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## Digital Gold Investment Decisions Through Technology Acceptance: The Influence of Intention

### Decisiones de Inversión en Oro Digital a Través de la Aceptación de la Tecnología: La Influencia de la Intención

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#### ABSTRACT

This study examines the Technology Acceptance Model (TAM) application in gold investment decisions through digital platforms, focusing on intention's mediating role and gender differences in East Java, Indonesia. Using structural equation modeling (SEM-PLS), data were collected from 254 respondents experienced with digital gold investment platforms through purposive sampling and structured questionnaires assessing perceived ease of use (PEOU), perceived usefulness (PU), intention, and investment decisions. All TAM relationships were statistically significant: PEOU to intention ( $\beta = 0,214$ ,  $p = 0,011$ ), PU to intention ( $\beta = 0,666$ ,  $p < 0,001$ ), and intention to gold investment decision ( $\beta = 0,575$ ,  $p < 0,001$ ). Intention significantly mediated both PEOU-investment and PU-investment relationships. The model explained 74 % of intention variance and 85,1 % of investment decision variance. Geographic limitation to East Java and self-reported data may affect generalizability. Future research should expand scope and incorporate behavioral data. Platform developers should prioritize user-friendly interfaces and utility emphasis. This study contributes novel insights to digital gold investment literature in emerging markets, identifying mediation differences for platform design and marketing strategies.

**Keywords:** Technology Acceptance Model; Gold Investment; Digital Platforms; Intention Mediation; Structural Equation Modeling.

#### RESUMEN

Este estudio examina la aplicación del Modelo de Aceptación de la Tecnología (TAM) en las decisiones de inversión en oro a través de plataformas digitales, con énfasis en el papel mediador de la intención y las diferencias de género en Java Oriental, Indonesia. Utilizando el modelado de ecuaciones estructurales (SEM-PLS), se recolectaron datos de 254 encuestados con experiencia en plataformas de inversión digital en oro, mediante muestreo por conveniencia y cuestionarios estructurados que evaluaron la facilidad de uso percibida (PEOU), la utilidad percibida (PU), la intención y las decisiones de inversión. Todas las relaciones del TAM fueron estadísticamente significativas: PEOU a intención ( $\beta = 0,214$ ,  $p = 0,011$ ), PU a intención ( $\beta = 0,666$ ,  $p < 0,001$ ) e intención a decisión de inversión en oro ( $\beta = 0,575$ ,  $p < 0,001$ ). La intención mediaba significativamente las relaciones tanto PEOU-inversión como PU-inversión. El modelo explicó el 74 % de la varianza de la intención y el 85,1 % de la varianza de la decisión de inversión. El análisis de género reveló que los hombres mostraron una mediación significativa para ambas rutas PEOU y PU, mientras que las mujeres demostraron una mediación significativa solo a través de PU. La limitación geográfica a Java Oriental y los

datos auto-referidos pueden afectar la generalización. Las futuras investigaciones deberían ampliar el alcance e incorporar datos conductuales. Los desarrolladores de plataformas deberían priorizar interfaces fáciles de usar y el énfasis en la utilidad. Se recomiendan estrategias específicas por género: los hombres responden tanto a la facilidad de uso como a la utilidad, mientras que las mujeres priorizan los beneficios y la confiabilidad. Este estudio aporta nuevas perspectivas a la literatura de inversión en oro digital en mercados emergentes, identificando diferencias en la mediación basada en género para el diseño de plataformas y estrategias de marketing.

**Palabras clave:** Modelo De Aceptación de la Tecnología; Inversión en Oro; Plataformas Digitales; Mediación de la Intención; Diferencias de Género; Modelado de Ecuaciones Estructurales.

## INTRODUCTION

The increasing demand for gold as a stable investment option amidst economic uncertainties has garnered significant attention from both individual and institutional investors.<sup>(1,2)</sup> Known as a “safe haven” asset, gold’s role in portfolio diversification and wealth preservation during times of financial instability has been well-documented in the financial literature.<sup>(3)</sup> Particularly in recent years, global gold prices have exhibited impressive growth, reflecting heightened interest in this commodity.<sup>(4)</sup> Gold investments are seen as a hedge against inflation, economic volatility, and the devaluation of fiat currencies.<sup>(5)</sup> With the rapid development of digital technologies, investment opportunities in gold are increasingly available through digital platforms, allowing investors to easily purchase and trade gold via mobile apps and online services.<sup>(6)</sup> This transformation has not only influenced how individuals make investment decisions but also how they perceive and adopt new investment technologies.

Despite the growing popularity of gold as an investment choice, there is limited research on how digital platforms impact investment decisions in the gold market, particularly in emerging economies like Indonesia. While the benefits of gold investment are often emphasized, the factors that influence an individual’s decision to invest in gold through digital platforms remain unclear. This lack of clarity poses significant challenges for developers of financial technologies and service providers looking to tailor their offerings to meet the needs of potential investors. Therefore, understanding the psychological and technological factors that shape investment decisions in gold is crucial for improving user experience and enhancing the adoption rates of digital investment platforms.<sup>(7)</sup>

The central research problem revolves around understanding how digital platforms, specifically mobile applications, influence users’ decisions to invest in gold. While traditional models such as the Technology Acceptance Model (TAM) have been extensively used to explain technology adoption, few studies have explored its application in the context of gold investment decisions, especially in the context of Indonesian users.<sup>(8,9)</sup> Specifically, there is a gap in the literature regarding how perceived ease of use, perceived usefulness, and intention mediate the relationship between technology acceptance and investment decisions in the gold market. This research aims to fill this gap by examining the application of TAM in understanding the factors that influence gold investment decisions through digital platforms in East Java, Indonesia.

The primary objective of this study is to analyze the role of the Technology Acceptance Model (TAM) in shaping gold investment decisions through digital platforms, with a particular focus on the mediating effect of user intention. By utilizing a quantitative approach and structural equation modeling (SEM-PLS), this research aims to evaluate how perceived ease of use, perceived usefulness, and intention collectively influence individuals’ decisions to invest in gold through mobile applications. Additionally, this study seeks to determine whether gender differences exist in the way technology acceptance influences gold investment decisions. By focusing on these variables, this research will provide valuable insights into the technological and psychological factors that drive gold investment decisions in a developing economy.

## METHOD

This research adopts a quantitative approach to explore the factors that influence gold investment decisions through digital platforms in East Java, Indonesia.<sup>(10)</sup> The study primarily utilizes the Technology Acceptance Model (TAM)<sup>(11)</sup> to examine the relationship between perceived ease of use, perceived usefulness, and intention in shaping gold investment decisions (the framework can be seen at figure 1). The methodology is designed to test the hypothesis that user intention mediates the relationship between the perceived ease of use and perceived usefulness of digital platforms, and the decision to invest in gold. This section outlines the research design, population and sampling, data collection techniques, and the data analysis methods employed in this study.

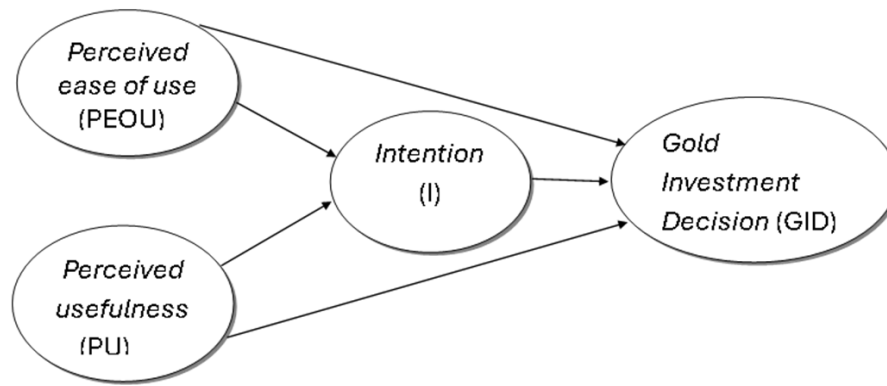


Figure 1. Conceptual Framework

### Research Design

This study employs a descriptive correlational research design, which aims to identify and measure the relationships between different variables.<sup>(12)</sup> The primary objective is to examine how the constructs of TAM including perceived ease of use, perceived usefulness, and intention that affect the decision to invest in gold via digital platforms. The research further investigates the role of intention as a mediator in the relationship between the TAM variables and the decision to invest in gold. The research design is well-suited to testing the hypothesized model through structural equation modelling (SEM) using Partial Least Squares (PLS), which allows for the analysis of complex relationships among latent variables.

### Population and Sampling

The population for this research consists of individuals who have used digital platforms for gold investment in East Java, Indonesia. The sample for this study is drawn from individuals who actively engage in gold investment using digital platforms such as mobile apps and online services. Given the rapidly increasing number of users, the research targets investors from diverse demographic backgrounds, including various age groups, gender, and income levels, to ensure that the results are representative of the broader population.

Purposive sampling was employed to select participants who meet specific criteria relevant to the study.<sup>(13)</sup> These criteria include having experience using a digital platform for gold investment, residing in East Java, and being at least 18 years old. The decision to use purposive sampling was driven by the need to gather data from individuals who have firsthand experience with the phenomenon under investigation, which is essential for the validity of the study. Based on the guidelines provided by Hair et al., a sample size of at least 160 respondents was determined to be adequate for the study, considering that the model includes 16 indicators. A total of 254 valid responses were obtained, ensuring a sufficient sample size for statistical analysis.

### Data Collection

Data for this research were collected using a structured questionnaire that was distributed both online and offline. The questionnaire was designed to capture respondents' perceptions of the perceived ease of use, perceived usefulness, and intention to invest in gold through digital platforms, as well as their actual gold investment decisions. The questionnaire was developed based on established scales from prior research, including Davis's<sup>(14)</sup> Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) scales.

The questionnaire consists of several sections. The first section gathers demographic information, including age, gender, and education level. The second section includes questions related to the perceived ease of use and perceived usefulness of the digital platform, using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The third section assesses the respondents' intention to invest in gold, as well as their actual gold investment decisions. The final section includes questions that examine the respondents' gender differences in their perceptions of gold investment through digital platforms. The survey was distributed with a mix of offline and online distribution to maximize response rates and inclusivity.

The data collection process was carried out over a period of three months, from March to May 2024. During this period, efforts were made to ensure that the sample was diverse and representative of various demographics, particularly in terms of gender and socioeconomic status, as these factors are expected to play a significant role in the study's findings.

### Data Analysis

The data collected were analyzed using Structural Equation Modeling (SEM) with Partial Least Squares (PLS) software. SEM-PLS is an appropriate technique for this study because it allows for the evaluation of complex

relationships between observed and latent variables, and it is especially useful when the data are non-normally distributed, as is often the case in social sciences research. SEM-PLS can also handle relatively small sample sizes, making it suitable for this study given the 254 responses collected.

The data analysis process involved several steps, beginning with the assessment of the measurement model (outer model). This step involves evaluating the reliability and validity of the constructs used in the model. The internal consistency of the measurement model was assessed using Composite Reliability (CR) and Average Variance Extracted (AVE) values. According to <sup>(15)</sup>, CR values above 0,7 and AVE values above 0,5 are considered acceptable. Convergent validity and discriminant validity were also assessed to ensure that the indicators of each construct are related to their respective latent variables and that they differ from the other constructs.

Next, the structural model (inner model) was tested to evaluate the relationships between the latent variables. The primary goal was to assess whether perceived ease of use, perceived usefulness, and intention significantly influence gold investment decisions. The mediation effect of intention was tested using the bootstrapping method, which involves repeatedly resampling the data to estimate the significance of the indirect effects. The results of the path coefficients, R-squared values, and p-values were examined to determine the strength and significance of the relationships.

Finally, the gender differences in the model were analyzed using multi-group analysis (MGA). This method allows for the comparison of path coefficients between male and female respondents, providing insights into how gender influences the decision-making process for gold investments. The results of the MGA help identify any potential differences in the mediation effect of intention for male and female investors.

### Ethical Considerations and Limitations

Ethical considerations were a priority in the design and implementation of this study. All participants were informed about the purpose of the research, and their consent was obtained before they completed the questionnaire. The confidentiality of respondents was maintained throughout the process, and their personal data were anonymized to ensure privacy. Furthermore, participants were informed that their participation was voluntary, and they could withdraw from the study at any time without consequence. The study adhered to ethical guidelines for research involving human participants, ensuring that all data collection and analysis procedures were conducted responsibly and transparently.

While the study provides valuable insights into the factors that influence gold investment decisions through digital platforms, there are some limitations to consider. First, the research was conducted in East Java, and the findings may not be generalizable to other regions of Indonesia or to countries with different cultural and economic contexts. Additionally, the study relies on self-reported data, which may be subject to biases such as social desirability or recall bias. Future studies could consider expanding the sample size and geographical scope to enhance the external validity of the findings.

### RESULTS

Text The structural equation modeling analysis was conducted using SmartPLS software to examine the relationship between Technology Acceptance Model constructs and gold investment decisions through intention as a mediating variable. The assessment began with the measurement model evaluation to establish the reliability and validity of the research instruments.

Convergent validity was assessed through outer loading values, with the threshold set at 0,7 as recommended by <sup>(15)</sup>. As presented in table 1, all indicators demonstrated satisfactory convergent validity. The Gold Investment Decision (GID) variable exhibited the strongest factor loadings, ranging from 0,939 to 0,954, indicating robust convergent validity. The Perceived Ease of Use (PEOU) variable demonstrated loadings between 0,922 and 0,955, while Perceived Usefulness (PU) showed consistent loadings from 0,905 to 0,947. The Intention variable displayed loadings ranging from 0,859 to 0,943, with the lowest loading still exceeding the minimum threshold.

Table 1. Outer Loading Results		
Variable	Indicator	Outer Loading
Gold Investment Decision (GID)	GID1	0,945
	GID2	0,954
	GID3	0,939
Perceived ease of use (PEOU)	PEOU1	0,922
	PEOU2	0,955
	PEOU3	0,925
	PEOU4	0,933
Perceived usefulness (PU)	PU1	0,933
	PU2	0,932

Intention (I)	PU3	0,934
	PU4	0,947
	PU5	0,905
	I1	0,939
	I2	0,905
	I3	0,943
	I4	0,859

The discriminant validity assessment was conducted using cross-loading analysis to ensure that indicators load more strongly on their respective constructs than on other constructs. Table 2 demonstrates that all indicators exhibit their highest loadings on their corresponding constructs. For instance, GID1 showed the highest loading of 0,945 on the GID construct compared to its loadings on PEOU (0,804), PU (0,833), and Intention (0,877). Similarly, PEOU2 demonstrated the strongest loading of 0,955 on its own construct compared to other constructs. This pattern was consistent across all variables, confirming adequate discriminant validity.

Table 2. Cross Loading Value Result				
	GID	PEOU	PU	I
GID1	0,945	0,804	0,833	0,877
GID2	0,954	0,781	0,806	0,832
GID3	0,939	0,778	0,816	0,851
PEOU1	0,752	0,922	0,811	0,747
PEOU2	0,793	0,955	0,854	0,789
PEOU3	0,766	0,925	0,809	0,729
PEOU4	0,799	0,933	0,848	0,744
PU1	0,789	0,848	0,933	0,804
PU2	0,803	0,830	0,932	0,786
PU3	0,799	0,813	0,934	0,782
PU4	0,825	0,821	0,947	0,814
PU5	0,808	0,824	0,905	0,792
I1	0,854	0,754	0,796	0,939
I2	0,821	0,775	0,809	0,905
I3	0,846	0,747	0,805	0,943
I4	0,766	0,658	0,707	0,859

Composite reliability was evaluated to assess internal consistency, with values above 0,7 considered acceptable. Table 3 reveals that all constructs exceeded this threshold: GID (0,942), PEOU (0,952), PU (0,961), and Intention (0,935). Additionally, the Average Variance Extracted (AVE) values for all constructs surpassed the recommended 0,5 threshold: GID (0,895), PEOU (0,872), PU (0,865), and Intention (0,832), indicating that each construct explains more than half of the variance in its indicators.

Table 3. Composite Reliability Value Result		
	Composite reliability	Average variance extracted (AVE)
GID	0,942	0,895
PEOU	0,952	0,872
PU	0,961	0,865
I	0,935	0,832

### Structural Model Assessment

The structural model assessment focused on the R-square values and predictive relevance of the model. As shown in table 4, the model demonstrated substantial explanatory power. The Intention variable achieved an R-square adjusted value of 0,740, indicating that Perceived Ease of Use and Perceived Usefulness collectively explain 74 % of the variance in investment intention. The Gold Investment Decision variable exhibited an R-square adjusted value of 0,851, suggesting that the combined effect of PEOU, PU, and Intention accounts for 85,1 % of the variance in gold investment decisions.

The goodness of fit assessment through  $Q^2$  ( $R\text{-square} / R^2$ ) calculation yielded a value of 0,962, substantially exceeding zero and approaching unity. This result indicates exceptional predictive relevance, with the model capable of explaining 96,2 % of the information contained within the research data. The high  $Q^2$  value confirms



the model's robustness and its ability to predict gold investment decisions effectively.

Table 4. R-Square Values Results		
	R-square	R-square adjusted
GID	0,853	0,851
I	0,742	0,740

### Hypothesis Testing: Direct Effects

The structural equation analysis revealed significant relationships across all direct pathways, as detailed in Table 5. The first hypothesis examining the relationship between PEOU and Intention was supported ( $\beta = 0,214$ ,  $p = 0,011$ ), indicating that enhanced perceived ease of use significantly increases investment intention. The second hypothesis regarding PU's influence on Intention received the strongest support ( $\beta = 0,666$ ,  $p < 0,001$ ), demonstrating that perceived usefulness is the most influential predictor of investment intention.

Table 5. Path Coefficient Values and p-value Results					
	Original sample (O)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Hipotesis
PEOU -> I	0,214	0,084	2,551	0,011	H1
PU -> I	0,666	0,082	8,071	0,000	H2
PEOU -> GID	0,180	0,061	2,938	0,003	H3
PU -> GID	0,214	0,079	2,692	0,007	H4
I -> GID	0,575	0,067	8,571	0,000	H5

Direct effects on gold investment decisions were also confirmed. PEOU demonstrated a significant direct effect on GID ( $\beta = 0,180$ ,  $p = 0,003$ ), while PU showed a similar significant relationship ( $\beta = 0,214$ ,  $p = 0,007$ ). The relationship between Intention and GID proved to be the strongest among direct effects ( $\beta = 0,575$ ,  $p < 0,001$ ), emphasizing the critical role of intention in driving actual investment decisions.

### Mediation Effects

The mediation analysis, presented in table 6, revealed significant indirect effects for both TAM constructs. Intention significantly mediated the relationship between PEOU and GID ( $\beta = 0,123$ ,  $p = 0,019$ ), supporting the sixth hypothesis. More substantially, Intention mediated the relationship between PU and GID ( $\beta = 0,382$ ,  $p < 0,001$ ), confirming the seventh hypothesis. The magnitude of the PU-Intention-GID pathway suggests that perceived usefulness exerts its strongest influence on investment decisions through the formation of investment intentions.

Table 6. Results of Path Coefficient Values and p-values for Indirect Effects					
	Original sample (O)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Hypothesis
PEOU -> I -> GID	0,123	0,052	2,338	0,019	H6
PU -> I -> GID	0,382	0,062	6,154	0,000	H7

Below is the structural model image developed in the research on intention mediating the influence of perceived ease of use and perceived usefulness on gold investment decisions.

The structural equations derived from the analysis are:

- Intention =  $0,214 \text{ PEOU} + 0,666 \text{ PU}$
- Gold Investment Decision =  $0,180 \text{ PEOU} + 0,214 \text{ PU} + 0,575 \text{ Intention}$

These equations demonstrate that while both TAM constructs directly influence investment decisions, their effects are amplified through their impact on intention formation.

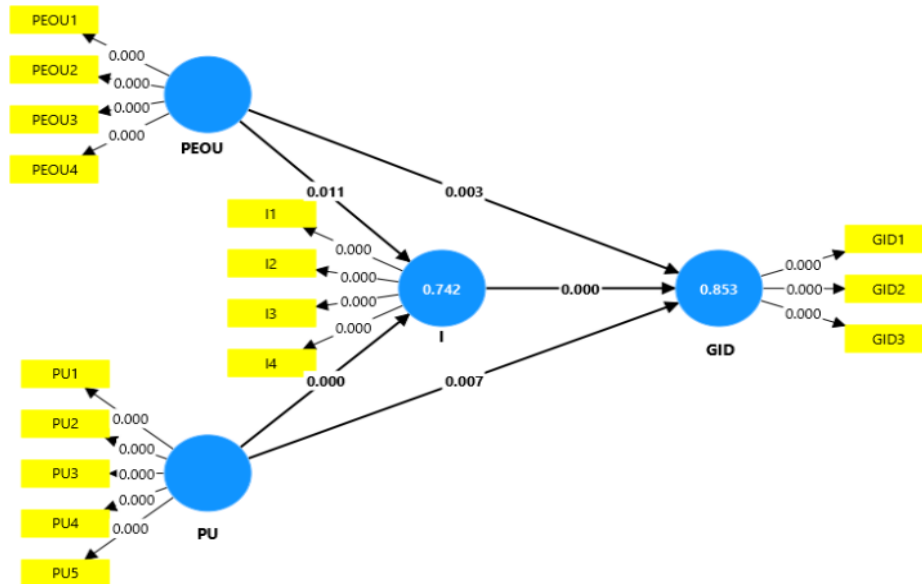
### Model Validation and Robustness

The comprehensive model assessment demonstrates robust psychometric properties and strong predictive validity. The measurement model exhibited excellent reliability and validity indicators, with all constructs meeting or exceeding established thresholds. The structural model revealed significant relationships across all hypothesized pathways, with the exception of the PEOU-Intention-GID mediation for female participants.

The high R-square values and exceptional  $Q^2$  score indicate that the Technology Acceptance Model provides

a powerful framework for understanding gold investment decisions in the digital context. The model's ability to explain over 85 % of the variance in investment decisions while maintaining high predictive relevance underscores its practical significance for understanding consumer behaviour in digital investment platforms.

The multi-group analysis adds nuance to the understanding of technology acceptance in investment contexts, revealing that gender significantly moderates the relationships between TAM constructs and investment decisions. These findings have important implications for designing gender-sensitive digital investment platforms and developing targeted marketing strategies for gold investment products.



**Figure 2.** Structural Model of Perceived Ease of Use and Perceived Usefulness on Gold Investment Decision with Intention as an Intervening Variable

## DISCUSSION

The section aims to interpret and contextualize the results of this study, which investigates the influence of the Technology Acceptance Model (TAM) constructs on gold investment decisions (GID) through digital platforms. The results of the study have provided substantial evidence supporting the hypothesis that intention mediates the relationship between both PEOU and PU and GID.

### Interpretation of Results

The path analysis showed a significant relationship between Perceived Ease of Use (PEOU) and Intention (I), with a path coefficient of 0,214 and a p-value of 0,011. This finding suggests that the easier a digital platform is perceived to be, the stronger the user's intention to invest in gold. This result is consistent with the findings of previous research on TAM, particularly the work of Davis<sup>(14)</sup> and Wicaksono,<sup>(16)</sup> who found that perceived ease of use is a critical factor influencing users' technology adoption. It aligns with the general notion that ease of use lowers cognitive effort and barriers, making users more likely to adopt a technology.<sup>(17)</sup>

The significance of PEOU on investment decisions, as seen with a path coefficient of 0,180 and a p-value of 0,003, further underscores the importance of platform usability. Users who perceive digital gold investment platforms as easy to use are more likely to make an actual investment decision. This result reinforces the argument that platform developers must prioritize user-friendly interfaces to reduce friction and enhance user experience,<sup>(18)</sup> particularly for those new to digital investments.

The relationship between Perceived Usefulness (PU) and Intention (I) was found to be strong and highly significant, with a path coefficient of 0,666 and a p-value of 0,000. This result indicates that the more useful a platform is perceived to be, the greater the intention to invest. This aligns with Schwarz et al.<sup>(19)</sup> assertion that users' perceptions of technology's usefulness significantly influence their intention to adopt and utilize technology, which in turn enhances their performance.

Furthermore, the relationship between PU and Gold Investment Decision (GID), with a path coefficient of 0,214 and a p-value of 0,007, suggests that users who view digital platforms as beneficial for managing their gold investments are more likely to take the leap and actually invest in gold. This highlights the critical role that the perceived utility of the platform plays in investment decisions, particularly in financial services where users need to trust that the platform will serve their needs efficiently.<sup>(20)</sup>

One of the key contributions of this study is the finding that Intention (I) mediates the relationship between

both PEOU and PU and GID. The indirect effect of PEOU on GID through intention (0,123,  $p = 0,019$ ) and the indirect effect of PU on GID through intention (0,382,  $p = 0,000$ ) were both statistically significant. This mediation effect underscores the importance of user intention in the investment decision process. Users may recognize the ease of use and usefulness of a digital platform, but it is their intention that ultimately drives their decision to invest.<sup>(21)</sup>

This result is consistent with Ajzen & Fishbein's Theory of Reasoned Action,<sup>(22)</sup> which suggests that individuals' intentions are the strongest predictors of their behavior. The findings here align with the broader literature on technology acceptance and behavioral finance,<sup>(23,24)</sup> which suggests that user behavior is heavily influenced by intention, particularly in digital environments where trust and ease of use are paramount.

### Practical Implications

The practical implications of this study are significant for developers of digital investment platforms and policymakers aiming to promote digital financial services. For platform developers, the findings suggest that making platforms user-friendly is crucial, particularly for male users, who tend to prioritize ease of use when deciding to invest. Additionally, for female users, it is essential to focus on enhancing the perceived usefulness and trustworthiness of the platform. This could be achieved by offering clear, transparent information about the platform's benefits, security features, and performance.

Policymakers should also take note of the gender differences identified in the study. For instance, targeted marketing campaigns that address the specific concerns of female investors—such as financial literacy, trust in digital platforms, and security—could help improve female engagement with digital financial services. Educational initiatives aimed at increasing digital literacy could further empower female investors and enhance their confidence in using digital platforms.

### Limitations and Future Research

While this study provides valuable insights into the factors influencing gold investment decisions, it is not without limitations. First, the study focused on respondents in East Java, Indonesia, which may limit the generalizability of the findings to other regions or countries with different economic conditions and cultural contexts. Future research could extend this study to other regions or even conduct a cross-cultural comparison to examine whether the findings hold in different global contexts.

Second, the study relies on self-reported data, which may be subject to biases such as social desirability or recall bias. Future studies could use behavioral data from actual investment platforms to provide a more objective measure of user behavior. Additionally, the study could explore other factors influencing investment decisions, such as financial knowledge, perceived risk, and social influence, to build a more comprehensive model of digital investment adoption.

### CONCLUSIONS

This research successfully demonstrates the applicability and robustness of the Technology Acceptance Model in explaining gold investment decisions through digital platforms in the Indonesian context. The comprehensive analysis reveals that both perceived ease of use and perceived usefulness significantly influence users' intentions to invest in gold, which subsequently drive actual investment decisions. The model's strong explanatory power, accounting for 85,1 % of variance in gold investment decisions and 74 % in intention formation, underscores the relevance of TAM constructs in understanding digital investment behavior in emerging markets.

The mediation analysis provides compelling evidence that user intention serves as a critical pathway through which technology acceptance factors influence investment decisions. This finding reinforces the sequential nature of technology adoption in financial contexts, where users must first develop positive perceptions about the digital platform before forming intentions that ultimately translate into investment actions. The significant indirect effects through intention (PEOU-I-GID:  $B = 0,123$ ,  $p = 0,019$ ; PU-I-GID:  $B = 0,382$ ,  $p < 0,001$ ) highlight the importance of intention formation as an intermediate psychological process in investment decision-making.

From a practical perspective, these findings offer valuable insights for digital investment platform developers and policymakers. Platform designers should implement gender-sensitive approaches: emphasizing both simplicity and functionality for male users while prioritizing trustworthiness, security, and clear value propositions for female users. The stronger influence of perceived usefulness among female participants suggests that platforms should clearly communicate practical benefits, security features, and investment performance to attract and retain female investors.

The study contributes to the limited literature on technology acceptance in digital precious metal investing, particularly in Southeast Asian emerging markets. However, limitations including geographic scope restriction to East Java and reliance on self-reported data suggest avenues for future research expansion and methodological refinement.



## REFERENCES

1. Baur D, Hoang LT, Casavecchia L. The gold exposure of institutional investors. *Int Polit Econ Invest Finance eJ*. 2021.
2. Jermann UJ. Gold's value as an investment. *FinPlanRN Invest Strateg*. 2021.
3. Rasheed H, Ahmad H, Javid AY. Is gold a hedge and safe haven during political uncertainties? *Bus Econ Rev*. 2021 Jun 30;13(2):1-28.
4. Zadeh J. International gold market trends: record prices in 2025. *Discovery Alert*. 2025. Available from: <https://discoveryalert.com.au/news/international-gold-market-trends-2025-analysis/>
5. Joseph R, Rowland Z, Shebalkova Y. The evolving role of gold as an inflation hedge: evidence from Europe and the United States. *Acta Montan Slovaca*. 2024.
6. Gurbaxani A. Digital gold in emerging markets: an investor's perspective. In: 2023 International Conference on Sustainable Islamic Business and Finance (SIBF). Bahrain: IEEE; 2023. p. 81-84. Available from: <https://ieeexplore.ieee.org/document/10380105/>
7. Suchitra VG, Lohith V, Subramanyan B. A study on perception of investors in digital gold market. *Eur J Manag Econ Bus*. 2025.
8. Kurniawan TA, Primastiwi A, Milanda DP. Perceived risk and self-efficacy effect on digital gold applications usage. *J Manaj*. 2024.
9. Oktavia T, Devano E, Alghifari A, Andrian W, Wahyudi V, Suharlin FM. Analysis of user acceptance of Indonesian society to use online investment application. In: 2022 International Conference on Information Management and Technology (ICIMTech). 2022. p. 671-675.
10. Ghanad A. An overview of quantitative research methods. *Int J Multidiscip Res Anal*. 2023 Aug;6.
11. Schorr A. The technology acceptance model (TAM) and its importance for digitalization research: a review. 2023. p. 55-65.
12. Clarete P, Mondejar MA, Quimba N, Gaygay C. A descriptive-correlational study on personality traits and entrepreneurial intentions of senior high school learners. *Int J Multidiscip Appl Bus Educ Res*. 2023 Dec;4:4460-4472.
13. Memon M, Thurasamy R, Ting H, Cheah J. Purposive sampling: a review and guidelines for quantitative research. *J Appl Struct Equ Modeling*. 2024.
14. Davis FD. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Q*. 1989 Sep;13(3):319-340.
15. Cheung GW, Cooper-Thomas HD, Lau RS, Wang LC. Reporting reliability, convergent and discriminant validity with structural equation modeling: a review and best-practice recommendations. *Asia Pac J Manag*. 2024 Jun;41(2):745-783.
16. Wicaksono SR. Teori dasar technology acceptance model. Zenodo. 2022. Available from: <https://zenodo.org/record/7754254>
17. He Y, Chen Q, Kitkuakul S. Regulatory focus and technology acceptance: perceived ease of use and usefulness as efficacy. *Cogent Bus Manag*. 2018 Jan 1;5(1):1459006.
18. Runsewe O, Osundare O, Folorunsho S, Akwawa L. Optimizing user interface and user experience in financial applications: a review of techniques and technologies. *World J Adv Res Rev*. 2024 Sep;23:934-942.
19. Schwarz A, Chin WW. Information technology acceptance: construct development and empirical validation. *Int J Inf Manag*. 2024;78:102810.

20. Appiah T, Agblewornu VV. The interplay of perceived benefit, perceived risk, and trust in fintech adoption: insights from Sub-Saharan Africa. *Heliyon*. 2025 Jan;11(2):e41992.
21. Tamara D, Maharani A, Heriyati P, Seto ABR, Nathanael K. Intention in investing digital gold through e-commerce platforms. *E3S Web Conf*. 2023.
22. Nickerson C. Theory of reasoned action (Fishbein and Ajzen, 1975). 2022. Available from: <https://www.simplypsychology.org/theory-of-reasoned-action.html>
23. Baeckstrom Y, Marsh IW, Silvester J. Financial advice, wealth and gender: risk tolerance, knowledge and confidence. *SSRN J*. 2019. Available from: <https://www.ssrn.com/abstract=3286336>
24. Giannikos CI, Korkou ED. Are women more risk averse? A sequel. *Risks*. 2025.

#### **FINANCING**

No financing.

#### **CONFLICT OF INTEREST**

None.

#### **AUTHORSHIP CONTRIBUTION**

*Conceptualization:* Dian Kusumaningtyas, Fidiana, Subagyo.

*Methodology:* Dian Kusumaningtyas, Fidiana.

*Software:* Dian Kusumaningtyas.

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*Formal analysis:* Dian Kusumaningtyas.

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