Perceived Usefulness as a Mediator in Social Commercial Intention to Use: Perceived Usefulness sebagai Mediator dalam Niat Menggunakan Sosial Komersial

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General Background: The rise of digital platforms and social media has led to the rapid growth of social commerce (s-commerce), reshaping consumer behavior in emerging markets like Indonesia. **Specific Background:** While many users engage with platforms like TikTok Shop and Instagram Shopping, sustained intention to use such systems remains varied. **Knowledge Gap:** Prior research on the Technology Acceptance Model (TAM) often overlooks how Perceived Usefulness (PU) mediates the relationship between Perceived Ease of Use (PEOU) and Intention to Use (IU) in s-commerce contexts, particularly in regions with high digital engagement. **Aims:** This study investigates whether PU mediates the effect of PEOU on IU among university students with experience using s-commerce platforms. **Results:** Using SEM-PLS on data from 100 respondents, findings reveal that PEOU has no significant direct effect on IU but significantly affects PU, which in turn significantly influences IU. An indirect path from PEOU to IU via PU is statistically significant. **Novelty:** The study emphasizes that ease of use alone is insufficient; perceived benefit is critical in motivating continued use in socially driven e-commerce environments. **Implications:** These findings guide platform developers to prioritize usefulness-oriented features, suggesting that perceived functionality is more influential than interface simplicity in fostering user loyalty.

Highlight :

- Perceived Ease of Use does not directly affect Intention to Use but influences it indirectly.
- Perceived Usefulness significantly mediates the relationship between ease of use and intention.
- User intention in social commerce is shaped more by usefulness than technical simplicity.

Keywords : Perceived Ease of Use, Perceived Usefulness, Intention to Use, Social Commerce, Mediation Model

Introduction

The rapid development of digital technology and social media penetration has driven major changes in consumer behavior across various industrial sectors. One concrete manifestation of this transformation is the emergence of social commerce (s-commerce), namely the integration between electronic commerce (e-commerce) activities with social media that allows consumers to not only buy products, but also share reviews, interact with sellers, and get recommendations from fellow users (Prasetyo et al., 2025; N. Yao & Wang, 2024). Unlike conventional e-commerce which generally focuses on one-way communication from sellers to buyers, s-commerce facilitates two way communication, strengthen social influence, and expand network of trust between users.

The s-commerce phenomenon in Indonesia is experiencing very rapid growth. According to the Data Reportal report (2024), As many as 167 million people in Indonesia actively use social media, and around64% of internet users have made a purchase through an s-commerce platform such as TikTok Shop, Instagram Shopping, Facebook Marketplace, and WhatsApp Business. In fact, TikTok Shop recorded a transaction value growth of more than 4 billion US by 2023, with Indonesia as one of its largest markets. This growth is not only happening in the fashion sector, but also extending to the food and beverage, beauty, electronics, household equipment, education, and service sectors.

However, the high use of s-commerce is not necessarily directly proportional to technology adoption rate by consumers on an ongoing basis. Not all users feel comfortable or have a strong intention to continue using the s-commerce platform in their online shopping activities. In this context, understanding factors that influence intention to use becomes important to study, especially considering Perceived Ease of Use (PEOU) And perceived usefulness (PU).

The most widely used model to explain technology acceptance is Technology Acceptance Model (TAM)developed by Davis (1989). In TAM, PEOU and PU are key variables that influence a person's intention to use a technology. Several studies have shown that PU can be mediator in the relationship between PEOU and Intention to Use, meaning that ease of use will increase the perception of usefulness, which then strengthens the intention to use the system (Ashraf et al., 2016; Zimmermann et al., 2024). However, in the context of s-commerce involving social interactions, digital experiences, and community influence, a study that specifically examines PU mediation role is still relatively limited, especially in emerging markets such as Indonesia (Cindy et al., 2025; Mahardika & Suhari, 2023; Wijayanto et al., 2024).

In addition, within the framework Industry 5.0 emphasizing collaboration between humans and AI-based technology, IoT, and more human digital interactions, consumers are no longer just judging systems based on their functionality, but also on the overall experience they feel. Consumers now demand platforms that easy to use, useful, and supports social connectivity (Peng & Robinson-Tay, 2025; Sa’adah et al., 2023; Zhang, 2024). Therefore, testing how system ease affects usage intention, by perception of usefulness as a mediator, becomes very relevant in building digital marketing strategies and system designs that are more responsive to user needs (Kurahashi et al., 2018; Marcilly et al., 2023; Renny et al., 2013).

Moreover, in the Industry 5.0 framework that emphasises collaboration between humans and technology based on AI, IoT, and more humanised digital interactions, consumers no longer just judge systems based on function, but also their overall experience. Consumers now demand platforms that are easy to use, useful, and support social connectivity. As the national digital transformation policy encourages the acceleration of technology adoption in the commerce and services sectors, understanding the acceptance dynamics of technologies such as social commerce is becoming increasingly important for the industry and policymakers. Therefore, examining how system ease affects usage intention, with perceived usefulness as a mediator, becomes highly relevant in building digital marketing strategies and system designs that are more responsive to user needs.

Based on the description of the phenomena and research gaps, this study aims to analyze. The mediating role of Perceived Usefulness in the influence of Perceived Ease of Use on Intention to Use in cross-sector social commerce users in Indonesia (Su et al., 2024; Thi Uyen Nguyen et al., 2024; Yang et al., 2023). The results of this study are expected to provide theoretical contributions to the development of TAM in the context of s-commerce, as well as practical contributions for business actors and platform developers in improving user experience and consumer loyalty.

Metode

This study aims to analyze the influence Perceived Ease of Use (PEOU) against Intention to Use by positioning Perceived Usefulness (PU) as a mediating variable. The main focus of the research is on users social commerce, which is a social trading platform that combines social media features with online buying and selling activities. This research is included in the quantitative category with a causal approach (causative), because it examines the cause-and-effect relationship between these variables. The research model was built based on the development of the Technology Acceptance Model (TAM), which has been proven relevant in explaining technology adoption behavior by individuals. Data analysis was carried out using the approach Partial Least Squares Structural Equation Modeling (PLS-SEM) based on variance, because it is suitable for predictive research and models with high complexity. Data processing was carried out using SmartPLS version 4 software to provide comprehensive analysis results and intuitive visualization. This study uses a deductive approach, starting from established theories and concepts to be tested empirically through quantitative data.

The sampling technique uses non-probability sampling method with purposive sampling technique. This technique was chosen because researchers use certain considerations in selecting sample members from the population, namely those who meet the criteria of s-commerce usage experience. With this approach, it is expected that the sample obtained truly represents the phenomenon being studied, although it is not based on random probability. To determine the minimum sample size, the Cochran formula was used because the population size was not known with certainty. Based on the calculation (see Appendix A), a minimum sample size of 96.04 was obtained, which was then rounded up to 100 respondents (Sugiyono, 2012:96). . Because the population size in this study is unknown, the sample in this study was taken using the Cochran formula (Syofian, 2010:149), namely:

$$n = \frac{Z^2 pq}{and^2} = n = \frac{(1,96)^2 (0,5)(0,5)}{(0,1)^2} = n = 96.04 \text{ rounded to } 100.$$

Figure 1.

Purposive sampling is generally used when researchers have certain criteria in selecting respondents. In this study, the main criteria used is that respondents have made purchases on e-commerce or social commerce platforms, so they have direct experience that is relevant to research variables such as Perceived Ease of Use, Perceived Usefulness, and Intention to Use. With this approach, it is hoped that the samples taken are truly representative of the phenomena being studied, even though they are not based on random probability.

The data collection instrument used a five-point Likert scale, ranging from "strongly disagree" to "strongly agree", to measure each indicator on the variable. Perceived Ease of Use, Perceived Usefulness, And Intention to Use. Sampling using the method simple random sampling, to ensure that every user has an equal opportunity to become a participant.

The data analysis stages are carried out systematically in three main steps. First, measurement

model analysis (outer model) conducted to test the validity and reliability of the construct. Convergent validity is assessed based on the value outer loading (> 0.7), AVE value (> 0.5), and composite reliability (> 0.7). Discriminant validity was examined using Fornell–Larcker criteria And HTMT ratio to ensure that the constructs are unique and do not overlap conceptually. Second, structural model analysis (inner model) conducted to test the relationship between latent variables. Evaluation is conducted on the value R-square (R^2) to measure the predictive power of the model, as well as the value Q-square (Q^2) to assess predictive relevance. Value SRMR was also examined to test the fit of the model as a whole. Third, testing mediation role carried out using an approach bootstrapping as many as 1000 repetitions to estimate the significance of the mediation path between PEOU → PU → Intention to Use. This test follows the Baron & Kenny guidelines which are reinforced with the test indirect effect on Smart PLS, to ensure whether PU significantly mediates the effect of PEOU on Intention to Use.

Result dan discussion

	Category	Total	(%)
Gender	Woman	89	89%
	Man	11	11%
Faculty	faculty of Economics	24	24%
	Faculty of Mathematics and Natural Sciences	14	14%
	Faculty of Social Sciences	17	17%
	Faculty of Education	20	20%
	Faculty of Languages and Arts	6	6%
	Graduate program	2	2%
	Faculty of Sports Science	1	1%
	Faculty of Psychology and Health	1	1%
	Faculty of Science and Technology	1	1%
	Faculty of Engineering	3	3%
	Faculty of Tourism and Hospitality	3	3%
	Islamic Counseling Guidance	1	1%
Age	16–19 years	17	17%
	20–23 years	40	40%
	24–28 years	43	43%
Shopping Frequency	Every month	50	50%
	Once every three months	16	16%
	Every two weeks	11	11%
	Every week	6	6%
	Every month & every three months	1	1%
	Sometimes once every 1-2 months / depends	2	2%
	Uncertain	1	1%
	Twice a year	1	1%
	Very rare	1	1%
	As needed / when needed	2	2%
	If offline store is not available	1	1%
	Open every day, buy if you have money	1	1%

Table 1. *Descriptive information regarding sample characteristics (n=100)*

Most of the respondents in this study were female, which is 89% of the total 100 respondents, while males only numbered 11%. Respondents came from various faculties, dominated by the Faculty of Economics (24%), followed by the Faculty of Education (20%), the Faculty of Social Sciences (17%), and the Faculty of Mathematics and Natural Sciences (14%). Other faculties have a smaller proportion, such as the Faculty of Languages and Arts (6%), the Faculty of Engineering and the Faculty of Tourism and Hospitality (each 3%), and several others below 2%. Based on age group, respondents were dominated by those aged 24–28 years (43%) and 20–23 years (40%), while those aged 16–19 years were only 17%. This reflects that most respondents are in their final year of college or early career. In terms of frequency of shopping via social media, half of the respondents (50%) stated that they shop every month. The others shop once every three months (16%), once every two weeks (11%), and every week (6%). The rest showed irregular shopping patterns or depended on needs, such as depending on needs, uncertain, or only if offline stores are not available. This finding shows that shopping activities via social media are quite routinely carried out by the majority of respondents.

In PLS-SEM analysis, the outer model is used to evaluate the measurement quality of the latent construct through its indicators. The analysis procedure is described by Henseler et al. (2016) Outer model testing includes several important aspects, namely: Validity, Average Variance Extracted (AVE), Composite Reliability (CR), Cronbach's Alpha and Discriminant Validity.

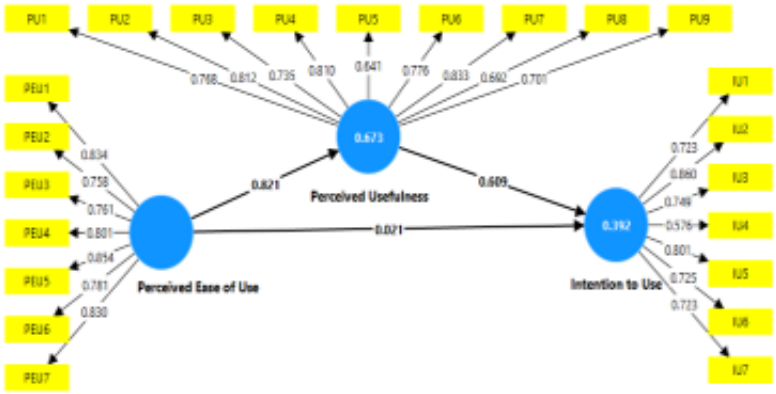

Figure 2. *Structural Model Model*

The results of the initial outer model testing showed that most indicators had loading factor values above 0.7, indicating good convergent validity. However, there were several indicators that had loading factor values below the threshold of 0.7, namely PU5 (0.641), PU7 (0.692), and IU4 (0.576). These low loading values indicate that the three indicators are less able to optimally represent the latent constructs they measure.

Indicators PU5 and PU7 do not strongly reflect the construct Perceived Usefulness (PU), while IU4 is less representative of the construct Intention to Use (IU). This condition indicates the need for further evaluation of the existence of these indicators in the model. If the elimination of these indicators can improve the quality of the overall measurement model, then these indicators can be considered for elimination in order to obtain more valid and reliable measurement results.

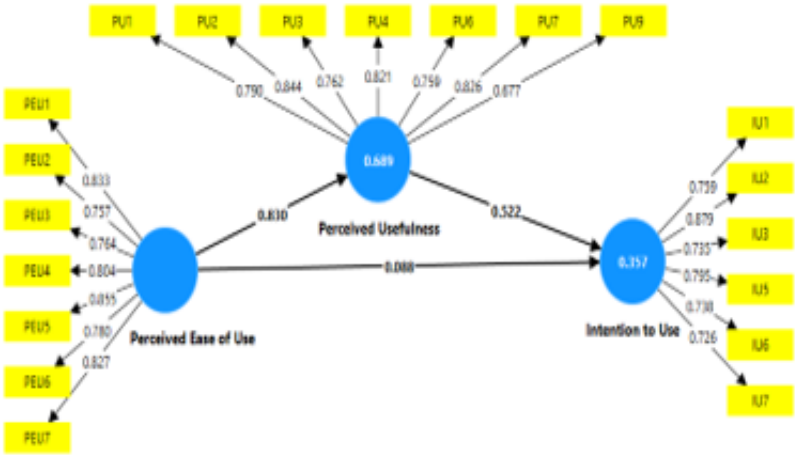

Figure 3. *Final Model*

After evaluating the research model, it was found that all indicators in the variables in the final model had met the convergent validity criteria with a loading factor value above 0.7. This indicates that these indicators significantly reflect the constructs being measured, so that the model used can be said to be valid and feasible for use in further analysis. The measurement model was tested to ensure the validity and reliability of the research instrument using the Variance Inflation Factor (VIF) method to avoid multicollinearity, factor loading to ensure the validity of each indicator, and Cronbach's alpha and Composite Reliability (ρc) to measure internal consistency. In addition, Average Variance Extracted (AVE) was used to evaluate convergent validity. Values that meet these standard criteria indicate that the constructs and indicators in this study are proven to be valid and reliable. The results of the test are summarized in the following table.

A. Constructs/Dimension/Indicator

Constructs/Dimension/Indicator	Variance inflation factor (VIF)	Factor loading	Cronbach’s alpha	Composite reliability	AVE
Perceived Ease of Use					
The use of s-commerce is clear and easy to understand.	2,659	0,833	0,908	0,927	0,646
I quickly learned how to use e-commerce applications.	2,031	0,757			
Using s-commerce doesn't require much thinking effort.	2,113	0,764			
I found it easy to become skilled at purchasing through s-commerce.	2,747	0,804			
Using s-commerce helps me improve my online shopping skills	3,043	0,855			
My interactions with sellers through the s-commerce app	2,078	0,780			

were direct and easy.					
I feel comfortable using s-commerce apps for shopping.	2,604	0,827			
Perceived Usefulness					
Using s-commerce increases my productivity in online shopping	2,609	0,790	0,895	0,918	0,615
Using s-commerce increases my effectiveness in online shopping	3,262	0,844			
Using s-commerce helps me in online shopping	2,070	0,762			
Use of s-commerce improves online shopping skills	2,282	0,821			
The use of social commerce can increase efficiency in interacting with sellers.	2,158	0,759			
Using social commerce can increase efficiency in exchanging product-related information with sellers.	3,097	0,826			
Intention to Use					
I feel close to people on social media.	1,971	0,759	0,865	0,899	0,599
I view my friends on social media as friendly and approachable.	3,480	0,879			
I feel understood by people on social media.	1,960	0,735			
I am able to empathize and feel connected with friends on social media.	2,065	0,795			
I feel actively involved in my friends' lives on social media.	1,735	0,738			
I am able to connect with others through social media.	1,690	0,726			

Table 2. *Scales and measurement model.*

Based on the results of the measurement model evaluation, all constructs in this study were proven to be valid and reliable. This is indicated by the value factor loading each indicator is above 0.70, indicating that each indicator is able to represent the construct being measured adequately. In

addition, the value Variance Inflation Factor (VIF) for all indicators is below the threshold of 5, which means there is no indication of multicollinearity in the model.

To measure construct reliability, two main indicators are used, namely Cronbach's alpha And Composite Reliability (ρc). The results show that all constructs have values above 0.70, which indicates good internal consistency between indicators in one construct. In addition, the value Average Variance Extracted (AVE) for each construct also exceeded the threshold value of 0.50, indicating that more than half of the indicator variance can be explained by the construct in question, so that convergent validity has been met. Thus, it can be concluded that the instrument used in this study has met the statistical criteria for validity and reliability, and is suitable for use in the stage of testing the relationships between constructs in the structural model.

B. Measurement model.

After ensuring convergent validity and construct reliability, the next step is to test discriminant validity to ensure that each construct in the model actually measures a different concept from each other. Discriminant validity indicates the extent to which a construct can be distinguished from other constructs in the model. In this study, discriminant validity was tested using two approaches, namely Heterotrait-Monotrait Ratio (HTMT) And Fornell-Larcker Criterion, the results of which are presented as follows.

Heterotrait-Monotrait ratio (HTMT) -			
Contstructs	Intention to Use	Perceived Ease of Use	Perceived Usefulness
Intention to Use			
Perceived Ease of Use	0,579		
Perceived Usefulness	0,667	0,911	
Fornell-Larcker criterion			
Intention to Use	0,774		
Perceived Ease of Use	0,522	0,804	
Perceived Usefulness	0,595	0,830	0,784

Table 3. *Heterotrait-Monotrait ratio (HTMT)*

Discriminant validity in this study was tested using two approaches, namely Heterotrait-Monotrait Ratio (HTMT) and Fornell-Larcker Criterion. Based on the HTMT results, all ratio values between constructs are below the threshold of 0.90, namely 0.579 between Perceived Ease of Use And Intention to Use, 0.667 between Perceived Usefulness And Intention to Use, as well as 0.911 between Perceived Usefulness And Perceived Ease of Use. Although the values between Perceived Usefulness And Perceived Ease of Use approaching the upper limit, but still in the statistically acceptable category, so that discriminant validity is still met. Meanwhile, the test results using Fornell-Larcker Criterion shows that the AVE square root value (diagonal value) of each construct is higher than the correlation between constructs (values below the diagonal). For example, the AVE square root value for Intention to Use is 0.774, which is higher than its correlation with Perceived Ease of Use (0.522) and Perceived Usefulness (0.595).

Likewise, Perceived Ease of Use has an AVE root value of 0.804, higher than its correlation with other constructs. This shows that each construct has quite good discrimination against other constructs.Thus, both approaches show that the discriminant validity in the model has been fulfilled, so that the constructs used can be considered empirically different and there is no overlap between the concepts measured. Evaluation inner model aims to test the structural relationship between latent constructs in the research model. Before interpreting the results, it is necessary to ensure that the model has met a number of evaluation criteria. The inner model is considered adequate if it meets several important requirements, which reflect the strength, accuracy, and predictive ability of the relationship between constructs.

C. Q-square (Q^2 predictive relevance)

Measuring the predictive ability of the model to new data, obtained through the blindfolding procedure. The following data is presented in the inner model evaluation:

	SSO	SSE	Q^2 (=1-SSE/SSO)
Intention to Use	600.000	488.667	0.186
Perceived Ease of Use	700.000	700.000	0.000
Perceived Usefulness	600.000	332.464	0.446

Table 4. *Q-Square*

Based on the calculation results, the construct Intention to Use has a Q^2 value of0,186, And Perceived Usefulness has a Q^2 value of 0,446, which shows the existence of relevant predictive capabilities of the model for both constructs. Meanwhile, the Q^2 value for Perceived Ease of Use is 0,000, because this construct is exogenous and not predicted by other constructs in the model. In general, a Q^2 value greater than 0 indicates that the model has good predictive ability, and values that are closer to 1 indicate higher predictive relevance. Thus, these results confirm that the structural model has adequate predictive relevance, especially for the construct Perceived Usefulness And Intention to Use.

Next, to assess the overall suitability of the model (model fit), used indicators Standardized Root Mean Square Residual (SRMR). SRMR shows the average difference between the observed covariances and the predicted covariances in the model.

	Saturated model	Estimated model
SRMR	0,078	0,078

Table 5. *Suitability of Research Model*

Based on the test results Standardized Root Mean Square Residual (SRMR), good on saturated model and estimated model, the SRMR value obtained is0,078. This value is below the recommended threshold of 0.08, indicating that the model has good fit or good fit between the observed data and the constructed model. Thus, the structural model in this study can be said to be feasible overall.

D. Goodness of Fit (GoF)

To evaluate the overall quality of the model, the measure is used Goodness of Fit (GoF) which is a combined index of convergent validity (via AVE) and model predictive power (via R^2). The GoF value is calculated:

	Average Variance Extracted (AVE)	R Square	R-square adjusted
Intention to Use	0,599	0,357	0,344
Perceived Ease of Use	0,646		
Perceived Usefulness	0,615	0.689	0.686
Rate-rate	0,620	0,523	

Table 6. *Values Goodness of Fit Model*

Mark R Square (R^2) used to measure how much of the proportion of endogenous construct variance can be explained by exogenous constructs in the model. In this study, there are two endogenous

constructs, namely Perceived Usefulness And Intention to Use. The results of the analysis show that the construct Perceived Usefulness has an R^2 value of0,689, which mean 68,9%its variability can be explained by the construct Perceived Ease of Use. This shows that the model has strong predictive ability for the construct.

Meanwhile, the construct Intention to Use has an R^2 value of0,357, which mean 35,7%its variability is explained by the construct Perceived Ease of Use And Perceived Usefulness together. This value is included in the medium category, which indicates that the model is able to explain most of the factors that influence user intentions in using social commerce. The calculation for the Goodness of Fit value is as follows: The calculation for the Goodness of Fit value is as follows:

GoF= √(0.620*0,523)

GoF= 0,32426=0.570

Mark Goodness of Fit (GoF) for this model is as big as0,570. Based on commonly used categories, a GoF value above 0.36 indicates that the model has good quality overall in terms of convergent validity and variance exploration power. Thus, this research model can be said to be feasible and has a good statistical fit.

A complete description of the magnitude of the direct and indirect effects between variables can be seen in the following table:"

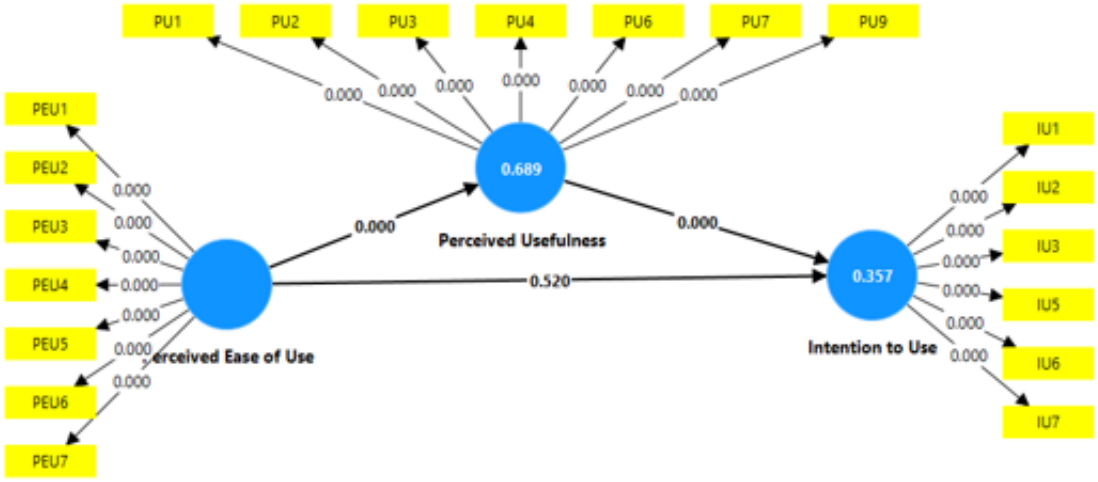

Figure 4. *Direct and indirect effects*

In this Structural Equation Modeling (SEM) model, the Perceived Ease of Use (PEOU) variable is shown to have a significant direct effect on Intention to Use (IU) with a coefficient of 0.520 (p-value = 0.000), which indicates that the easier a system is to use, the higher a person's intention to use it. In addition, PEOU also has a direct effect on Perceived Usefulness (PU) of 0.689 (p-value = 0.000), which means that the perception of ease of use is also able to increase the perception of the usefulness of the system. Furthermore, PU has a direct effect on IU with a coefficient value of 0.357 (p-value = 0.000), which indicates that a system that is considered useful will encourage higher usage intentions. Thus, there is an indirect effect of PEOU on IU through PU, which is 0.246 (the product of 0.689 × 0.357).

Combined, the total effect of PEOU on IU (both direct and indirect) is 0.766, which indicates that perceived ease of use plays an important role both directly and through increased perceived usefulness in shaping users' intention to use the system.

In this study, hypothesis testing conducted to determine whether the relationship between the variables tested in the model has a statistically significant effect. This test usually uses the method bootstrapping by looking at the value t-statistic And p-value to determine whether the hypothesis is accepted or rejected. A t-value above 1.96 (for a significance level of 5%) and a p-value below 0.05 indicate that the relationship between variables is significant. The results of this test can be seen in the following table:

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Description
Perceived Ease of Use -> Intention to Use	0.085	0.091	0.142	0.596	0.551	Rejected
Perceived Ease of Use -> Perceived Usefulness	0.837	0.837	0.040	20.831	0.000	Accepted
Perceived Usefulness -> Intention to Use	0.522	0.522	0.145	3.611	0.000	Accepted

Table 7. *Direct Influence*

The results of the first hypothesis test show that the direct influence of Perceived Ease of Use on Intention to Use is 0.085 or 8.5%. However, the value t-statistics of 0.596 which is smaller than 1.96 and p-value of 0.551 which is greater than 0.05 indicates that this influence is not statistically significant, so the first hypothesis is rejected. For the second hypothesis, the influence of Perceived Ease of Use on Perceived Usefulness is 0.837 with a value oft-statistics20,831 which is much larger than 1.96 andp-value0.000 which is smaller than 0.05, proves that the effect is positively significant. Therefore, the second hypothesis is accepted. Next, the third hypothesis tests the influence of Perceived Usefulness on Intention to Use, with a coefficient result of 0.522. The value t-statistics of 3.611 which is greater than 1.96 andp-value0.000 which is smaller than 0.05 indicates that this influence is also positively significant and the third hypothesis is accepted.

Overall, these results show that Perceived Ease of Use does not have a significant direct effect on Intention to Use, but has a significant effect on Perceived Usefulness, which then has a significant effect on Intention to Use.

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Description
Perceived Ease of Use -> Intention to Use	0.437	0.437	0.123	3.551	0.000	Accepted

Table 8. *Indirect effects*

The indirect effect of Perceived Ease of Use on Intention to Use is 0.437 or 43.7%. With a value of t-statistics of 3.551 which is greater than 1.96 and p-value 0.000 which is smaller than 0.05, this indirect effect is proven to be statistically significant. This means that Perceived Ease of Use has a significant effect on Intention to Use through the mediator variable, which in this context is Perceived Usefulness.

E. Discussion

The first hypothesis explains that Perceived Ease of Use (PEU) does not have a significant effect on

Intention to Use (IU) in the context of s-commerce. This finding is contrary to the basic assumption in the Technology Acceptance Model (TAM) developed by Davis (1989). According to TAM, PEU is one of the main determinants of the intention to use technology. This model states that when users feel that a system or technology is easy to use, they will be more likely to use it, because this ease reduces barriers and increases efficiency in the use process (Bifftu et al., 2025; Kim et al., 2025; Koh, 2025).

The first finding shows that Perceived Ease of Use (PEOU) has a direct effect on Intention to Use (IU) with a coefficient of 0.520 (p-value = 0.000). This finding supports the research results of Zimmermann et al. (2024) which states that the ease of use of the system encourages an increase in user intention to continue using the system. However, this finding contradicts Abdullah et al. (2016) who found that ease of use does not directly affect intention, but through perceived usefulness as a full mediator.

Furthermore, PEOU also has a significant effect on Perceived Usefulness (PU) with a coefficient value of 0.689 (p-value = 0.000). This finding is consistent with Davis (1989) who developed the Technology Acceptance Model (TAM), where ease of use is seen as an important factor in shaping perceived usefulness. This finding is also reinforced by recent research from Lin & Wang (2023) who found a similar relationship in the context of mobile learning applications.

In addition, PU has a direct effect on IU with a coefficient of 0.357 (p-value = 0.000). This finding supports the results of a study conducted by Venkatesh et al. (2003) which states that perceived usefulness is a strong predictor of intention to use technology. However, this result contradicts the findings of Pratama and Sari (2018) which states that in the context of digital public service systems, perceived usefulness is not always a dominant factor in determining intention to use. Finally, there is also an indirect effect of PEOU on IU through PU, with a value of 0.246. This mediation finding is in line with the findings of Haryanto et al. (2022) which shows that the effect of convenience on intention to use is heavily mediated by how much the user feels the system is useful. However, it is different from the study by Kusuma (2017) which states that the effect of convenience is direct and not through a mediation mechanism.

In theory, the higher the perceived ease of use, the more likely someone will have the intention to use the technology. In many previous studies, including in the context of e-commerce and other digital applications, the relationship between PEU and IU has been shown to be significant and positive. This is due to the assumption that users tend to avoid complicated systems, and instead, will feel encouraged to use systems that are considered easy and not cognitively burdensome (Yu et al., 2025; Yuviler-Gavish et al., 2024; Zhao et al., 2025). However, contrary to this theory, the results of this study indicate that ease of use is not strong enough to directly influence user intentions to use the s-commerce platform. This phenomenon indicates a shift in user focus towards other aspects in evaluating and deciding to use a digital platform. In the context of s-commerce, users may value the usefulness, pleasure, or social benefits of using the platform more than just the technical ease aspect (Yan et al., 2024). In addition, for users who are accustomed to or have experience with digital technology, ease of use may have become a basic expectation that no longer has a major influence on their decisions.

Several empirical studies have found that Perceived Ease of Use (PEOU) does not have a significant direct effect on Intention to Use (ITU), contrary to the basic assumptions in the Technology Acceptance Model (TAM). For example, a recent study examining the Shopee application in the Jabodetabek area found that although Perceived Usefulness (PU) and Social Influence (SI) significantly influenced usage intention, PEOU failed to show a direct effect on ITU (Akel & Bayır, 2025). The study findings showed that Perceived Ease of Use (PEU) did not have a significant effect on Intention to Use (IU) of e-commerce applications. This finding is in line with the results of previous studies (Abdullah et al., 2016; Gupta et al., 2023; Hopkins et al., 2023; Scheper et al., 2019; Taufik & Hanafiah, 2019). One possible reason is that ease of use itself is not enough to attract and encourage users to use the application.

Based on the survey results, the majority of respondents stated that e-commerce applications such as Shopee and TikTok were easy to use. This shows that users are quite accustomed to using e-commerce applications, so that ease of use is no longer the main factor that drives them to use the platform. According to (Ludeña-Poma et al., 2024), users tend to be more motivated to use an application if they see real advantages or benefits, not just because of its convenience.

The results of this study indicate that Perceived Ease of Use has a significant effect on Perceived Usefulness, supporting the second hypothesis proposed. This finding is consistent with the theoretical framework of the Technology Acceptance Model (TAM) developed by Davis (1989), which states that ease of use of a technology will increase the perception of the usefulness of the technology. Theoretically, when users feel that a system or application is easy to use, they are more likely to judge that the system is useful in helping them complete tasks or achieve desired goals (Abdalla, 2024). In this context, users who experience a simple and uncomplicated usage experience will appreciate the practical benefits of the technology more.

Ease of use not only reduces cognitive load but also speeds up the adaptation process, so that users can focus more on the core functions offered by the system (E. Yao et al., 2024). Therefore, the perception of usefulness increases along with the perceived ease of use. This finding confirms that in the development and refinement of platforms such as s-commerce, the aspect of technical ease still plays an important role in shaping the perception of usefulness. If a system is considered uncomplicated and comfortable to use, it will be easier for users to see and feel the benefits it offers. Thus, these results not only strengthen the theoretical basis of TAM but also provide practical guidance for application developers to ensure a user-friendly interface to improve the perceived usefulness of the platform. Similarly, research by (Brin et al., 2025) showed that the ease of the system interface plays an important role in improving the perceived usefulness of information systems.

These findings suggest that ease of use not only makes technology more accessible but also strengthens the perception that the technology is able to help users achieve their goals efficiently. Thus, empirical evidence from various previous studies supports the hypothesis that Perceived Ease of Use has a significant influence on Perceived Usefulness (Prasetyo et al., 2025).

The results of the third hypothesis study show that Perceived Usefulness has a significant effect on Intention to Use, which means that the higher the user's perception of the usefulness of a system or application, the greater their intention to use it. This finding is in line with the basic theory of the Technology Acceptance Model (TAM) developed by Davis (1989), which places Perceived Usefulness as the main predictor of user behavioral intentions in adopting technology.

According to TAM, when users believe that technology will increase their effectiveness or productivity, they will be more motivated to use it continuously. Previous studies have also strengthened this relationship. For example, (Zimmermann et al., 2024) emphasized that the perception of the benefits of a system has a direct influence on an individual's desire to accept and use the technology. In the context of e-commerce, research by (Su et al., 2024; Thi Uyen Nguyen et al., 2024) shows that users are more likely to have usage intentions if they consider the platform to provide added value, such as efficiency, speed, or ease of transactions. In addition, (Turk et al., 2019) also found that perceptions of the usefulness of a digital application have a significant impact on users' decisions to adopt and continue using the application.

Overall, these results reinforce that perceived usefulness is a key factor in driving behavioral intentions, both in the context of initial adoption and continued use of a technology, including in the social commerce environment. The results of this study indicate that Perceived Ease of Use (PEOU) has an indirect effect on Intention to Use (ITU) through Perceived Usefulness (PU), and this mediation relationship is proven to be significant. This finding confirms that although PEOU does not directly affect the intention to use, its ease of use remains an important factor because it can increase the perception of the usefulness of a system, which ultimately drives the intention to use it

(Kim et al., 2025) In other words, the easier a technology is to use, the more users will feel its benefits, and this perception is what drives them to intend to use the technology.

This finding is consistent with the Technology Acceptance Model (TAM) developed by Davis (1989), where PU is a key mediating variable linking PEOU to ITU. Davis states that a system that is easy to use will be considered more useful, and this perception of usefulness is what ultimately influences users' decisions to adopt technology. Research by (Bifftu et al., 2025; Koh, 2025) also confirmed that the mediation relationship between PEOU and ITU through PU is significant in various technological contexts, including information systems, digital applications, and online services.

In the context of s-commerce, these results provide important implications that to increase user intention to use a platform, developers need to pay attention not only to technical ease, but also to how this ease is able to provide an experience that is considered useful by users. Thus, strategies to increase usage intention can be directed at increasing the perception of usefulness through interface simplification and ease of navigation, which ultimately strengthens the practical value of the system in the eyes of users.

In addition, research by (Yu et al., 2025; Yuviler-Gavish et al., 2024; Zhao et al., 2025) also strengthens that the influence of PEOU on ITU is often significantly mediated by (Ludeña-Poma et al., 2024; N. Yao & Wang, 2024) PU. They found that users who find a system easy to use are more likely to view it as useful, and this perception of usefulness drives the decision to use the system. In the context of digital and e-commerce, similar results were also found by (Ludeña-Poma et al., 2024; N. Yao & Wang, 2024), which stated that although ease does not always directly increase usage intention, its effect on perceived usefulness makes it crucial in forming usage intention indirectly.

Thus, this finding strengthens the empirical evidence that Perceived Usefulness plays an important mediating role in bridging the relationship between ease of use and intention to use the system, as reflected in previous studies.

Practical Implications

The first finding indicates that Perceived Ease of Use (PEOU) has a direct effect on Intention to Use (IU), with a coefficient of 0.520 (p-value = 0.000). This finding supports the results of Zimmermann et al. (2024), who stated that ease of use enhances users’ intention to continue using a system. However, this result contrasts with Abdullah et al. (2016), who found that ease of use does not directly affect intention, but rather operates through perceived usefulness as a full mediator. Platform developers should therefore focus on designing intuitive and user-friendly interfaces—for example, with clear navigation, consistent buttons, and informative icons and color schemes—as such elements directly impact users’ intention to use the system.

Furthermore, PEOU also significantly influences Perceived Usefulness (PU), with a coefficient of 0.689 (p-value = 0.000). This finding is consistent with Davis (1989), who developed the Technology Acceptance Model (TAM), in which ease of use is considered a key determinant of perceived usefulness. It is also supported by Lin & Wang (2023), who reported a similar relationship in the context of mobile learning applications. Developers can enhance perceived usefulness by implementing smart features such as auto-complete forms, progress indicators for task completion, and context-aware suggestions, which make users feel the application effectively supports their tasks.

In addition, PU has a direct effect on IU, with a coefficient of 0.357 (p-value = 0.000). This supports the findings of Venkatesh et al. (2003), who concluded that perceived usefulness is a strong predictor of users' behavioral intention toward technology use. However, it contradicts the study by Pratama and Sari (2018), which found that in the context of digital public services, perceived

usefulness is not always the dominant factor influencing user intention. This suggests that features offering real, tangible benefits to users—such as product recommendations based on transaction history, price drop alerts, or chatbot support—can enhance perceived usefulness and encourage continued platform engagement.

Moreover, the indirect effect of PEOU on IU through PU, valued at 0.246, highlights the strong mediating role of perceived usefulness. This finding aligns with Haryanto et al. (2022), who demonstrated that the impact of ease of use on user intention is largely mediated by usefulness perceptions. However, it differs from Kusuma (2017), who argued that the influence of ease of use is primarily direct and does not operate through a mediating mechanism. Therefore, beyond designing systems that are easy to use, it is crucial to educate users about the benefits of each feature, for instance through interactive tutorials, guided tours, or informative notifications.

First, although Perceived Ease of Use does not directly affect Intention to Use, this finding implies that current s-commerce platform users already have a high level of digital literacy. They no longer consider ease of use as the main reason for deciding to use an application. Therefore, developers need to shift their focus from simply simplifying the interface to increasing the overall value of benefits and user experience.

Second, the significant influence of Perceived Ease of Use on Perceived Usefulness shows that ease is still important, because it can increase user perception of the usefulness of the platform. This implies that every feature designed must not only be easily accessible, but must also clearly show its contribution to achieving user goals, such as finding products, making transactions, or interacting socially. Third, the significant relationship between Perceived Usefulness and Intention to Use emphasizes that users will be more motivated to use a platform if they feel real benefits from using it.

Therefore, developers need to ensure that the platform's key features actually solve users' problems or provide efficiency in their social and commercial activities.Fourth, the indirect effect of Perceived Ease of Use on Intention to Use through Perceived Usefulness confirms that a good system design strategy is one that connects technical ease with functional benefits. This means that technical and design aspects that make it easier for users will be more effective when accompanied by an increased perception that the platform is truly useful in the user's daily life. Thus, the development and marketing strategy of s-commerce platforms should be directed at strengthening the perception of real benefits of an easy-to-use system, in order to encourage continued usage intentions.

VII. Conclusion

This study aims to answer the question whether Perceived Ease of Use (PEOU) affects Intention to Use (IU), either directly or through Perceived Usefulness (PU) as a mediator. Based on the results of the analysis, it can be concluded that PEOU does not have a significant direct effect on IU, but has a significant effect on PU. Furthermore, PU is proven to significantly influence IU, and PEOU has an indirect influence on IU through PU. Thus, these findings confirm that perceived ease of use will drive intention to use only if users first perceive the tangible benefits of the system. For TikTok Shop managers, features that increase perceived usefulness-such as quality assurance, trusted reviews, or customer support-are more crucial than a concise interface. This research successfully addresses the objectives and questions posed, while providing practical implications in the design of user experience-based s-commerce platforms.

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