

Volume 2, Issue 1, 2024 "Human Resource Transformation and Collaborative Innovation to Build Independent and Competitive Business in the Digital Era"

# THE EFFECT OF PERCEIVED EASE OF USE, PERCEIVED SECURITY AND E-TRUST ON USER SATISFACTION

Gina Oktavia Surbakti<sup>1\*</sup>, Paham Ginting<sup>2</sup>, Endang Sulistya Rini<sup>3</sup>

<sup>1,2,3</sup>Universitas Sumatera UtaraJl. Dr. T. Mansyur No. 9, Medan

\*Email: ginasurbakti@hotmail.com

#### **ABSTRACT**

The purpose of this study was to determine the effect of perceived ease of use, perceived security and e-trust on user satisfaction in using e-wallet. The approach used in this research is a quantitative approach. The research instrument used was a questionnaire using a four - level Likert scale. The sampling technique in this study is nonprobability sample, and the sampling method uses purposive sampling. The method used is a survey by distributing questionnaires to 132 respondents who are DANA e-wallet users in Medan, Indonesia. Data analysis and hypothesis testing were carried out using multiple linear regression analysis techniques using the IBM SPSS Statistics 25. The results from the F test (simultaneous test) and t-tests for each variable indicate that perceived ease of use, perceived security, and e-trust significantly and positively affect user satisfaction. This implies that enhancing these factors can lead to higher user satisfaction with e-wallet service.

Keywords: E-Trust, , E-Wallet, Perceived Ease Of Use, Perceived Security, Satisfaction.

### INTRODUCTION

In the era of globalization, technology is developing rapidly. The rapid development of technology and the internet has created many new innovations in various industries that use or are based on technology (Purwanto et al., 2022). One of them is in the financial sector, namely Financial Technology (fintech) which is a technology to support financial services (Munawar et al., 2023). Financial Technology (Fintech) is the combination of financial services with technology which has changed the business model from conventional to moderate, which previously had to pay face-to-face and carry a certain amount of cash, now it can make long-distance transactions by making payments that can be made in a matter of seconds (Lubis et al., 2022). The development of fintech makes it easier for consumers to make purchases and transactions online. Along with the development of fintech in Indonesia, the payment system began to shift from cash transactions to non-cash transactions using electronic money. Bank Indonesia has also launched a non-cash movement with the National Non-Cash Movement program in 2014 which aims to realize Indonesian people who become Less Cash Society (LCS) (Sianturi & Suhandak, 2019) in (Himawati & Firdaus, 2021).



Volume 2, Issue 1, 2024

"Human Resource Transformation and Collaborative Innovation to Build Independent and Competitive Business in the Digital Era"



### **DOMPET DIGITAL MAKIN DIMINATI**

Popularitas dompet digital sebagai metode pembayaran kian merangkak naik. Keamanan dan kemudahan yang ditawarkan menjadi nilai tambah yang berhasil mendorong masyarakat beralih.



Chart 1. Data of payment methods preferred by consumers (2022)

Source: https://katadata.co.id

Based on Graph 1 from Katadata in 2022, it can be seen that the use of e-wallets in Indonesia is ranked first, with 74% of respondents using e-wallets as the main method of payment. E-wallet is a digital payment tool for non-cash transactions. E-wallets can be used to send money, pay for goods and services, and have a limit on the amount of money that can be stored in the application. E-wallets can facilitate transactions because consumers do not have to carry cash directly in large amounts, only by having a balance on a digital wallet installed in a smartphone with an internet network, payments can be made easily (Kesuma & Nurbaiti, 2023).



Chart 2. Data of the most popular digital wallet platforms (2022)

Source: https://katadata.co.id

Chart 2 shows that DANA ranks third as the most popular used e-wallet platform in Indonesia. However, there are several cases where users have experienced unauthorized deductions from their DANA balance, causing considerable concern and disappointment. Recently, there was a case of DANA balance being deducted suddenly, even though the user did not feel like making any transactions. This case has taken many victims, some of whom complained that the nominal balance that was cut was quite large, even reaching millions of



Volume 2, Issue 1, 2024

"Human Resource Transformation and Collaborative Innovation to Build Independent and Competitive Business in the Digital Era"

rupiah (Poskota.co.id, March 21, 2024). Despite the growing popularity of e-wallets, there are several factors that need to be considered to understand user satisfaction. Factors such as perceived ease of use, perceived security, and e-trust can influence on user satisfaction. Perceived Ease of Use can be explained as the level of confidence of an individual where learning, utilizing and using technology is believed to make it easier for users, is believed to make it easier for users (Naufaldi & Tjokrosaputro, 2020). If users find DANA easy to navigate and use, it is likely to enhance their overall satisfaction with the service. Perceived security is another critical factor influencing user satisfaction. As e-wallets involve financial transactions and the storage of sensitive information, users need to perceive the platform as secure and trustworthy. DANA has obtained four Bank Indonesia (BI) licenses, namely licensing the use of e-wallets and e-payments. Digital financial institutions and online money transfers to assure customers that DANA is safe for transactions (Heryanti, 2023). E-trust, or electronic trust, plays a vital role in the user's willingness to rely on DANA as their preferred e-wallet. According to Jogiyanto (2019), trust is an assessment of an individual after obtaining, processing, and collecting information which will result in various judgments and assumptions. Building and maintaining e-trust are essential for the sustained success of e-wallets, and it directly influences user satisfaction. This study aims to determine the effect of perceived ease of use, perceived security and e-trust on user satisfaction in using DANA. Understanding of these factors can provide valuable insights for both academic researchers and industry practitioners in enhancing the user experience and ensuring the long-term viability of e-wallet platforms. As technology continues to evolve, examining user perceptions and satisfaction becomes increasingly important for shaping the future of digital financial services.

### **METHOD**

The approach used in this research is a quantitative approach. The research instrument used was a questionnaire using a four - level Likert scale. The sampling technique in this study is that the sample is taken with a nonprobability sample design, namely sampling that is not random, members of the population do not have the same opportunity to be selected. The sampling method uses purposive sampling, which determines the selection of samples for certain reasons. The method used is a survey by distributing questionnaires to 132 respondents who are DANA users in Medan, Indonesia. Data analysis and hypothesis testing were carried out using multiple linear regression analysis techniques using the IBM SPSS Statistics 25. The measurement of the perceived ease of use variable using instruments from (Nguyen & Huynh, 2018; Malik & Annuar, 2021; Nugroho et al., 2023; Meyta Dewi et al., 2021) contains four statements. Then, the perceived security variable consists of four statements, adopted from (Huseynov & Yıldırım, 2016; Kumala et al., 2020; Ariningsih et al., 2022). Furthermore, the e-trust variable consists of four items adopted (Meyta Dewi et al., 2021; Safarudin, 2020; Nguyen & Huynh, 2018). The satisfaction variable consists of three items adopted from Safarudin (2020) and Nugroho et al. (2023).



Volume 2, Issue 1, 2024

"Human Resource Transformation and Collaborative Innovation to Build Independent and Competitive Business in the Digital Era"

#### **RESULTS**

Based on the 132 respondents who participated in this study, the characteristics of the respondents showed that the majority were between 17-25 years old as many as 116 people (87.9%), followed by the age group 26-35 years old as many as 16 people (12.1%), and one respondent over 35 years old (0.8%). Regarding gender, there were 16 male respondents (12.1%), while there were 116 female respondents (87.9%). Most of the respondents were university students, totaling 110 people (82.3%). In addition, 11 people (8.3%) were private employees, 2 people (1.5%) were self-employed, 2 people (1.5%) were housewives, and the remaining 7 people (5.3%) had other jobs. Seen from the length of use of DANA, 91 respondents (68.9%) have used DANA for more than 12 months. A total of 17 people (12.9%) had only used the DANA for 1-3 months, 14 people (10.6%) had used the DANA for 6-12 months, and 10 people (7.6%) had used the DANA for 3-6 months. The classical assumption test is an important requirement in multiple regression analysis to ensure the validity of the analysis results. This test includes normality test, multicollinearity test, and heteroscedasticity test.

### **Classical Assumption Test**

In this study, the residual normality test was carried out using the Kolmogorov-Smirnov method. Based on the provisions, if the significance value is more than 5% ( $\alpha$  = 0.05), the data is considered normally distributed. The normality test results show the value of Asymp. Sig. (2-tailed) of 0.200, which indicates that the data is normally distributed. To detect the presence of multicollinearity symptoms in the research model, the Variance Inflation Factor (VIF) value is used. If the VIF value is less than 10, it can be concluded that there is no multicollinearity between the independent variables. The multicollinearity test results show that all variables have a VIF value of less than 10, which means there is no multicollinearity in this regression model. Heteroscedasticity test is conducted using the Glejser test method. Based on the provisions, if the significance value is more than 5% ( $\alpha$  = 0.05), it can be concluded that no heteroscedasticity symptoms occur. The test results show that the significance value of all variables is more than 5%, so it can be concluded that there are no symptoms of heteroscedasticity in this study.

### **Multiple Linear Regression**

Hypothesis testing in this study can be seen from the results of multiple linear regression analysis. The results of multiple linear regression calculations with the SPSS program in this study are as follows:

**Table 1:** Results of Multiple Linear Regression Analysis

Coefficients <sup>a</sup>											
		Unstandardized Coefficients		Standardized Coefficients							
Model		В	Std. Error	Beta	t	Sig.					
1	(Constant)	-1,009	,672		-1,501	,136					
	PEoU	,341	,053	,335	6,447	,000					
	(X1)										



Volume 2, Issue 1, 2024

"Human Resource Transformation and Collaborative Innovation to Build Independent and Competitive Business in the Digital Era"

	and competitive passiness in the pi8.ta. and									
	PS (X2)	,206	,050	,324	4,087	,000				
	ET (X3)	,271	,061	,357	4,462	,000				
7	1 4 37 1 1 1									

a. Dependent Variable: ESAT (Y)

Source: Processed data, 2022

Based on the Table 1, the regression equation in this study can be made as follows:

$$Y = -1,009 + 0,341 + 0,206 + 0,271 + e$$

The coefficient of determination (R Square) measures how much the percentage of independent or independent variables influences the dependent or dependent variable in percent units in a research regression model. The test results for the coefficient of determination in this study can be seen from the Adjusted R Square value of 0.744 or equal to 74.4%. This figure implies that the variable perceived ease of use, perceived risk, and etrust simultaneously affect the user satisfaction by 74.4%, while the remaining 25.6% is influenced by other variables not examined. The F test is used to determine the effect of the independent variable on the dependent variable in a simultaneous study. In the F test, this study will use a significance value of 5% or 0.05. The results of the F test in this study show an F value of 122,862 with a significance level of 0.000, so it can be concluded that the hypothesis is accepted or in other words, the variables of perceived ease of use, perceived security, and e-trust simultaneously have a significant effect on user satisfaction. The t-test aims to determine the effect of the independent variable on the dependent variable in a study partially. The t-test in this study uses a significance value of 5% or 0.05. The results of the t-test in this study can be seen in table 1. From table 1, it can be explained that partially there is a significant effect of the perceived ease of use, perceived security and e-trust on user satisfaction.

#### **DISCUSSION**

### The Effect of Perceived Easy of Use and User Satisfaction

Based on the results of the study, it was found that perceived ease of use has a significant positive effect on user satisfaction, as evidenced by a significance value of 0.000, which is well below 5%. The intuitive design and user-friendly features of e-wallets reduce the effort and time required to perform transactions, thereby enhancing user satisfaction (Lestari & Indriana, 2021). This indicates that users who find DANA easy to use are more likely to be satisfied with their experience. Scientifically, this can be explained by the Technology Acceptance Model (TAM) proposed by Davis (1989) in Putri & Aprianingsih (2024), perceived ease of use plays a crucial role in shaping users' attitudes and intentions toward adopting and utilizing technology. When users find a system easy to use, they are more likely to adopt it and recommend it to others, which aligns with Singh et al., (2020) findings that ease of use have significant effect on user's intention, which further influenced user's perceived satisfaction and recommendation to use mobile wallet services. When users encounter fewer obstacles and complexities, their overall experience improves, leading to higher satisfaction levels. This phenomenon is consistent with the findings of Filieri et al. (2021) who observed that perceived ease of use positively impacts customer satisfaction. The significant relationship between perceived ease of use and user satisfaction observed in this study not only corroborates existing literature but also provides practical insights for e-



Volume 2, Issue 1, 2024

"Human Resource Transformation and Collaborative Innovation to Build Independent and Competitive Business in the Digital Era"

wallet service providers. By prioritizing user-friendly design and functionality, these providers can enhance user satisfaction and foster long-term adoption and loyalty. This finding is particularly relevant in the context of increasing competition in the digital payment industry, where user satisfaction can be a key differentiator.

### The Effect of Perceived Security and User Satisfaction

The results showed that perceived security has a significant positive effect on user satisfaction, as evidenced by a significance value of 0.000 which is far below 5%. According to Arpaci (2015) in Pringgadini & Basiya (2022) high security perceptions increase user confidence in the system used. When users feel that their personal data and financial transactions are safe, they are more likely to feel comfortable and satisfied using e-wallet services. This shows that the higher the perception of security felt by DANA users, the higher their level of satisfaction. This phenomenon is also supported by previous research such as Marhaendra & Mahyuzar (2023); Lestari & Indriana (2021) found that perceived security has a positive and significant effect on customer satisfaction. Security in using e-wallet applications such as DANA makes consumers feel comfortable making transactions without worrying about their personal data being misused (Chusnah & Indriana, 2021). Thus, e-wallet service provider companies must ensure strong data protection to increase user satisfaction. This is important because personal data is indispensable for various transactions both online and offline, and adequate data protection will increase users' sense of security, which in turn increases their satisfaction.

#### The Effect of E-Trust and User Satisfaction

The results also show that electronic trust (e-trust) has a positive and significant effect on user satisfaction, with a significance value of 0.000. This finding underscores the importance of user trust, as users who trust DANA prove to be satisfied with their experience. This aligns with prior research by Melinda et al. (2023), e-satisfaction is influenced by e-trust, which indicates that user trust in the type of service used is very important to increase satisfaction. Berliana & Sanaji (2022) also found that e-trust has a positive and significant effect on e-satisfaction. So, building and maintaining trust in e-wallet services is very important because it directly affects user satisfaction (Putra & Hidayat, 2022). When users feel trust in the security and reliability of e-wallet services, they will be more satisfied with their experience, which in turn can increase user loyalty to the service.

### **CONCLUSION**

This study reveals that perceived ease of use, perceived security, and e-trust significantly influence user satisfaction in using DANA as e-wallet. These findings are in line with the Technology Acceptance Model (TAM), which indicates that user-friendly design and strong security measures are essential to increase user satisfaction. Despite the bad news about DANA's security, it did not affect DANA users in Medan. Trust in the platform further increases user confidence and satisfaction, indicating the importance of maintaining high standards of security and reliability in digital financial services. The results suggest that e-wallet providers should prioritize improving the ease of use and security of their platforms. Simplifying the user interface and implementing strong security protocols



Volume 2, Issue 1, 2024

"Human Resource Transformation and Collaborative Innovation to Build Independent and Competitive Business in the Digital Era"

can significantly improve user satisfaction. Building and maintaining trust through transparent operations and quick problem resolution is also important to retain users. This research is limited by non-probability sampling method and the focus on DANA digital wallet users in Medan, which may not represent the wider population of e-wallet users. In addition, this study did not explore other potential factors that affect user satisfaction, such as customer service quality or transaction costs. Future research should consider a more diverse and representative sample to generalize findings across different user demographics and geographic locations. Investigating additional factors, such as customer support and transaction costs, may provide a more comprehensive understanding of user satisfaction. Longitudinal studies can also be helpful in understanding how user perceptions and satisfaction evolve over time with technological advancements and increased use of e-wallets.

#### REFERENCES

- Ariningsih, E. P., Wijayanti, & Prasaja, M. G. (2022). Intention to Use E-wallet Dilihat dari Perceived Usefulness, Perceived Ease of Use, Perceived Security, dan Trust. Jurnal Maksipreneur: Manajemen, Koperasi, Dan Entrepreneurship, 11(2), 227–238.
- Berliana, C., & Sanaji. (2022). Pengaruh E-Service Quality, E-Trust, Dan Commitment Terhadap E-Loyalty Dengan E- Satisfaction Sebagai Variabel Mediasi. Management Studies and Entrepreneurship Journal, 3(4), 2397–2413.
- Chusnah, C., & Indriana, K. T. (2021). PENGARUH KEMUDAHAN DAN KEAMANAN TERHADAP KEPUASAN KONSUMEN FINTECH. Kinerja, 3(1), 111–122. https://doi.org/10.34005/kinerja.v3i1.1280
- Filieri, R., Acikgoz, F., Ndou, V., & Dwivedi, Y. (2021). Is TripAdvisor still relevant? The influence of review credibility, review usefulness, and ease of use on consumers' continuance intention. International Journal of Contemporary Hospitality Management, 33(1), 199–223. https://doi.org/10.1108/IJCHM-05-2020-0402
- Heryanti, A. H. (2023). Pengaruh Kualitas Layanan Aplikasi Dana terhadap Kepuasan Pelanggan dalam Melakukan Transaksi Secara Online sebagai Alat Pembayaran Elektronik (E-Payment). Journal on Education, 5(3), 8080–8096.
- Himawati, D., & Firdaus, M. F. (2021). Pengaruh Word of Mouth dan Manfaat Terhadap Keputusan Menggunakan E-Wallet Dana Melalui Kepercayaan Pelanggan di Jabodetabek. INOBIS: Jurnal Inovasi Bisnis Dan Manajemen Indonesia, 4(3), 424–436. https://doi.org/10.31842/jurnalinobis.v4i3.194
- Huseynov, F., & Yıldırım, S. Ö. (2016). Internet users' attitudes toward business-to-consumer online shopping: A survey. Information Development, 32(3), 452–465. https://doi.org/10.1177/0266666914554812
- Jogiyanto. (2019). Persepsi Manfaat. Andi.
- Kesuma, P., & Nurbaiti, N. (2023). Minat Menggunakan E-Wallet Dana Di Kalangan Mahasiswa Di Kota Medan. Jesya, 6(1), 694–703. https://doi.org/10.36778/jesya.v6i1.979
- Kumala, D. C., Pranata, J. W., & Thio. (2020). PENGARUH PERCEIVED USEFULNESS, PERCEIVED EASE OF USE, TRUST, DAN SECURITY TERHADAP MINAT



Volume 2, Issue 1, 2024

- "Human Resource Transformation and Collaborative Innovation to Build Independent and Competitive Business in the Digital Era"
- PENGGUNAAN GOPAY PADA GENERASI X DI SURABAYA. Jurnal Manajemen Perhotelan, 6(1), 19–29.
- Lestari, S., & Indriana, K. T. (2021). PENGARUH KEMUDAHAN DAN KEAMANAN TERHADAP KEPUASAN KONSUMEN FINTECH (Studi Kasus Pada Pengguna Aplikasi DANA). AL-MISBAH, 2(1), 66–80.
- Lubis, N. R., Rahma, T. I. F., & Inayah, N. (2022). Pengaruh Pekerjaan, Pendidikan dan Pendapatan terhadap keputusan Masyarakat dalam Menggunakan Layanan Fintech Berbasis Online (Studi Kasus Masyarakat Kota Medan). JIKEM: Jurnal Ilmu Komputer, Ekonomi Dan Manajemen, 2(2), 3438–3445.
- Malik, A. N. A., & Annuar, S. N. S. (2021). The Effect of Perceived Usefulness, Perceived Ease of Use, Reward, and Perceived Risk toward E-Wallet Usage Intention. In M. H. Bilgin, H. Danis, & E. Demir (Eds.), Eurasian Business and Economics Perspectives (Vol. 17, pp. 115–130). Springer International Publishing. https://doi.org/10.1007/978-3-030-65147-3\_8
- Marhaendra, A. N., & Mahyuzar, H. (2023). KEAMANAN TERHADAP KEPUASAN PADA PENGGUNA E-WALLET DANA DI KEBUMEN. Journal of Digital Business and Management, 2(2), 84–90. https://doi.org/10.32639/jdb m.v2i2.400
- Melinda, E., Osly Usman, & Shandy Aditya. (2023). The Effect of E-Service Quality and E-Trust on E-Loyalty with E-Satisfaction as an Intervening for Mobile Banking User. JURNAL DINAMIKA MANAJEMEN DAN BISNIS, 6(1), 80–96. https://doi.org/10.21009/JDMB.06.1.6
- Meyta Dewi, G. M., Joshua, L., Ikhsan, R. B., Yuniarty, Y., Sari, R. K., & Susilo, A. (2021). Perceived Risk and Trust in Adoption E-Wallet: The Role of Perceived Usefulness and Ease of Use. 2021 International Conference on Information Management and Technology (ICIMTech), 120–124. https://doi.org/10.1109/ICIMTech53080.2021.9535033
- Munawar, A. H., Subrata, A., & Nugraha, C. S. (2023). Kontribusi financial technology (fintech) payment terhadap perilaku manajemen keuangan pada masa pandemi covid-19 di Kota Banjar. INOVASI: Jurnal Ekonomi, Keuangan Dan Manajemen, 19(3), 798–807. https://doi.org/10.30872/jinv.v19i3.13340
- Naufaldi, I., & Tjokrosaputro, M. (2020). Pengaruh Perceived Ease Of Use, Perceived Usefulness, dan Trust terhadap Intention To Use. Jurnal Manajerial Dan Kewirausahaan, 2(3), 715–722.
- Nguyen, T. D., & Huynh, P. A. (2018). The Roles of Perceived Risk and Trust on E-Payment Adoption. In L. H. Anh, L. S. Dong, V. Kreinovich, & N. N. Thach (Eds.), Econometrics for Financial Applications (Vol. 760, pp. 926–940). Springer International Publishing. https://doi.org/10.1007/978-3-319-73150-6\_68
- Nugroho, A., Siagian, H., Oktavio, A., & Tarigan, Z. J. H. (2023). The effect of e-WOM on customer satisfaction through ease of use, perceived usefulness and e-wallet payment. International Journal of Data and Network Science, 7(1), 153–162. https://doi.org/10.5267/j.ijdns.2022.11.007
- Pringgadini, S. A., & Basiya, R. (2022). Pengaruh Kepercayaan, Perceived Security, Dan Risiko Terhadap Minat Penggunaan E-Payment Pospay (Studi Kasus Pengguna



Volume 2, Issue 1, 2024

- "Human Resource Transformation and Collaborative Innovation to Build Independent and Competitive Business in the Digital Era"
- Pospay Kantor Pos Pati). SEIKO: Journal of Management & Business, 5(1), 574–584. https://doi.org/10.37531/sejaman.v5i1.1774
- Purwanto, H., Yandri, D., & Yoga, M. P. (2022). PERKEMBANGAN DAN DAMPAK FINANCIAL TECHNOLOGY (FINTECH) TERHADAP PERILAKU MANAJEMEN KEUANGAN DI MASYARAKAT. KOMPLEKSITAS: JURNAL ILMIAH MANAJEMEN, ORGANISASI DAN BISNIS, 11(1), 80–91. https://doi.org/10.56486/kompleksitas.vol11no1.220
- Putra, J. A., & Hidayat, A. (2022). Analysis of the Effect of E-Satisfaction and E-Trust on Loyalty in E-Commerce. Archives of Business Research, 10(4), 62–73. https://doi.org/10.14738/abr.104.12146
- Putri, M. R., & Aprianingsih, A. (2024). The Impact of Customer Satisfaction on Loyalty of GoTo: The Application of Technology Adoption Model (TAM). Indonesian Journal of Business and Entrepreneurship. https://doi.org/10.17358/ijbe.10.1.214
- Safarudin, A. (2020). Faktor-Faktor Pembentuk Loyalitas Generasi Z dalam Menggunakan Financial Technology E-wallet. Prosiding 11th Industrial Research Workshop and National Seminar (IRWNS), 11, 1073–1078. https://doi.org/10.35313/irwns.v11i1.2166
- Singh, N., Sinha, N., & Liébana-Cabanillas, F. J. (2020). Determining factors in the adoption and recommendation of mobile wallet services in India: Analysis of the effect of innovativeness, stress to use and social influence. International Journal of Information Management, 50, 191–205. https://doi.org/10.1016/j.ijinfomgt.2019.05.022
- Waspada! Saldo DANA Terpotong Sendiri di Aplikasi, Ternyata Begini Cara Mengatasinya. (2024, March 21). Poskota. https://poskota.co.id/2024/03/21/waspada-saldo-dana-terpotong-sendiri-di-aplikasi-ternyata-begini-cara-mengatasinya