence does not indirectly affect continuance behavior through Intention to Use. Likewise, Quality of Information does not exhibit a significant indirect effect on Continuance Usage through Intention to Use. Overall, these findings indicate that Intention to Use does not mediate the relationship between the examined antecedents and Continuance Usage. This suggests that the influence of these variables on continuance behavior occurs primarily through direct effects rather than indirect pathways, highlighting the limited role of mediation within the proposed structural model.

Table 6. Indirect Hypotheses Testing Result

	Mediation Hypothesis	*Path Coefficient*	*P value*	95% *Interval Path Coefficient*	
				Lower Bound	*Upper Bound*
H8	Attitude -> Intention To Use -> Continuance Usage	0.011	0.403	-0.004	0.050
H9	Quality Of Information -> Intention To Use -> Continuace Usage	0.003	0.670	-0.006	0.030
H10	Subjective Norms -> Intention To Use -> Continuance Usage	0.000	0.951	-0.019	0.012
H11	Perceived Behavioral Control -> Intention To Use -> Continuance Usage	0.013	0.357	-0.006	0.054

Source: Research data

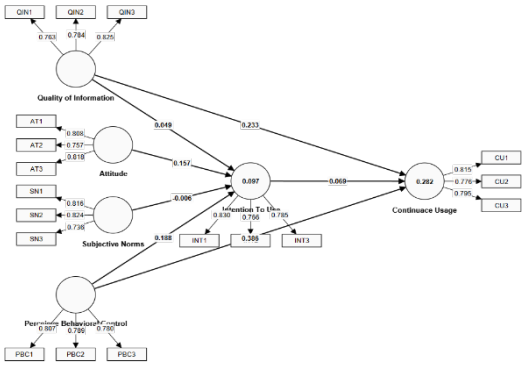
Table 7 presents the total effects results are consistent with the structural model findings, confirming the dominant role of perceived behavioral control and quality of information in explaining continuance usage.

Table 7. Total Effects

	Original	Sample	Standard	*T* statistics	*P* values
Attitude -> Continuace Usage	0.011	0.012	0.013	0.836	0.403
Attitude -> Intention To Use	0.157	0.158	0.082	1.904	0.057
Intention To Use -> Continuace Usage	0.069	0.069	0.061	1.126	0.260
Perceieve Behavioral Control -> Continuace Usage	0.399	0.399	0.059	6.741	0.000
Perceieve Behavioral Control -> Intention To Use	0.188	0.184	0.092	2.042	0.041
Quality Of Information -> Continuace Usage	0.236	0.235	0.064	3.714	0.000
Quality Of Information -> Intention To Use	0.049	0.049	0.082	0.596	0.551
Subjective Norms -> Continuace Usage	0.000	0.000	0.007	0.061	0.951
Subjective Norms -> Intention To Use	-0.006	-0.005	0.078	0.082	0.935

Source: Research data

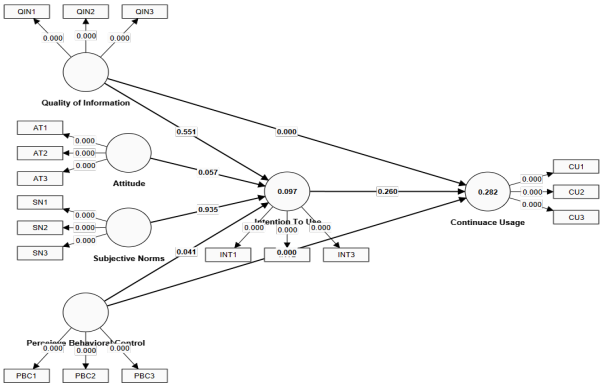
The measurement model results, as shown in Figure 1, further confirm that all indicators meet reliability thresholds.



Source: Research data

Figure 1. Research Model with of PLS Algorithm Result

The structural model results in Figure 2 support the findings presented in Table 5, highlighting perceived behavioral control as the strongest predictor.



Source: Research data

Figure 2. Research Model with Bootstrapping Result

Common Method Bias

Common method bias (CMB) may occur when both independent and dependent variables are measured using the same data collection method, such as a self-reported questionnaire (Kock, 2015). To assess potential CMB in this study, the full collinearity approach proposed by Kock (2015) was applied using SmartPLS 4. This method evaluates variance inflation factor (VIF) values for each latent construct based on latent variable scores. According to the recommended threshold, VIF values below 3.3 indicate that common method bias is not a significant concern (Diamantopoulos & Siguaw, 2006; Kock, 2015). The results show that all constructs in the model have VIF values below the threshold of 3.3, indicating that the dataset is free from common method bias.

Discussion

This study examines the determinants of continuance usage of mobile stock investment applications by integrating the Theory of Planned Behavior with information quality. The findings indicate that perceived behavioral control is the most influential factor in the model, significantly affecting both intention to use and continuance usage. This result is consistent with prior studies emphasizing the role of self-efficacy and perceived capability in complex technology usage, particularly in financial contexts where users are required to make informed and consequential decisions (Fan, 2022; Yadav et al., 2026). It suggests that users' confidence in their ability to understand financial information, operate application features, and execute investment decisions plays a central role in sustaining their engagement. In high-risk financial environments, users rely more on their perceived capability than on their initial behavioral intention, highlighting the importance of self-efficacy in complex financial decision-making contexts.

Quality of information is also found to have a significant direct effect on continuance usage, while its influence on intention to use is not significant. This finding aligns with recent research in digital finance and information systems, which highlights that the clarity, accuracy, and timeliness of information directly support user behavior in data-intensive environments (Chand et al., 2025; Tam et al., 2020). In investment contexts where decision-making depends heavily on financial data, users tend to treat information quality as a functional necessity rather than a factor shaping their initial motivation. Therefore, accurate and understandable information serves as a practical support mechanism that directly enables continued engagement, rather than influencing users' intention to use the platform.

In contrast, attitude and subjective norms do not significantly influence intention to use. This finding diverges from traditional TPB-based studies, which typically emphasize the importance of affective evaluation and social influence in shaping behavioral intention (Ajzen & Driver, 1991). However, similar patterns have been observed in high-risk or cognitively demanding contexts, where users rely less on social validation and emotional preference, and more on rational evaluation and perceived capability (Ryu & Ko, 2020; Wang & Deng, 2026). In financial decision-making environments characterized by uncertainty and potential loss, users appear to prioritize their ability to interpret information and manage risk over social influence or personal attitudes.

A central finding of this study is that behavioral intention does not significantly influence continuance usage. This finding challenges the fundamental assumption of the Theory of Planned Behavior that behavioral intention serves as the primary determinant of actual behavior, particularly in high-risk fintech contexts (Ajzen & Driver, 1991). This result contradicts prior studies in general digital service and fintech contexts, which consistently identify behavioral intention as a significant predictor of continuance usage (Alsharo et al., 2026; Naeem et al., 2026). However, this finding aligns with an emerging stream of literature highlighting the intention–behavior gap in high-risk environments (Bahmani & Bhatnagar, 2023; Shah et al., 2025). This can be explained by the high-risk and cognitively demanding nature of digital investment platforms. Unlike general digital services, investment decisions require users to continuously interpret complex financial information and manage uncertainty. In such conditions, users' initial intention may not be sufficient to sustain behavior, particularly among individuals with limited financial literacy. Instead, continuance usage appears to be more strongly influenced by users' perceived capability and the clarity of information provided by the platform (Hijazi et al., 2023; Yadav et al., 2026).

Theoretical Contribution

This study provides important theoretical contributions to the literature on technology continuance behavior in digital financial contexts. The findings challenge the core assumption

of the Theory of Planned Behavior (TPB), which posits behavioral intention as the primary determinant of behavior (Ajzen & Driver, 1991). The results demonstrate that intention to use does not significantly influence continuance usage, indicating the presence of an intention–behavior gap in high-risk financial environments (Bahmani & Bhatnagar, 2023; Shah et al., 2025). This indicates that in complex and uncertain investment contexts, behavioral intention alone may be insufficient to explain sustained usage. This study also extends the TPB framework by integrating Quality of Information from the Information Systems Success Model (Petter et al., 2008), thereby incorporating system-related characteristics into a behavioral model. The findings show that Quality of Information directly influences continuance usage without operating through intention, highlighting the critical role of informational clarity in supporting sustained engagement in data-intensive environments.

In addition, the results emphasize the role of Perceived Behavioral Control, which significantly influences both intention to use and continuance usage. This indicates that users' perceived capability, particularly in terms of financial and technological self-efficacy, is a key factor in sustaining engagement with mobile investment platforms. Taken together, these findings suggest the need to reconsider continuance behavior in high-risk fintech contexts. Rather than being primarily intention-driven, continuance usage is better explained by a combination of perceived capability and system-level informational support. This study therefore contributes to the development of a more context-sensitive extension of the TPB, which is conceptualized as a high-risk fintech continuance framework tailored to digital financial services.

This framework provides a foundation for future research to better explain user behavior in high-risk digital financial environments, where traditional intention-based models may no longer be sufficient.

Practical Implications

The findings of this study provide important practical implications for stakeholders in digital investment platforms. The results indicate that continuance usage is not primarily driven by users' psychological intention, but rather by their perceived capability and the quality of information provided by the platform. This suggests that marketing strategies focusing solely on user acquisition or stimulating initial interest are insufficient to sustain long-term engagement (Bahmani & Bhatnagar, 2023), particularly in high-stakes contexts where vulnerable users must continuously interpret financial data and manage uncertainty.

For platform developers, the dominant role of perceived behavioral control highlights the need to design systems that actively enhance users' financial self-efficacy. Users are more likely to continue using investment applications when they feel both technologically and financially capable of executing transactions and understanding outcomes. Accordingly, developers must move beyond basic interfaces and embed localized, capability-building features, such as step-by-step transaction support, dynamic risk indicators, and interactive micro-tutorials to reduce perceived difficulty and strengthen user control over investment activities (Fan, 2022; Nair et al., 2023).

In addition, the significant direct effect of information quality underscores the need to prioritize the cognitive accessibility of financial data. This finding indicates that users do not rely solely on raw access to market information, but on their ability to interpret and utilize it effectively without experiencing cognitive overload (Ariel, 2026). As such, presenting complex market volatility in a structured, simplified, and easily interpretable format, such as visual portfolio summaries, simplified risk-exposure charts, and plain-language contextual explanations is essential to support confident decision-making and sustain engagement (Chand et al., 2025; Tam et al., 2020).

From a regulatory and policy perspective, these findings reveal a critical gap in traditional financial inclusion strategies that rely exclusively on expanding access to digital platforms. There is an urgent need to address the gap between mere platform access and safe, effective usage, particularly among users with limited financial literacy. This implies that regulatory bodies must mandate transparent, understandable information disclosures and prioritize the long-term capability of the public. Improving user capability and ensuring informational clarity is just as important as expanding platform availability to achieve safe and sustainable participation in digital capital markets (Ryu & Ko, 2020; Yadav et al., 2026).

These findings reinforce recent international evidence suggesting that continuance behavior in high-risk digital environments is increasingly shaped by capability and information factors rather than purely intention-based mechanisms (Chand et al., 2025; Shah et al., 2025).

CONCLUSION

This study examines the determinants of continuance usage of mobile stock investment applications by integrating the Theory of Planned Behavior with information quality. The findings indicate that continuance usage is primarily influenced by perceived behavioral control and quality of information, while intention to use does not significantly affect continuance usage. This suggests that sustained engagement in digital investment platforms is driven more by users' perceived capability and access to clear and reliable information than by their initial behavioral intention. In high-risk financial contexts, continuance behavior is therefore not fully explained by intention-based models, but depends on users' ability to understand and manage investment activities supported by the system.

These findings imply that platform developers and financial service providers should prioritize improving usability, simplifying features, and enhancing user guidance to strengthen users' confidence in performing investment activities. In addition, ensuring that financial information is accurate, clear, and easy to interpret is essential to support informed decision-making and sustained platform usage.

This study is subject to several limitations. The cross-sectional design limits the ability to observe behavioral changes over time, particularly as users gain experience and adjust to financial risks. The focus on users in Central Java, Indonesia may also limit the generalizability of the findings to other contexts. Future research is encouraged to adopt longitudinal approaches and incorporate additional factors such as financial literacy, perceived risk, and trust to provide a more comprehensive understanding of continuance behavior in digital investment environments.

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Data Availability Statement

The data supporting the findings of this study are available in a public repository. The shared materials include aggregated data and the research questionnaire, ensuring that no personally identifiable information is disclosed. The dataset can be accessed at: DOI: 10.17632/n2s74w4pm6.1

Author Contributions

Conceptualization, methodology, data collection, formal analysis, and writing original draft preparation were performed by the first author. Supervision, validation, and writing review and editing were conducted by the second author.

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