



Strategic Determinants of Investment Sustainability on Digital Investment Platforms: Integrating the Technology Acceptance Model and Impulsive Trading Behavior with the Mediating Role of Initial Investment Decisions

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ARTICLE INFO

Keywords: Impulsive Trading Behavior, Investment Continuance, Purchase Decision, Technology Acceptance Model, Digital Investment Platform

Received : 15, June

Revised : 20, July

Accepted: 10, August

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ABSTRACT

Indonesia's digital investment sector grew 499% from 2019 to 2024, yet fewer than 1% of 14.87 million registered investors trade daily, revealing a systemic retention problem. This study integrates the Technology Acceptance Model (TAM) and Impulsive Trading Behavior (ITB) into one causal model explaining Investment Continuance, with Purchase Decision as mediator. A survey of 220 active retail investors on five Indonesian platforms (Bibit, Ajaib, Stockbit, IPOT, Bareksa) was analyzed via PLS-SEM in SmartPLS 4. All six hypotheses were supported. Perceived Enjoyment was the strongest predictor of Purchase Decision ($\beta=0.411$, large effect). ITB negatively affected Investment Continuance ($\beta=-0.300$), and Purchase Decision partially mediated the TAM-Continuance relationship. The model explained 74.0% of Purchase Decision variance and 66.3% of Investment Continuance variance

INTRODUCTION

The ease of trading via smartphone has brought millions of Indonesians into the capital market in a very short time. Data from the Indonesian Central Securities Depository (KSEI, 2024) shows investor growth from 2.48 million SIDs at the end of 2019 to 14.87 million SIDs as of December 2024—a 499% surge over five years. The sharpest surge occurred between 2020 and 2021, when the COVID-19 pandemic prompted people to seek alternative sources of income from home, coinciding with the expansion of the five largest digital investment platforms, which significantly simplified the registration process. More than 79% of all individual SIDs are under 40 years old, and 73% are individual retail investors, not institutions (KSEI, 2024; OJK, 2024).

Behind those growth figures lies a far more significant paradox: the average number of investors who actually trade every day was only about 147,000 as of December 2024—less than 1% of the total registered user base (KSEI, 2024). The growth rate of SIDs, which had reached 93% in 2021, slowed to the 18–22% range in 2023–2024. The gap between the number of registered users and active users is not a statistical anomaly; it reflects a serious and unresolved retention problem. For the OJK, which through the 2023–2027 Indonesian Capital Market Roadmap aims to reach 20 million SIDs by 2027 (OJK, 2023), understanding why users stop trading is a policy prerequisite that cannot be ignored.

The Technology Acceptance Model (TAM), developed by Davis (1989), has become the dominant framework for explaining the adoption of financial technology. Musa et al. (2024) confirmed this through a review of over a thousand articles in Scopus: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) consistently predict the intention to use digital platforms across various cultural contexts. On increasingly immersive investment platforms, Ling et al. (2024) added Perceived Enjoyment (PE) as an affective extension of TAM that is highly relevant among young investors. However, TAM answers only one question: why someone starts using a technology. It is not designed to explain why most of them later stop. On the other hand, the interfaces of modern investment platforms are structurally designed to create conditions that encourage spontaneous and emotional trading decisions, through real-time price notifications, daily stock rankings, and constantly updating volatility charts. Wu & Wu (2024) demonstrated causally that exposure to stock rankings on mobile interfaces increases users' speculative behavior, even in the absence of underlying fundamental reasons. When repeated impulsive decisions result in losses or disappointment, users tend to stop using the platform—not because of technical issues, but due to the negative emotional associations formed from their own experiences (Freibauer et al., 2026).

Based on a review of the available literature, at least three gaps need to be addressed. First, TAM and impulsive trading behavior have never been integrated into a single comprehensive model of usage sustainability for digital investment platforms. Second, the role of the Initial Investment Decision (Purchase Decision/PD)—the moment when a user first makes a transaction involving actual financial risk—as a mediator between pre-adoption TAM evaluation and Investment Continuance (IC) has rarely been formally tested;

Nair et al. (2023) note that this first transactional step is qualitatively distinct from mere general usage intent, yet its role as a formal mediator has never been empirically confirmed. Third, such an integrative study is not yet available in the specific context of active Indonesian retail investors, whose demographic profiles and platform interaction patterns cannot be generalized from findings in more mature markets. To the best of the researchers' knowledge, no study has yet positioned the Purchase Decision as an explicit mediator in a model that integrates both the TAM and Impulsive Trading Behavior within the context of Indonesian digital investment platforms.

Based on these three gaps, this study poses four research questions: (1) to what extent do PU, PEOU, and PE influence the Purchase Decision; (2) does the Purchase Decision have a positive effect on Investment Continuance; (3) Does impulsive trading behavior have a negative effect on investment continuance; and (4) Does the purchase decision mediate the influence of TAM factors on investment continuance among active retail investors on Indonesia's five largest digital investment platforms.

LITERATURE REVIEW

Technology Acceptance Model dan Konstruk Eksogen

The TAM formulated by Davis (1989) states that user acceptance of technology is determined by two main beliefs: Perceived Usefulness (PU), which is the belief that the system improves the performance of the user's activities, and Perceived Ease of Use (PEOU), which is the perception that the system can be operated without significant cognitive effort. Nair et al. (2023) confirmed the relevance of these two constructs in the context of mobile trading in emerging markets: PU consistently emerged as the most dominant factor in actual decisions to use investment platforms, while PEOU determined whether new users could progress from the exploration stage to their first transaction. Siagian et al. (2022) add that perceptions of digital security in Indonesia moderate how users evaluate a platform's functional benefits; concerns about transaction security suppress overall PU ratings-a condition typical of markets where digital trust has not yet fully matured.

In an increasingly immersive and competitive investment platform ecosystem, these two utilitarian constructs are no longer sufficient. Davis et al. (1992) introduced Perceived Enjoyment (PE) as an affective extension of the TAM, measuring the extent to which using a system is perceived as intrinsically enjoyable regardless of its functional benefits. The relevance of PE becomes even stronger when considering that 79.31% of all individual SIDs in Indonesia are under 40 years of age (KSEI, 2024)-a group that shapes the standard for digital experiences in e-commerce and social media and evaluates platforms not based on technical specifications, but rather on the feelings they experience when interacting with them (Dewi et al., 2022). Ling et al. (2024) confirmed that PE has an influence comparable to-and even surpassing-PU in predicting the intention to use mobile investment apps among young investors after controlling for functional influences; Jahed & Abdekhoda (2025) add that PE encourages voluntary and consistent platform use-a condition that precisely reflects the

situation of investment platform users, where all decisions depend on the users' own initiative.

H1: Perceived Usefulness has a positive effect on the Purchase Decision.

H2: Perceived Ease of Use has a positive effect on Purchase Decision.

H3: Perceived Enjoyment has a positive effect on Purchase Decision.

Initial Investment Decision as a Transition Point and Mediator

When someone finally clicks the "Buy" button for the first time, something different happens compared to simply downloading or trying out an app. That action carries a real financial risk, no matter how small the amount, and from that moment on, concrete expectations are formed that will become the standard for evaluating all subsequent experiences. In this study, "Purchase Decision" refers to a user's initial decision to make their first investment transaction through a digital platform, adapted from consumer decision-making theory (Kotler & Keller, 2016) but incorporating a dimension of financial risk not present in conventional purchasing decisions. Nair et al. (2023) describe this first transactional step as a "leap of trust" that is qualitatively distinct from ordinary behavioral intentions; Mendoza et al. (2025) confirm that users' readiness to make their first transactional commitment on a fintech platform is directly influenced by system quality and the level of trust established during the initial evaluation phase; Stanley et al. (2024) found direct evidence that the use of trading apps has a significant effect on the purchase decisions of Indonesian investors.

Investment Continuance is adapted from continuance intention in Bhattacharjee's (2001) Expectation-Confirmation Model (ECM). In the ECM, continuance intention is formed after users experience expectation confirmation and satisfaction from their actual experience; without a transitional point in the form of an actual transactional action, the expectation confirmation mechanism cannot take place. Yehuda & Tjhin (2024) confirmed in the Indonesian context that the quality of the initial experience using a digital investment app has a disproportionate impact on continuance intention: users who are satisfied with their first transaction demonstrate a much stronger commitment to continue, while initial disappointment can hardly be offset by subsequent positive experiences. Thapa et al. (2024) reinforce these findings by demonstrating that the first transaction experience forms a psychological anchor whose influence extends far beyond the moment itself.

H4: Purchase Decision has a positive effect on Investment Continuance.

H6: Purchase Decision mediates the effects of PU, PEOU, and PE on Investment Continuance.

Purchase Decision is not positioned as a mediator for the ITB path because, temporally speaking, ITB is a post-adoption behavior that occurs after the first transaction; positioning Purchase Decision as the mediator would create a temporal inconsistency that cannot be logically sustained.

Impulsive Trading Behavior

Not every trading decision is the result of careful consideration. Rook (1987) defines impulsive behavior through three mutually reinforcing characteristics: spontaneity in decision-making, the dominance of emotional impulses over rational considerations, and disregard for consequences. In the context of mobile trading platforms, these three characteristics emerge in response to app interface

stimuli, namely rapidly moving price charts, real-time notifications, and continuously updated stock rankings. Impulsive Trading Behavior (hereafter ITB) differs from overtrading and speculative trading because it emphasizes psychological mechanisms rather than frequency or risk orientation: the tendency to trade as a spontaneous and emotional response to visual interface stimuli without adequate risk assessment. Wu & Wu (2024) demonstrated a causal relationship through a natural experiment based on actual transaction data, showing that exposure to stock rankings on mobile interfaces increases the frequency of speculative trades even among users with relatively rational investment patterns.

The most critical consequence for retention is the emotional impact. When impulsive decisions repeatedly result in losses or unexpected volatility, users experience emotional disconfirmation (Bhattacharjee, 2001): a state in which reality clashes sharply with initial expectations. Unlike cognitive dissatisfaction, which occurs when technical features fail to meet standards, this type of disconfirmation operates at a much deeper level of emotional association and is difficult to reverse. Users begin to associate the platform itself with unpleasant experiences and eventually stop using it-not because the platform is technically flawed. Freibauer et al. (2026) documented this phenomenon among European neobroker users; Thapa et al. (2024) confirmed that the accumulation of negative emotional experiences among mobile trading users strongly correlates with a decline in continuance intention even after controlling for technical satisfaction with the platform. Elisa et al. (2022) found an identical mechanism in the Indonesian context: digital stimuli drive impulsive decisions through momentary perceived value that overrides rational considerations, on both e-commerce and mobile trading platforms.

H5: Impulsive Trading Behavior has a negative effect on Investment Continuance.

The research model consists of two parallel causal pathways. The first pathway is a pre-adoption cognitive-affective pathway: PU, PEOU, and PE collectively shape users' evaluations of the platform, driving the Purchase-Decision as a transition point, and from there, Investment Continuance is determined (H1-H4, H6). The second pathway is a post-adoption emotional pathway: ITB has a direct negative effect on investment continuity through the mechanism of emotional disconfirmation (H5). Financial literacy (Nofsinger, 2022) and risk tolerance are included as control variables.

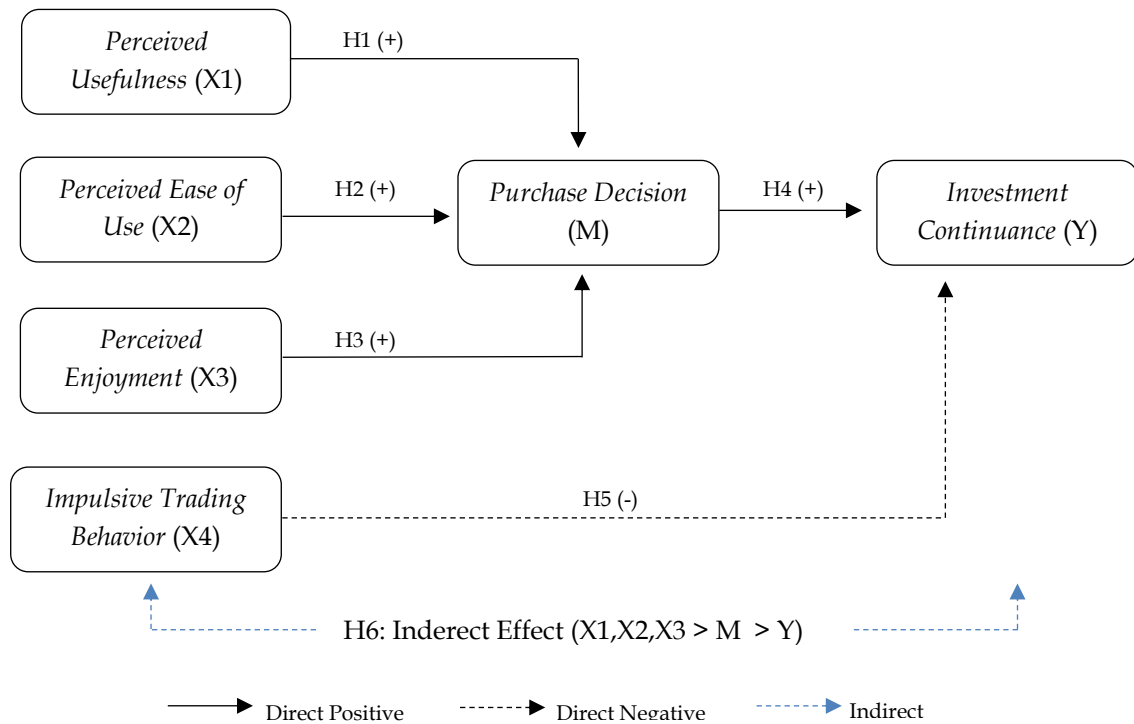


Figure 1. Conceptual Framework

METHODOLOGY

This study employs a quantitative approach with an explanatory (causal) design and a positivist paradigm. The hypotheses were derived deductively from the Theory of Attitudes and Motivation (TAM) (Davis, 1989), the Expectation-Confirmation Model (Bhattacharjee, 2001), and the literature on impulsive trading behavior. The study population consists of individual retail investors in Indonesia who actively trade through one of five platforms: Bibit, Ajaib, Stockbit, IPOT (Indo Premier Sekuritas), or Bareksa. These five platforms were selected because they have consistently been identified as the most widely used mobile-based digital investment platforms among Indonesian retail investors (OJK, 2023) and provide relatively uniform core features, ensuring that the measured user experiences are comparable across platforms. Limiting the sample to investors who are truly active in trading is important because users who have not yet made more than their first transaction do not have sufficient experience to meaningfully evaluate either Purchase Decision or Investment Continuance (Thapa et al., 2024).

The sampling technique used was purposive sampling (Memon et al., 2025; Sekaran & Bougie, 2016) with six inclusion criteria: (1) actively using one of the five target platforms; (2) having made more than one transaction or been active within the last three months; (3) a minimum transaction value of Rp 500,000 per single transaction or Rp 1,000,000 cumulatively; (4) residing in Indonesia; (5) at least 17 years of age in accordance with OJK regulations; and (6) willing to complete the questionnaire in full. The minimum sample size was set at 150 respondents based on the 10x rule for the most frequent indicator (Hair et al.,

2022), and 200 respondents were set as the ideal target based on Cohen's (1988, in Hair et al., 2019) power analysis for a medium effect size at $\alpha=0.05$. Of the 258 forms received, 38 responses were eliminated through a four-stage data cleaning procedure: failure to meet inclusion criteria (automatic screening questions), straight-lining patterns (Ward & Meade, 2023), completion too quickly (Leiner, 2019), and incomplete items (Hair et al., 2022). The final sample analyzed consisted of 220 respondents, exceeding the minimum target.

The research model includes eight constructs: three exogenous variables from the Technology Acceptance Model (TAM) (PU, PEOU, PE; 5 indicators each), one exogenous behavioral variable (ITB; 9 indicators covering three dimensions: Spontaneity, Emotional Drive, Consequence Neglect), Purchase Decision as a mediator (5 indicators), Investment Continuance as an endogenous variable (5 indicators), and Financial Literacy and Risk Tolerance as control variables (3 indicators each). All indicators were systematically adapted from validated instruments: Davis (1989) and Davis et al. (1992) for the TAM constructs; Rook (1987) and Wu & Wu (2024) for ITB; Kotler & Keller (2016) and Mendoza et al. (2025) for Purchase Decision; and Bhattacharjee (2001) for Investment Continuance. Measurements used a six-point Likert scale (1 = strongly disagree, 6 = strongly agree) to avoid the tendency to select the neutral option.

Data analysis using SEM-PLS with SmartPLS version 4 (Ringle et al., 2020) was chosen because it is capable of handling integrative models with multiple latent variables and mediating relationships in moderately sized samples without requiring a multivariate normal distribution (Hair et al., 2022). A two-step procedure was applied: evaluation of the outer model included outer loadings (≥ 0.70), AVE (≥ 0.50), HTMT (< 0.85), composite reliability (≥ 0.70), and VIF (< 5.0); followed by evaluation of the inner model, which included R^2 , f^2 , and Q^2 . Hypothesis testing was conducted using bootstrapping with 5,000 subsamples ($t\text{-stat} > 1.96$; $p < 0.05$). Common method bias was controlled through design procedures (anonymity, item order variation) and a full collinearity VIF assessment (Kock, 2021; VIF values < 3.3). Mediation analysis used specific indirect effects with bootstrapping; mediation was accepted if the 95% CI did not include zero.

RESEARCH RESULT

Demographic Profile and Descriptive Statistics

Table 1. Demographic Profile of Respondents (n = 220)

Characteristics	Category	n	%
Gender	Male	117	53.2
	Female	103	46.8
Age	17–24 years	55	25.0
	25–30 years	99	45.0
	31–35 years	44	20.0

	36–40 years	15	6,8
	> 40 years	7	3,2
Primary Platform	Bibit	78	35,5
	Stockbit	54	24,5
	Ajaib	40	18,2
	IPOT	28	12,7
	Bareksa	20	9,1
Transaction Frequency	< 1 time/month	49	22.3
	1–4 times per month	102	46.4
	5–10 times/month	45	20.5
	> 10 times per month	24	10.9

Source: Primary data processed by the researcher (2026)

The age distribution of the sample aligns with the national investor profile: 90.0% of respondents are under 35 years old, compared to 79.31% of registered national investors who are under 40 years old (KSEI, 2024). Bibit is the most widely used platform (35.5%), consistent with its position as a popular gateway to digital investing for beginner investors. The majority of respondents (46.4%) trade 1–4 times per month, while 31.4% trade more than five times per month.

Table 2. Descriptive Statistics of Research Constructs (1–6 Likert Scale)

Konstruk	n	Mean	Min	Maks	SD	Catatan
Perceived Usefulness (PU)	220	5,30	3,00	6,00	0,570	Very positive
Perceived Ease of Use (PEOU)	220	5,32	3,20	6,00	0,591	Very positive
Perceived Enjoyment (PE)	220	5,29	3,20	6,00	0,613	Very positive
Impulsive Trading Behavior (ITB)	220	4,47	2,56	6,00	0,679	Very positive
Purchase Decision (PD)	220	5,23	3,20	6,00	0,662	Very positive
Investment Continuance (IC)	220	5,23	3,20	6,00	0,590	Very positive
Financial Literacy (Kontrol)	220	4,15	1,33	6,00	0,997	Width variation
Risk Tolerance (Kontrol)	220	3,95	1,00	6,00	1,152	Highest SD

Source: Primary data processed by the researcher (2026)

All three TAM constructs recorded means above 5.20, indicating a very positive assessment of the platform. ITB recorded the lowest mean among the main constructs (4.47) with the highest standard deviation (0.679), reflecting

significant variation in impulsive tendencies among respondents, which is statistically advantageous for the model's ability to detect the influence of ITB.

Measurement Model Evaluation (Outer Model)

Table 3. Summary of Measurement Model Evaluation

Konstruk	Loading Range	AVE	CR (rho_c)	Cronbach's α	VIF Maks
Perceived Usefulness (PU)	0,789-0,812	0,635	0,897	0,857	2,447
Perceived Ease of Use (PEOU)	0,791-0,841	0,666	0,909	0,875	1,842
Perceived Enjoyment (PE)	0,800-0,828	0,656	0,905	0,869	2,635
Impulsive Trading Behavior (ITB)	0,709-0,782	0,546	0,915	0,898	1,012
Purchase Decision (PD)	0,822-0,872	0,709	0,924	0,897	3,178
Investment Continuance (IC)	0,765-0,839	0,655	0,905	0,868	2,903
Financial Literacy (FL)	0,780-0,881	0,690	0,869	0,804	1,185
Risk Tolerance (RT)	0,785-0,922	0,720	0,885	0,824	1,197

Note: All constructs met the criteria of loading ≥ 0.70 ; AVE ≥ 0.50 ; CR ≥ 0.70 ; $\alpha \geq 0.70$; VIF < 5.0 .

Source: SmartPLS 4.0 output, processed by the researcher (2026)

All 37 indicators met the criterion of an outer loading of ≥ 0.70 , with values ranging from 0.709 (CN3 in ITB) to 0.922 (RT1 in Risk Tolerance). ITB recorded the lowest AVE among the main constructs (0.546), a reasonable consequence of the three sub-dimensions being modeled reflectively within a single construct. The composite reliability of all constructs ranged from 0.869 to 0.924. All VIF values were below 3.3, indicating that common method bias is not a serious threat (Kock, 2021). The model was deemed to fit well: SRMR = 0.054 (< 0.080) and NFI = 0.773 (> 0.70).

Table 4. Discriminant Validity Test-HTMT Ratio (Critical Value Pairs)

Construct Pairs	HTMT	Threshold	Status
PD $\leftrightarrow$ PE (highest)	0,860	$< 0,90$ (related construct)	Meets
PD $\leftrightarrow$ IC	0,824	$< 0,85$	Meets
PD $\leftrightarrow$ PU	0,821	$< 0,85$	Meets
PE $\leftrightarrow$ IC	0,740	$< 0,85$	Meets

PD ↔ PEOU	0,743	< 0,85	Meets
PU ↔ PE	0,697	< 0,85	Meets
PEOU ↔ IC	0,668	< 0,85	Meets
All ITB pairs	< 0,300	< 0,85	Meets
All Control Pairs	< 0,480	< 0,85	Meets

Note: Thresholds from Hair et al. (2022): < 0.85 for constructs with different concepts; < 0.90 for constructs with high conceptual similarity.

Source: SmartPLS 4.0 output, processed by the researcher (2026)

The highest HTMT value for the PD-PE pair (0.860) remains below the 0.90 threshold applicable to pairs with high conceptual similarity (Hair et al., 2022). Substantively, the relationship between the enjoyment of using the platform (PE) and users' confidence in making their first investment decision (PD) is understandable; the slight conceptual overlap between the two is a consequence of the model design, not a validity issue. All 28 other HTMT pairs are below 0.85.

Structural Model Evaluation (Inner Model)

Table 5. Summary of Structural Model Evaluation

Indicator / Path	Value	Adj. R ²	Category
SRMR (Model Fit)	0.054	–	Good fit (< 0.080)
NFI (Model Fit)	0.773	–	Acceptable (> 0.70)
R ² Purchase Decision (PD)	0.740	0.736	Substantial
R ² Investment Continuance (IC)	0.663	0.652	Moderate-Substantial
Q ² Purchase Decision	0.517	–	Strong predictive relevance (> 0)
Q ² Investment Continuation	0.421	–	Good predictive relevance (> 0)
PE → PD (H3)	f ² = 0.365	–	Large effect - the highest in the model
PU → PD (H1)	f ² = 0.264	–	Medium effect
ITB → IC (H5)	f ² = 0.261	–	Moderate effect
PEOU → PD (H2)	f ² = 0.197	–	Moderate effect
PD → IC (H4)	f ² = 0.096	–	Small effect
FL → IC (Control)	f ² = 0.017	–	Negligible
RT → IC (Control)	f ² = 0.001	–	Negligible

Note: f^2 : 0.02 = small; 0.15 = medium; 0.35 = large (Cohen, 1988 in Hair et al., 2019).

Source: SmartPLS 4.0 output, processed by the researcher (2026)

Hypothesis Testing

Table 6. Results of Direct Effect Tests

H	Path	β	T-stat	P-value	CI 95%	Decision
H1	PU → Purchase Decision	0.339	7.163	<0.001	[0.247; 0.430]	Accepted
H2	PEOU → Purchase Decision	0.276	6.532	<0.001	[0.195; 0.360]	Accepted
H3	PE → Purchase Decision	0.411	8.440	<0.001	[0.314; 0.507]	Accepted (Large)
H4	PD → Continued Investment	0.354	4.745	<0.001	[0.202; 0.494]	Accepted
H5	ITB → Investment Continuation	-0.300	6.453	<0.001	[-0.396; -0.216]	Accepted
-	PU → IC (direct)	0.145	2.465	0.014	[0.029; 0.264]	Significant
-	PEOU → IC (direct)	0.154	2.660	0.008	[0.038; 0.264]	Significant
-	PE → IC (direct)	0.223	3.408	0.001	[0.097; 0.349]	Significant
-	FL → IC (Control)	0.082	1.636	0.102	[-0.037; 0.161]	Not Significant
-	RT → IC (Control)	-0.022	0.464	0.643	[-0.106; 0.080]	Not Significant

Note: The direct effect of TAM → IC remains significant after the mediator is included, confirming the partial mediation of H6.

Source: SmartPLS 4.0 output, processed by the researcher (2026)

Table 7. Total Effects of TAM → Investment Continuance

TAM Construct	Direct β	Indirect β (via PD)	Total Effect β
Perceived Usefulness (PU)	0.145*	0.120**	0.265
Perceived Ease of Use (PEOU)	0.154**	0.098**	0.252
Perceived Enjoyment (PE)	0.223**	0.145**	0.368 (highest)

Note: * $p < 0.05$; ** $p < 0.01$. Total Effect = Direct β + Indirect β .

Source: compiled by the researcher (2026)

Table 8. Mediation Test Results - Specific Indirect Effects (H6)

Mediation Path	Indirect β	T-stat	P-value	95% CI	Type
PU $\rightarrow$ PD $\rightarrow$ IC	0.120	3.779	<0.001	[0.062; 0.184]	Partial
PEOU $\rightarrow$ PD $\rightarrow$ IC	0.098	4.278	<0.001	[0.054; 0.143]	Partial
PE $\rightarrow$ PD $\rightarrow$ IC	0.145	4.000	<0.001	[0.077; 0.218]	Partial

Note: All 95% CIs do not include zero; partial mediation because the direct effect of TAM $\rightarrow$ IC remains significant.

Source: SmartPLS 4.0 output, processed by the researcher (2026)

Table 9. Summary of Test Results for All Research Hypotheses

H	Hypothesis Statement	β	T-stat	p	Effect Size	Results
H1	PU (+) $\rightarrow$ Purchase Decision	0.339	7.163	<0.001	$f^2=0.264$ Medium	Accepted
H2	PEOU (+) $\rightarrow$ Purchase Decision	0.276	6.532	<0.001	$f^2=0.197$ Medium	Accepted
H3	PE (+) $\rightarrow$ Purchase Decision	0.411	8.440	<0.001	$f^2=0.365$ Large	Accepted
H4	PD (+) $\rightarrow$ Continued Investment	0.354	4.745	<0.001	$f^2 = 0.096$ Small	Accepted
H5	ITB (-) $\rightarrow$ Investment Continuation	-0.300	6.453	<0.001	$f^2 = 0.261$ Medium	Accepted
H6	PD mediates PU/PEOU/PE $\rightarrow$ IC	var.	≥ 3.779	<0.001	Partial Mediation	Accepted

Source: SmartPLS 4.0 output, processed by the researcher (2026)

DISCUSSION

All six hypotheses were accepted, and the integrative model successfully explained 74.0% of the variance in Purchase Decision and 66.3% of the variance in Investment Continuance. The strength of these findings lies not in each hypothesis individually, but in the model's ability to integrate two opposing forces acting simultaneously: the pre-adoption cognitive-affective pathway that builds investment commitment, and the post-adoption emotional pathway that erodes it from within. Both were empirically tested within a single structural framework for the first time in the context of active retail investors in Indonesia.

Perceived Enjoyment as the Most Determinant Factor in TAM

Perceived Enjoyment was the only path that reached the "large effect" category across all models ($\beta=0.411$; $f^2=0.365$), with the highest total effect on Investment Continuance ($\beta=0.368$). This effect surpassed that of Perceived Usefulness ($\beta=0.339$; $f^2=0.264$) and Perceived Ease of Use ($\beta=0.276$; $f^2=0.197$). This

finding is significant because the TAM developed by Davis (1989) emerged from the context of mandatory organizational information systems, where functionality dominates because users have no other choice. Digital investment platforms operate in a completely different ecosystem: voluntary use, intense competition among platforms, and a user base where 90.0% are under 35 years old—a demographic shaped by the digital experience standards of e-commerce and social media. In this ecosystem, the enjoyment derived from using the platform is a stronger determinant of the first transactional step than functional benefits alone. Ling et al. (2024) documented a similar pattern among young Asian investors; Jahed & Abdekhoda (2025) explained the mechanism through intrinsic motivation, which is more resilient to initial barriers. PEOU's position as the weakest predictor among the three likely reflects the convergence in interface quality across the five platforms studied. When nearly all platforms are already easy to use, ease of use is no longer a sharp differentiating factor; competition shifts to the affective dimension.

Impulsive Trading Behavior: An Equally Erosive Force

ITB has a significant negative effect on Investment Continuance ($\beta = -0.300$; $f^2 = 0.261$; 95% CI = $[-0.396; -0.216]$). The entire confidence interval lies in the negative zone, confirming that the direction of this effect is consistent and not a statistical artifact. One particularly revealing comparison: the f^2 for ITB relative to IC (0.261) is nearly identical to the f^2 for PU relative to PD (0.264). The erosive power of Impulsive Trading Behavior on retention is equivalent in magnitude to the constructive power of Perceived Usefulness in driving initial adoption. The platform that most successfully attracts users through engaging design—with reactive price notifications, prominent stock rankings, and constantly updating volatility charts—unintentionally drives a mechanism that undermines its own retention. This mechanism operates through emotional disconfirmation (Bhattacharjee, 2001): when impulsive trades repeatedly result in disappointment, users form negative associations with the platform itself as a space they associate with unpleasant experiences. Wu & Wu (2024) empirically demonstrated this causality; Freibauer et al. (2026) documented its consequence—a complete cessation of investment activity, rather than merely a decrease in frequency. Tahar & Danarsari (2023) confirmed a similar behavioral pattern among Indonesian retail investors using app-based platforms.

Partial Mediation of Purchase Decisions: Two Parallel Mechanisms

All three indirect effect paths through Purchase Decision were significant, with 95% CIs that did not include zero: PU (indirect $\beta = 0.120$; CI = $[0.062; 0.184]$), PEOU (indirect $\beta = 0.098$; CI = $[0.054; 0.143]$), and PE (indirect $\beta = 0.145$; CI = $[0.077; 0.218]$). The mediation is partial because the direct effect of TAM on IC remains significant after the mediator is included, indicating that two distinct mechanisms operate simultaneously.

The direct path indicates that a positive evaluation of the platform fosters a general orientation that supports continuance. The indirect path shows that a positive evaluation drives the first transaction, which then establishes concrete expectations as the standard for evaluating all subsequent experiences. Continuance intention, as defined by Bhattacharjee (2001), is meaningful only in the context of actual usage

experiences; the Purchase Decision serves as the conversion point from hypothetical evaluation to real-world experience. Yehuda & Tjhin (2024) confirm, in the Indonesian context, that initial disappointment is asymmetric and difficult to offset with subsequent positive experiences, reinforcing the role of the Purchase Decision as a critical turning point that determines the trajectory of retention.

Theoretical Contributions

This study yields three identifiable theoretical contributions. First, TAM is extended beyond its conventional boundaries as a mere pre-adoption model. Confirmation that TAM constructs have a causal reach beyond the initial adoption point-whether through direct effects or indirect effects via the Purchase Decision-indicates that TAM and ECM (Bhattacharjee, 2001) need not be treated as two separate frameworks; this finding addresses the limitation identified by Savitha et al. (2022) regarding continuance models that neglect the emotional dimension of users' active behavior. Second, Impulsive Trading Behavior is formally operationalized as a direct predictor of Investment Continuance within the SEM framework, filling the gap identified by Wu & Wu (2024) that previous ITB studies have primarily focused on the impact on the quality of financial decisions rather than on the continuity of platform use. Third, the Purchase Decision is confirmed as an explicit mediator in the TAM → Investment Continuance path-a role previously suggested only conceptually by Nair et al. (2023) and Mendoza et al. (2025) but never formally tested in the context of Indonesian digital investment platforms.

The lack of significance of Financial Literacy ($\beta=0.082$; $p=0.102$) and Risk Tolerance ($\beta=-0.022$; $p=0.643$) after controlling for the main variables indicate that loyalty to the platform is determined more by the quality of the affective experience and trading behavior patterns than by individual psychographic characteristics (Khan et al., 2021).

CONCLUSIONS AND RECOMMENDATIONS

This study successfully demonstrated that investment continuance on digital investment platforms is determined by two opposing forces. First, pre-adoption cognitive-affective evaluation via the Technology Acceptance Model (TAM), with Perceived Enjoyment as the most significant determinant ($\beta=0.411$; large effect), builds investment commitment through the Purchase Decision as a transition point. Second, Impulsive Trading Behavior erodes that commitment with nearly equal strength ($f^2=0.261$ compared to $f^2=0.264$ for PU). Partial mediation by Purchase Decision confirms that pre-adoption evaluation operates through two parallel mechanisms leading to Investment Continuance: directly shaping continuity orientation, and indirectly through the first transactional action that forms concrete expectations. Overall, the model explains 74.0% of the variance in Purchase Decision and 66.3% of the variance in Investment Continuance.

For platform developers and securities firms, the dominance of "Perceived Enjoyment" implies that the quality of the user experience-not merely the comprehensiveness of data or the level of transaction fees-is the determining factor in converting registered users into active investors. Audits of interfaces

focused on the affective experience-such as visual responsiveness, content personalization, and intuitive transaction flows-have the potential to be more effective than adding analytical features. At the same time, features that trigger impulsivity-such as overly prominent real-time stock rankings, aggressive price notifications, and volatility charts that dominate the main screen-need to be evaluated, as they have been empirically shown to erode retention. Concrete

design considerations include a cooling-off mechanism before executing large transactions for novice investors and context-based, portfolio-driven educational notifications as an alternative to reactive price notifications.

For retail investors, this study offers a practical insight: price notifications, stock rankings, and volatility charts are not neutral information. These elements have been empirically shown to increase the tendency toward spontaneous transactions without adequate risk assessment. Limiting exposure to real-time notifications and establishing a scheduled time to review one's portfolio are concrete steps that can reduce exposure to ITB stimuli. Given the disproportionate influence of Purchase Decisions on Investment Continuance, the quality of decisions made during the first transaction deserves far greater attention than simply the speed at which one begins. For the OJK and the IDX, the impact of ITB ($f^2=0.261$) provides an empirical basis that platform interface design is a measurable and relevant determinant of investor retention for policies protecting retail investor behavior in the digital ecosystem, in line with the target of 20 million SIDs by 2027 (OJK, 2023; OJK, 2024).

ADVANCED RESEARCH

This study confirmed all six hypotheses with substantial predictive power; however, several limitations must be acknowledged in order to accurately define the scope of the findings.

A cross-sectional design limits the study's ability to capture temporal dynamics. The relationship between Impulsive Trading Behavior and Investment Continuance is theoretically cumulative and develops over time as trading experience accumulates; a cross-sectional design cannot verify whether high ITB precedes a decline in continuance or whether both occur simultaneously in response to specific market conditions. A 12-24-month longitudinal panel study is needed to test the temporal dynamics of this relationship more accurately (Yi et al., 2024). ITB measurements also rely on self-reports via perceptual questionnaires rather than actual transaction data; although the outer loadings of all indicators are adequate, this method is susceptible to social desirability bias. Replication using actual transaction data from platform logs would yield more accurate estimates of ITB prevalence, following the approach of Wu & Wu (2024). The purposive sampling technique, although common in financial technology adoption research and mitigated through diversification of recruitment channels (Memon et al., 2025), still limits the generalizability of the findings beyond the context of the five platforms studied. Finally, the model does not yet include theoretically relevant variables, namely market volatility during the survey period, platform usage duration, and social influence through online investment

communities; all three could moderate the relationship between ITB and Investment Continuance.

Given these limitations, six of the most relevant directions for further research can be identified. Researchers can design a longitudinal panel study to capture how ITB patterns and TAM evaluations evolve over time as users gain transaction experience and market conditions change. Cross-platform comparative research can determine whether specific differences in interface design result in significant differences in ITB and investment continuance. Using actual transaction data instead of self-reports to measure ITB will improve the accuracy of estimates while addressing the methodological limitations of this study. Testing specific interface design elements-such as notification frequency, chart prominence, and gamification features-as independent predictors of ITB will provide more actionable design implications for platform developers. Replicating the model in other emerging markets with similar demographic profiles-such as Vietnam, Thailand, or the Philippines-could test the generalizability of the contextual findings from Indonesia. Finally, future researchers could examine moderating variables not included in this model, namely market volatility, platform usage duration, and social influence through online investment communities (Yi et al., 2024).

ACKNOWLEDGMENT

The author would like to express her deepest gratitude to Ms. Rd. Nurafni Rubiyanti, S.M.B., M.B.A., Ph.D., as the primary advisor, and Dr. Yogi Suprayogi, S.E., M.M., as the co-advisor, for their guidance, critical feedback, and invaluable support throughout the entire research process. Appreciation is also extended to Dr. Putu Nina Madiawati, S.T., M.T., M.M., as the first examiner, and Dr. Arry Widodo, S.E., M.M., Ph.D., as the second examiner, for their constructive criticism that enriched this research. Thank you to Prof. Dr. Suyanto, S.T., M.Sc., Rector of Telkom University, and Prof. Dr. Farida Titik Kristanti, S.E., M.Si., Dean of the Faculty of Economics and Business, for the institutional facilities and support, as well as to Mahir Pradana, S.E., M.Sc., Ph.D. as the academic advisor for his consistent guidance. The author also extends gratitude to the 220 retail investors who were willing to take the time to participate as respondents in this study.

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