

Understanding Consumer Intention To Use Indonesian Electronic Stamp Duty Through Technology Acceptance Model (TAM): Study On PT Peruri Digital Security's Consumer

Studi Minat Penggunaan Meterai Elektronik Melalui *Technology Acceptance Model* (TAM) Pada Konsumen PT Peruri Digital Security

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ABSTRACT

With the invention of electronic stamps as an extension of adhesive stamps, PT Kertas Padalarang, a subsidiary of Perum Peruri (the company appointed to produce adhesive stamps), has identified a change in consumer behavior where consumers are starting to switch to electronic stamps. This research aims to determine the intention to use electronic stamps using the Technology Acceptance Model (TAM) among the consumers of PT Peruri Digital Security. Using simple random sampling and Slovin techniques, the primary data was collected through online questionnaires from 398 respondents who use electronic stamps. The research method uses a quantitative approach, and the data was analyzed using Partial Least Squares (PLS) with SmartPLS 3 software. The research results show that intention to use electronic stamps is positively and significantly influenced by perceived ease of use, perceived usefulness, and perceived trust. Furthermore, perceived trust can positively and significantly mediate perceived ease of use and perceived usefulness on intention to use.

Keywords: *Indonesian Electronic Duty Stamp Paper, Technology Acceptance Model, Marketing Management, Consumer Behavior.*

ABSTRAK

Dengan ditemukannya prangko elektronik sebagai pengembangan dari prangko berperekat, PT Kertas Padalarang, anak perusahaan Perum Peruri (perusahaan yang ditunjuk untuk memproduksi prangko berperekat), mengidentifikasi adanya perubahan perilaku konsumen dimana konsumen mulai beralih ke prangko elektronik. Penelitian ini bertujuan untuk mengetahui niat untuk menggunakan prangko elektronik dengan menggunakan Technology Acceptance Model (TAM) pada konsumen PT Peruri Digital Security. Dengan menggunakan teknik simple random sampling dan Slovin, data primer dikumpulkan melalui kuesioner online dari 398 responden yang menggunakan meterai elektronik. Metode penelitian menggunakan pendekatan kuantitatif, dan data dianalisis menggunakan Partial Least Squares (PLS) dengan perangkat lunak SmartPLS 3. Hasil penelitian menunjukkan bahwa niat untuk menggunakan prangko elektronik dipengaruhi secara positif dan signifikan oleh persepsi kemudahan penggunaan, persepsi kegunaan, dan persepsi kepercayaan. Selanjutnya, kepercayaan yang dirasakan dapat memediasi secara positif dan signifikan persepsi kemudahan penggunaan dan persepsi kegunaan terhadap niat menggunakan.

Kata Kunci: Kertas Bea Meterai Elektronik Indonesia, Technology Acceptance Model, Manajemen Pemasaran, Perilaku Konsumen.

1. Introduction

Along with the rapid development of information technology, the use of paper in various sectors has begun to decline and shift to electronic documents (paperless). The use of electronic documents is considered to increase effectiveness and efficiency compared to the use of paper. The status of digital documents was legalized by the Law on Information and Transactions (UU

ITE) No. 11 of 2008, which states that electronic documents are valid legal evidence and therefore have the same status as paper documents.

By repealing Law No. 13 of 1985 on Stamp Duty and replacing it with Law No. 10 of 2020 on Stamp Duty, the Indonesian government has attempted to expand the use of stamp duty on electronic documents, which is considered very urgent to maximize its potential and generate more revenue for the government. Through Government Regulation (PP) No. 86 of 2021, the Indonesian government has appointed Perum Peruri as a state-owned enterprise (BUMN) that manufactures electronic stamps and prints adhesive stamps. Article 8 of PP No. 86 of 2021 states that Perum Peruri shall cooperate with other parties in the performance of its responsibilities. The following is an illustration of the procurement, management, and sales process for adhesive and electronic stamps:

Table 1. Illustration of the Business Process for Procurement, Distribution, and Sales of Adhesive and Electronic Stamps

No	Description	Adhesive Stamps	Electronic Stamps
1	Procurement / Production	Perum Peruri assigns its subsidiary PT Kertas Padalarang to create paper stamps which are then printed by Perum Peruri	Perum Peruri designs, creates, and provides the system to make electronic stamps
2	Distribution	PT Pos Indonesia (Persero)	PT Peruri Digital Security
3	Sales	PT Pos Indonesia (Persero)	70 Collection Companies *) Data from June 2023, may increase

Source: Stamp Duty Law No. 10 of 2020 processed

Although they share the same function, i.e. the application of tax to a document (Stamp Duty Law No. 13 of 1985), adhesive stamps and electronic stamps have different product characteristics. The differences between the two products are as follows:

Table 2. Different characteristics between Adhesive Stamp and Electronic Stamp products

No	Description	Adhesive Stamps	Elektronic Stamps
1	Form	Base paper	Elektronic
2	Function	Tax on physical documents	Tax on electronic documents
3	Safety Features	UV Dull, Security Fiber etc.	Overt, Covert, dan Forensic
4	Searchability	Personalization	Forensic
5	Distribution channel	PT Pos Indonesia (Persero)	Collection companies, via digital channels (websites / Android or iOS applications)

Source : Data Primer / Interview

With the invention of electronic stamps as an extension of adhesive stamps, PT Kertas Padalarang, a subsidiary of Perum Peruri (the company appointed to produce adhesive stamps), identified a change in consumer behavior where consumers are starting to switch to electronic stamps. This is supported by empirical evidence that there has been a decline in the number of orders for base paper for adhesive stamps by Perum Peruri since the inauguration of electronic stamps on October 1st, 2021. The following is data on the realization of orders for stamp base paper placed by Perum Peruri for PT Kertas Padalarang:

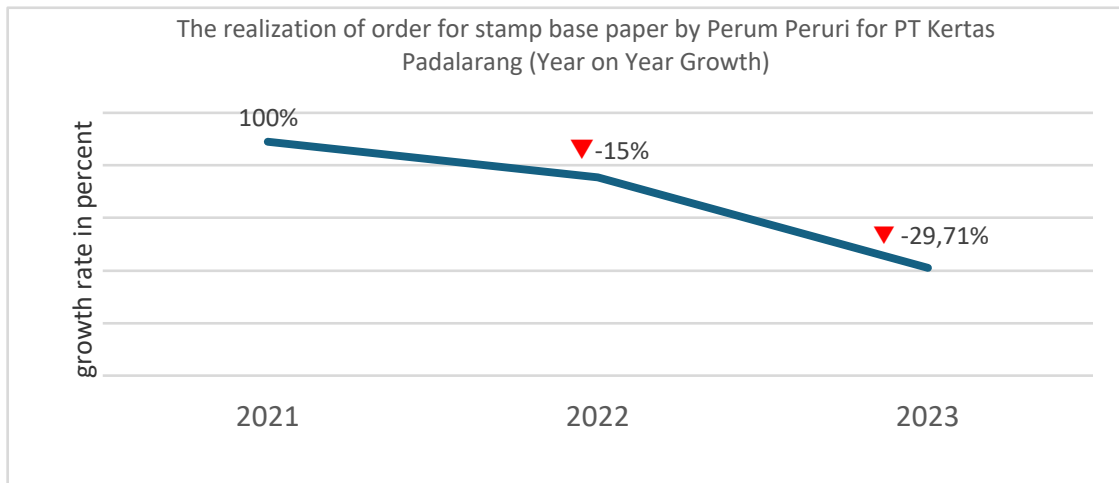


Figure 1. The Realization Of Orders For Stamp Base Paper Placed By Perum Peruri For PT Kertas Padalarang (Year On Year Growt)

Source : Internal data from PT Kertas Padalarang

The decline in demand for adhesive stamps is inversely proportional to the increase in demand for electronic stamps, where the contribution of electronic stamps to government revenue was 30 trillion rupiah by the end of 2023. (Republika.com: 2023). This contribution cannot be separated from the clear ease of access to electronic stamps. Based on the results of the interviews, it is known that 70 companies have been appointed as collectors and have gone live in four categories, namely platinum, gold, silver and bronze. In addition to corporate customers, up to 100,000 end-users have acquired electronic stamps (data as of June 2023).

The high demand for the use of electronic stamps is supported by the results of a pre-survey carried out in August 2023 on a random sample of 80 respondents who use stamp products. It is known that 80 respondents stated that they had used adhesive stamps before, but only 32 respondents, or 40%, stated that they had used both adhesive stamps and electronic stamps. A total of 94% of the 32 respondents who had used electronic stamps said they intended to use them again. A full 6% of respondents indicated that they did not intend to use electronic stamps in the future. In accordance with the background of the issue above, the research problems can be formulated as follows:

- Does perceived ease of use affect intention to use electronic stamps between PT Peruri Digital Security consumers?
- Does perceived usefulness affect intention to use electronic stamps between PT Peruri Digital Security consumers?
- Does perceived ease of use affect perceived usefulness between PT Peruri Digital Security consumers?
- Does *perceived ease of use* affect *perceived trust* between PT Peruri Digital Security consumers?
- Does perceived trust affect intention to use electronic stamps between PT Peruri Digital Security consumers?
- Does perceived ease of use affect intention to use electronic stamps if mediated by perceived trust between PT Peruri Digital Security consumers?
- Does perceived usefulness affect intention to use electronic stamps if mediated by perceived trust between PT Peruri Digital Security consumers?

2. Literature Review

Technology Acceptance Model (TAM)

In order to measure the interaction of individuals with information systems, a theory or model for measuring technology acceptance is required. Over the years there have been many models for measuring technology acceptance. In 1975, Fisbein and Ajzen proposed the theory

of reasoned action, better known as TRA. 14 Years later, Davis et al. published a technology acceptance model, which is one of the most rapidly evolving models to date. Ajzen then developed the Theory of Planned Behaviour (TPB) in 1991. Taylor and Todd also contributed in 1995 with the theory of decomposed planning. Furthermore, Compeau and Higgins (1995) introduced the social cognitive theory. Apart from the theories that have been presented, there are still many theories and measurement models for technology acceptance. However, the Technology Acceptance Model (TAM) is considered to be a model that can adequately measure technology acceptance. This is supported by technology acceptance research which continues to use the TAM. In its development, TAM has undergone many developments following the characteristics of technology which initially only focused on software, whereas now its use has expanded to other technologies, such as mobile technology, social media, internet of things, and others.

Intention to use (INT)

Intention to use is the most important component of an individual's interest in adapting a form of technology. Because if there is no intention to adapt, there will be no technology adaptation process. Purwanto (2020:34) states that intention to use can be defined as a form of user or customer desire to use and even reuse a particular object. Intention to use is defined as behavioral awareness in carrying out an activity.

Perceived ease of use (PEOU)

Perceived ease is defined as the extent to which a person believes that using technology does not require much effort (Jogiyanto 2007: 115). In addition, Wicaksono (2022: 33) and Suhendar et al. (2022) defines perceived ease of use as an individual's perception of the extent to which technology is easy to use.

Perceived usefulness (PU)

Jogiyanto (2007: 114) defined perceived usefulness as the extent to which a person believes that using a technology will improve their job performance or efficiency. Furthermore, Wicaksono (2022: 38) defined that perceived usefulness is an individual's perception of the extent to which technology can help them in performing their tasks or achieving their goals.

Perceived Trust (Trust)

Trust is how much users believe that technology is reliable and safe to use (Wicaksono, 2022:7). Different consequences of user behavior also arise from trust and concerns about privacy. For example, trust will generate strong grounds to lead customers to make repeat transactions (Purwanto 2020: 34).

Hypothesis Development

According to Davis in Purwanto (2022:40), a form of information technology that is easy to use can increase the user's confidence or perception that the product does not require a great deal of effort to use. Research conducted by Hidayat (2023) on 170 digital banking users stated that the variable perceived ease of use has a positive and significant effect on the intention to use digital banking. Furthermore, research by Kurniawan et al. (2021), Elyaset et al. (2023), Soyoung An et al. (2023) and Tampi et al. (2023) stated that perceived ease of use has a positive and significant effect on intention to use. Based on these studies, it is hypothesised that perceived ease of use will have a positive and significant effect on intention to use electronic stamps. Therefore, the first hypothesis is proposed:

H1: Perceived ease of use has a positive and significant effect on the intention to use electronic stamps.

Adamson and Shine in Purwanto (2022: 41) defined perceived usefulness as the basis for a person's belief that the use of technology will be able to improve their performance, where individuals will use information technology if they know the positive benefits. This theory is supported by research conducted by Ramadhania et al. (2022), Kurniawan et al. (2022), Batubara et al. (2022), Putra et al. who found that perceived usefulness has a positive and significant effect on intention to use. Based on these studies, it is assumed that perceived usefulness has a positive and significant effect on intention to use electronic stamps. Therefore, the second hypothesis is proposed:

H2: Perceived usefulness has a positive and significant effect on the intention to use electronic stamps.

Perceived usefulness is defined as the level of confidence users have that an information technology will improve the performance of the system itself (Purwanto, 2022: 26). Perceived usefulness is thought to be influenced by perceived ease of use. This is supported by research conducted by Molick et al. (2023), Umesh et al. (2023), Nurcahyanto et al. (2020), Patiro et al. (2021) where these studies collectively state that perceived ease of use positively and significantly affects perceived usefulness. Based on this theory and research, the following hypothesis is constructed:

H3: Perceived ease of use has a positive and significant effect on perceived usefulness.

Morgan and Hunt in Purwanto (2022: 37) stated that trust is perceived as a situation where a party has confidence in the benefits and integrity of a system. Perceived ease of use is thought to promote consumer trust, with several studies showing a relationship between perceived ease of use and trust. Research conducted by Nurjanah et al. (2023), Islam et al. (2020), Ramli et al. (2020), Nyalon et al. (2020) and Mustika et al. (2020) together state that the effect of perceived ease of use on perceived trust is positive and significant. Based on these studies, it is assumed that there is a positive and significant effect of perceived ease of use on perceived trust. Therefore, the fourth hypothesis is proposed:

H4: Perceived ease of use has a positive and significant effect on perceived trust.

In the Technology Acceptance Model (TAM) research, the relationship between perceived usefulness and perceived trust cannot be separated. According to Davis in Purwanto (2022: 39), perceived usefulness focuses more on whether users believe that the system can work properly and facilitate user needs. The relationship between perceived usefulness and perceived trust is supported by research conducted by Kurniawan et al. (2022), Putra et al, (2020), Ramadhia et al. (2022), Ramli et al. (2020), where these studies state that perceived trust is influenced by perceived usefulness. Based on this, the following hypothesis is formulated:

H5: Perceived usefulness has a positive and significant effect on perceived trust.

According to Pan et al. in Purwanto (2022: 37), trust is the source of intention. Intention refers to an individual's willingness to buy or use a product. The customer's decision to continue using the product is the core of intention itself. The relationship between trust and intention cannot be separated in the Technology Acceptance Model (TAM). This is supported by previous research which states that there is a positive and significant effect of perceived trust on intention to use as stated by Minafe et al, (2022), Sari et al, (2023), Omar Ali et al, (2020), Utami et al, (2023) and Batubara et al, (2023). On this basis, the sixth hypothesis is as follows:

H6: Perceived trust has a positive and significant effect on the intention to use electronic stamps.

In its development, the Technology Acceptance Model 3 (TAM 3) adds perceived trust as a main variable. Perceived trust measures the extent to which users believe that the technology is reliable and safe to use. (Wicaksono, 2022: 7). Perceived trust is able to play a role in mediating perceived ease of use on intention to use. This is supported by previous studies

conducted by Utami, et al (2023), Ramadhania et al, (2022), Sadani et al, (2022), and Mustika et al, (2020), which state that perceived trust is able to mediate perceived ease of use on intention to use positively and significantly. Based on these assertions, the following hypothesis is built:

H7: Perceived ease of use has a positive and significant effect on intention to use with perceived trust as an intervening variable.

Just as perceived trust is believed to be able to mediate perceived ease of use, the role of perceived trust is also believed to be able to mediate perceived usefulness. This is supported by the findings of research proposed by Batubara et al. (2023), Ramadhania et al. (2022), and Al-Sharafi et al. (2017), which stated that perceived trust is able to positively and significantly mediate perceived usefulness on intention to use. Based on these assertions, the following hypothesis is constructed:

H8: Perceived usefulness has a positive and significant effect on intention to use with perceived trust as an intervening variable.

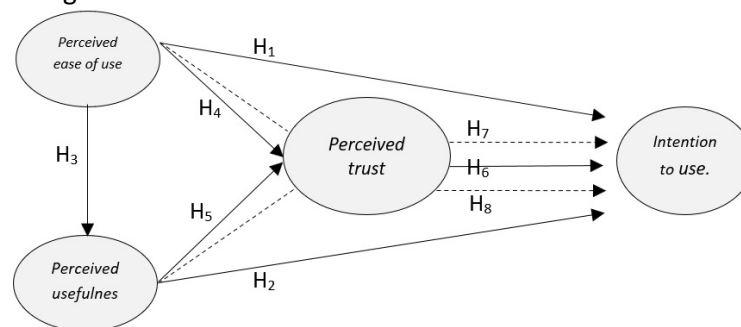


Figure 2. Relations between Research Variables Models

3. Research Methods

This research uses a quantitative approach where the population of end-users of electronic stamps is known to be 100,000 users (data as of June 2023, may increase). Using a simple random sampling technique, where the sample is determined using Slovin with an error rate of 5%, it is known that the number of samples is 398. The method of analysis is structural equation modelling (SEM). The software used is SmartPLS 3. The results of demographic data for respondents are presented in the following table:

Table 3. Demographic Data for Respondents

No	Category	Frequency	Percentage %
1	Gender		
	Male	155	39
	Female	243	61
	Missing Values	0	0
	Total	398	100
2	Ages		
	≤ 17 Years	4	1
	18-26 Years	224	56
	27-35 Years	154	39
	36-49 Years	13	3
	≥ 50 Years	3	1
	Total	398	100
3	Education		
	High School and less	89	22,4
	Diploma	43	10,8
	BCs	231	58
	MCs	34	8,5

PhD	1	0,3
Total	398	100

Source: Questionnaire Reprocessed in 2024

4. Results and Discussions

Descriptive statistical test result

Descriptive statistical test is used to study and describe the real conditions of the variables under study. The purpose of this analysis is to answer the formulation of research problems. The results of descriptive statistics are presented in the following table:

Table 4. Descriptive Statistical Test Results

	No.	Missing	Mean	Median	Min	Max	Stand Dev	Excess Kurtosis	Skewness
PU1	1.000	0.000	5.731	6.000	1.000	7.000	1.228	1.801	-1.249
PU2	2.000	0.000	5.704	6.000	1.000	7.000	1.359	0.491	-0.947
PU3	3.000	0.000	5.470	6.000	1.000	7.000	1.346	0.486	-0.832
PU4	4.000	0.000	5.525	6.000	1.000	7.000	1.325	0.537	-0.906
PU5	5.000	0.000	5.736	6.000	1.000	7.000	1.337	0.665	-1.067
PU6	6.000	0.000	5.696	6.000	1.000	7.000	1.298	1.027	-1.076
PEOU1	7.000	0.000	5.799	6.000	1.000	7.000	1.274	1.375	-1.214
PEOU2	8.000	0.000	5.673	6.000	1.000	7.000	1.297	0.860	-1.013
PEOU3	9.000	0.000	5.628	6.000	1.000	7.000	1.289	0.621	-0.943
PEOU4	10.000	0.000	5.658	6.000	1.000	7.000	1.276	0.712	-0.958
PEOU5	11.000	0.000	5.726	6.000	2.000	7.000	1.213	0.371	-0.897
PEOU6	12.000	0.000	5.761	6.000	1.000	7.000	1.268	1.242	-1.124
T1	13.000	0.000	5.771	6.000	1.000	7.000	1.282	1.264	-1.189
T2	14.000	0.000	5.533	6.000	1.000	7.000	1.312	0.308	-0.758
T3	15.000	0.000	5.618	6.000	1.000	7.000	1.262	0.554	-0.863
T4	16.000	0.000	5.688	6.000	1.000	7.000	1.229	1.140	-1.132
INT1	17.000	0.000	5.781	6.000	1.000	7.000	1.250	1.066	-1.106
INT2	18.000	0.000	5.608	6.000	1.000	7.000	1.408	0.665	-1.016
INT3	19.000	0.000	5.671	6.000	1.000	7.000	1.318	0.904	-1.060

Source: Questionnaire Reprocessed in 2024

Verification analysis result

In this study, the Partial Least Square (PLS) approach was used for the verification analysis. Musyaffi et al (2022: 4) stated that PLS is an analytical tool developed by a Swedish statistician and econometrician named Herwan World. This analytical tool combines structural approaches, factor analysis approaches and also path analysis. PLS SEM is an SEM method that is evaluated through internal and external models.

Evaluation of the Measurement Model (Outer Model)

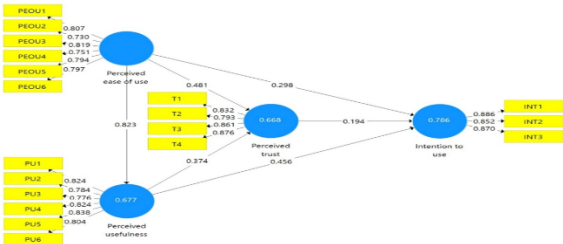


Figure 3. Output Loading Factor Model

Convergent validity

The following are the results of calculations using smart PLS 3 software:

Table 5. Convergent validity test result

	Intention to use	Perceived ease of use	Perceived trust	Perceived usefulness
INT1	0,886			
INT2	0,852			
INT3	0,870			
PEOU1		0,807		
PEOU2		0,730		
PEOU3		0,819		
PEOU4		0,751		
PEOU5		0,794		
PEOU6		0,797		
PU1				0,824
PU2				0,784
PU3				0,776
PU4				0,824
PU5				0,838
PU6				0,804
T1			0,832	
T2			0,793	
T3			0,861	
T4			0,876	

Source: Questionnaire Reprocessed in 2024

The value of convergent validity indicates the validity of the measurement indicators. The value of convergent validity can be seen through the value of the loading factor on endogenous and exogenous variables. According to Musaffy (2022: 10), the recommended value of convergent validity is > 0.7 in research models that have been widely studied. As for the new model or first development, the loading factor value can be tolerated up to 0.5. The output shows that all loading factor values provide values above the recommended value of 0.5. Therefore, the indicators used in this study meet convergent validity.

Average variance extracted (AVE)**Table 6. Average variance extracted (AVE) test result**

	Average Variance Extracted (AVE)
Intention to use	0,756
Perceived ease of use	0,614
Perceived trust	0,707
Perceived usefulness	0,654

Source: Questionnaire Reprocessed in 2024

According to Musyaffy (2022: 11), the AVE value explains the internal intercorrelation between the indicators of the constructs in each latent variable. The AVE value also shows the results of the discriminant validity assessment for each endogenous and exogenous variable construct. The AVE value is expected to be 0.5. Based on the output above, the AVE value of all variables is greater than 0.5, so they have met convergent validity.

Discriminant validity

According to Musyaffy (2022: 11), the discriminant validity value is the value of the cross loading factor that aims to determine the discriminant relationship that exists in a research construct. The following are the results of the calculation of the discriminant validity test:

Table 7. Discriminant validity test result

	Intention to use	Perceived ease of use	Perceived trust	Perceived usefulness
INT1	0,886	0,734	0,671	0,746
INT2	0,852	0,707	0,658	0,709
INT3	0,870	0,714	0,706	0,764
PEOU1	0,644	0,807	0,608	0,599
PEOU2	0,600	0,730	0,560	0,585
PEOU3	0,648	0,819	0,624	0,650
PEOU4	0,660	0,751	0,627	0,692
PEOU5	0,638	0,794	0,630	0,621
PEOU6	0,689	0,797	0,654	0,710
PU1	0,716	0,713	0,618	0,824
PU2	0,665	0,649	0,619	0,784
PU3	0,611	0,610	0,594	0,776
PU4	0,671	0,659	0,608	0,824
PU5	0,729	0,697	0,657	0,838
PU6	0,728	0,660	0,638	0,804
T1	0,754	0,697	0,832	0,721
T2	0,541	0,582	0,793	0,571
T3	0,618	0,650	0,861	0,629
T4	0,686	0,711	0,876	0,652

Source: Questionnaire Reprocessed in 2024

The cross-loadings are declared valid because the cross-loadings and the Farnell-lacker are greater than the indicator variables in the latent variable, meaning that the instrument or statement items are significantly correlated with the total score.

Composite reliability

Composite reliability is a measure of the reliability of an indicator (Musyaffy: 2022). This value can be used to measure the true reliability of a construct. The composite reliability value is expected to be at least 0.7. If the composite reliability value is above 0.8, it can be concluded that it has a high level of reliability.

Table 8. Composite reliability test result

	Cronbach's Alpha	Composite Reliability
Intention to use	0,838	0,903
Perceived ease of use	0,874	0,905
Perceived trust	0,862	0,906
Perceived usefulness	0,894	0,919

Source: Questionnaire Reprocessed in 2024

In this test, the variable is considered reliable if the Cronbach's alpha and composite reliability values are greater than 0.8, meaning that it has a high level of reliability.

Variance inflation factor (VIF)

Table 9. Variance inflation factor (VIF) test result

	Intention to use	Perceived trust	Perceived usefulness
Perceived ease of use	3,797	3,099	1,000
Perceived trust	3,012		
Perceived usefulness	3,521	3,099	

Source: Questionnaire Reprocessed in 2024

Based on the output above, it can be seen that all VIF values are <0.5, which means that there is no multicollinearity, and therefore the test requirements are met.

Evaluation of the Measurement Model (Inner Model)

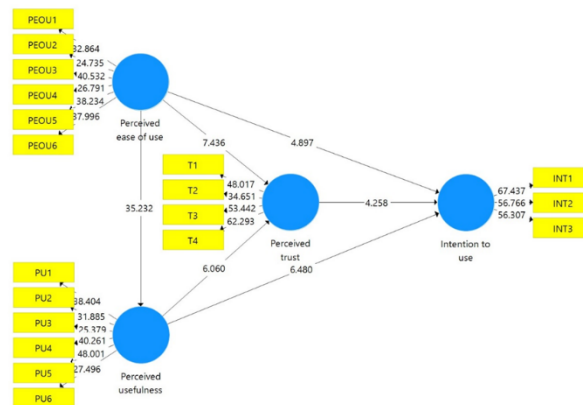


Figure 4. Output inner model

Musyaffy (2022: 12) states that the internal model tests the structural model, which aims to identify and see the relationship between exogenous and endogenous variables in a study. This relationship will answer the research objectives and test the hypothesis.

R Square Testing

Musyaffy (2022:13) defines R square as the coefficient of determination on an endogenous construct. R Square statistics explain the variance in the endogenous variable explained by the exogenous variables. Musyaffy (2022:13) recommended R square values for endogenous latent variables based on: 0.67 (substantial), 0.33 (moderate) and 0.19 (weak).

Table 10. R Square test result

	R Square	R Square Adjusted
Intention to use	0,786	0,784
Perceived trust	0,668	0,666
Perceived usefulness	0,677	0,677

Source: Questionnaire Reprocessed in 2024

The adjusted R-squared value is used to measure how much influence certain independent latent variables (more than 2 variables) have on the dependent latent variable. The magnitude of the influence of the independent variable towards intention to use is 0.784 or 78.4%, whereas towards perceived trust it is 0.668 or 66.8%, and towards perceived usefulness it is 0.677 or 67.7%.

Effect size (F Square)

In order to determine the change in R-square on endogenous constructs, it is necessary to calculate an effect size. The change in the R-square value shows the effect of the R-square value, which shows the effect of the endogenous constructs in relation to the existence of the substantive effect. The lower category of R-squared values is 0.02. Then, the middle category is 0.15 and the higher category is 0.35 (Musyaffy, 2022: 13).

Table 11. Effect size (F Square) test result

	Intention to use	Perceived trust	Perceived usefulness
Perceived ease of use	0,109	0,225	2,099
Perceived trust	0,058		
Perceived usefulness	0,276	0,136	

Source: Questionnaire Reprocessed in 2024

Based on the output results, it is known that the highest value for the intention to use variable is perceived usefulness, which is 0.276, while for perceived trust it is perceived ease of use, which is 0.225, and for perceived usefulness it is also perceived ease of use, which is 2.099.

Prediction relevance (Q Square)

Musyaffy (2022: 13) states that Q-square is used to determine the ability of a prediction through a blindfold procedure. Q-square is also known as Stone-Geisser's. This Q-square value is below 0, which means that the exogenous latent construct as an explanatory variable is able to predict existing constructs. The Q-squar value is categorised as follows: the small category value is 0.02, the medium category value is 0.15, and finally the value of the large category is 0.35.

Table 12. Q Square test result

	SSO	SSE	Q ² (=1-SSE/SSO)
Intention to use	1194,000	492,923	0,587
Perceived ease of use	2388,000	2388,000	
Perceived trust	1592,000	853,531	0,464
Perceived usefulness	2388,000	1342,033	0,438

Source: Questionnaire Reprocessed in 2024

The overall Q-square value is known to be greater than 0.35, so the model can predict existing constructs with a 'large' category value.

Significance Testing

The significance test in the SEM model with PLS aims to determine the effect of the exogenous variable on the endogenous variable. Hypothesis testing with the SEM PLS method is carried out by performing the bootstrapping process using the SmartPLS 3 variable program, so that the relationship between the influence of exogenous variables on endogenous variables is obtained as follows:

Direct Effect Testing

Table 13. Direct effect test result

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Perceived ease of use -> Intention to use	0,298	0,299	0,061	4,897	0,000
Perceived ease of use -> Perceived trust	0,481	0,482	0,065	7,436	0,000
Perceived ease of use -> Perceived usefulness	0,823	0,823	0,023	35,232	0,000
Perceived trust -> Intention to use	0,194	0,195	0,046	4,258	0,000

Perceived usefulness -> Intention to use	0,456	0,454	0,070	6,480	0,000
Perceived usefulness -> Perceived trust	0,374	0,375	0,062	6,060	0,000

Source: Questionnaire Reprocessed in 2024

Based on the results of the output above, the p-value of all variables is less than 0.05 and the t-statistic is greater than 1.96, so there is a significant relationship between the variables.

H1 : Hypothesis testing of perceived ease of use variables on intention to use

Based on the results of the above output, the p-value of 0.000 is less than 0.05 and the t-statistic of 4.897 is greater than 1.96, so there is a significant relationship between the variable perceived ease of use and intention to use, and therefore H1 can be accepted.

H2 : Hypothesis testing of perceived usefulness variables on Intention to Use

Based on the results of the output above, the p-value of 0.000 is less than 0.05 and the t-statistic of 6.480 is greater than 1.96, so there is a significant relationship between the variable perceived usefulness and intention to use, and therefore H2 can be accepted.

H3 : Hypothesis testing of Perceived ease of use variables on Perceived usefulness

Based on the results of the output above, the p-value of 0.000 is less than 0.05 and the t-statistic of 35.232 is greater than 1.96, so there is a significant relationship between perceived ease of use and perceived usefulness, and therefore H3 can be accepted.

H4 : Hypothesis testing of Perceived ease of use variables on Perceived trust

Based on the results of the above output, the p-value of 0.000 is less than 0.05 and the t-statistic of 7.436 is greater than 1.96, which means that there is a significant relationship between perceived ease of use and perceived trust, and therefore H4 can be accepted.

H5 : Hypothesis testing of Perceived usefulness variables on Perceived trust

Based on the results of the output above, the p-value of 0.000 is less than 0.05 and the t-statistic of 6.060 is greater than 1.96, so there is a significant relationship between perceived usefulness and perceived trust, and therefore H5 can be accepted.

H6 : Hypothesis testing of Perceived trust variables on Intention to Use

Based on the results of the output above, the p-value of 0.000 is less than 0.05 and the t-statistic of 4.258 is greater than 1.96, so there is a significant relationship between perceived trust and intention to use, and therefore H6 can be accepted.

Indirect Effect Testing

Table 14. Indirect effect test result

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Perceived ease of use -> Perceived trust -> Intention to use	0,093	0,094	0,025	3,698	0,000
Perceived usefulness	0,073	0,073	0,022	3,333	0,001

-> Perceived trust -> Intention to use	
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Source: Questionnaire Reprocessed in 2024

H7 : Hypothesis testing of perceived trust variables mediating perceived ease of use on intention to use

Based on the output results above, the p-value of 0.000 is less than 0.05 and the t-statistic of 3.698 is greater than 1.96, so perceived trust mediates perceived ease of use on intention to use, and therefore H7 can be accepted.

H8 : Hypothesis testing of perceived trust variables mediating perceived usefulness on intention to use

Based on the results of the output above, the p-value of 0.001 is less than 0.05 and the t-statistic of 3.333 is greater than 1.96, so perceived trust mediates perceived usefulness on intention to use, and therefore H8 can be accepted.

5. Conclusion

Based on the results of the research on the intention to use electronic stamps through the Technology Acceptance Model (TAM) for consumers of PT Peruri Digital Security, it can be concluded as follows:

- Perceived ease of use has a positive and significant effect on the intention to use electronic stamps among PT Peruri Digital Security consumers.
- Perceived usefulness has a positive and significant effect on intention to use among PT Peruri Digital Security consumers.
- Perceived ease of use has a positive and significant effect on perceived usefulness among PT Peruri Digital Security consumers.
- Perceived ease of use has a positive and significant effect on perceived trust among PT Peruri Digital Security consumers.
- Perceived usefulness has a positive and significant effect on perceived trust among PT Peruri Digital Security consumers.
- Perceived trust has a positive and significant effect on the intention to use electronic stamps among PT Peruri Digital Security consumers.
- Perceived trust mediates perceived ease of use on intention to use
- Perceived ease of use has a positive and significant effect on intention to use through perceived trust as an intervening variable.
- Perceived usefulness has a positive and significant effect on intention to use through perceived trust as an intervening variable.

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