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Analysis of the Influence of Security Perception on the Level of Public Concern in Using the DANA Application

Analisis Pengaruh Persepsi Keamanan terhadap Tingkat Kepedulian Masyarakat dalam Menggunakan Aplikasi DANA

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Abstract

This study examines how public anxiety levels when using the DANA e-wallet application are impacted by security perception. Data were gathered from 24 observations of news and social media (App X) using a quantitative method using simple linear regression (OLS) using EViews 12. The findings show that anxiety levels are strongly impacted negatively by security perception (coefficient -0.307849; p-value 0.0054), accounting for 39.11% of the variation (R^2 = 0.391052). While news frequency turned out to be negligible, the traditional assumption tests (normality, heteroscedasticity, multicollinearity, and autocorrelation) were fulfilled. The results highlight how crucial proactive security communication is in reducing user concern. The study suggests creating techniques for educating people about digital security and investigating other psychological aspects.

Keywords: DANA Application; Digital Wallet; FinTech; Level of Concern; Perception of Security

Abstrak

Studi ini menganalisis bagaimana tingkat kecemasan publik saat menggunakan aplikasi dompet digital DANA dipengaruhi oleh persepsi keamanan. Data dikumpulkan dari 24 pengamatan berita dan media sosial (App X) menggunakan metode kuantitatif dengan regresi linier sederhana (OLS) menggunakan EViews 12. Hasil penelitian menunjukkan bahwa tingkat kecemasan dipengaruhi secara negatif yang signifikan oleh persepsi keamanan (koefisien -0.307849; nilai p 0.0054), yang menjelaskan 39,11% variasi (R^2 = 0.391052). Meskipun frekuensi berita ternyata tidak signifikan, uji asumsi tradisional (normalitas, heteroskedastisitas, multikolinearitas, dan autokorelasi) terpenuhi. Hasil ini menyoroti betapa pentingnya komunikasi keamanan proaktif dalam mengurangi kekhawatiran pengguna. Studi ini menyarankan untuk mengembangkan teknik pendidikan tentang keamanan digital dan menyelidiki aspek psikologis lainnya.

Kata Kunci: Aplikasi DANA; Dompet Digital; FinTech; Tingkat Keprihatinan; Persepsi Keamanan

INTRODUCTION

The development of financial technology (FinTech) in Indonesia has experienced significant growth in recent years. This has been driven by increased internet usage, the widespread adoption of smartphones, and government support for technological innovation in the financial sector. According to data from the Financial Services Authority (OJK), the number of FinTech companies in Indonesia rose dramatically from only 29 in 2017 to more than 100 in 2022. One of the fastest-growing FinTech subsectors is digital payment services. Among the most popular FinTech products in Indonesia are digital wallets, also known as e-wallets. E-wallets such as GoPay, OVO, and Dana have become widely used payment tools, not only in major cities but also in rural areas.[1]

However, as the number of users increases, so does the risk to their security. Cybercrimes such as data theft and digital fraud are serious issues that must be addressed. Therefore, maintaining the security of applications is crucial to protecting users' privacy and data.[2] Perceived security refers to the extent to which individuals feel safe from potential threats originating from certain sources of information. Criminal activities can lead to user distrust toward e-wallet services; hence, banks must ensure practical security measures that do not hinder users from conducting fund transfers.[3]

One of Indonesia's well-known digital wallets, DANA, is a digital payment service based on a mobile application that allows users to make payments for electricity bills, phone bills, BPJS insurance, mobile top-ups, Google Play vouchers, shopping, and more. Among the digital payment applications mentioned above, this study focuses specifically on the Indonesian digital wallet application, DANA.[4] Nevertheless, research specifically examining how DANA users' perceptions of security influence their levels of concern remains relatively limited. Previous studies have primarily focused on satisfaction, repurchase intention, or utilitarian factors. User perceptions of security and their concerns regarding the DANA application have not been deeply explored.

Consumers' perceptions of data security not only influence their sense of safety during transactions but also affect their level of trust and confidence in using the application systematically.[5] When users believe that an application can manage personal data, facilitate transactions, and has effective mechanisms to prevent digital threats, their level of anxiety tends to decrease. Conversely, inadequate perceptions of security can cause excessive concern, anxiety, and ultimately affect users' willingness to continue using—or even lead them to abandon—the platform.

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1 Aswirah, Aryati Arfah, and Syamsu Alam, "Perkembangan dan Dampak Financial Technology Terhadap Inklusi Keuangan di Indonesia : Studi" 13, no. 2 (2024): 180–86.

2 Bertnardo Mario Uskono, Rian Wijaya, and Mochamad Galih Pradipta Aldiansyah Kusnadi, "Analisis Keamanan Aplikasi Fintech Di Indonesia : Studi" 2, no. 1 (2021): 177–86.

3 Yuliani Dwi Rahmawati and Rahmi Yuliana, "Pengaruh Persepsi Manfaat, Persepsi Kemudahan, Dan Persepsi Keamanan Terhadap Keputusan Penggunaan E-Wallet Pada Mahasiswa STIE Bank BPD Jateng Yuliani" 2, no. 2 (2020): 157–68.

4 Kasidjo, Hendri Darusman, and Rhevania Aprilianita Eka Putri, "Pengaruh Kepercayaan , Fitur Layanan Dan Resiko Terhadap Minat Penggunaan Digital Payment Pada Aplikasi DANA (Dompet Digital Indonesia) Di Kecamatan Tambun Selatan PENDAHULUAN Sistem Pembayaran Di Indonesia Masih Menggunakan Uang Tunai Dan Berinteraksi" 5, no. 1 (2025): 129–49.

5 Devita Azwi Nurrahma et al., "Persepsi Konsumen Tentang Keamanan Data Pada Aplikasi E-Wallet : Studi Kasus Dana" 3, no. 3 (2025).

According to research by Alfaris perceived usefulness refers to the subjective probability that an application can facilitate employees in completing their tasks.[6] From this definition, it can be concluded that an individual will not use a digital wallet if they are not confident in their ability to complete a task; conversely, they will use it if they believe they can. Therefore, consumers' use of digital wallets during transactions may be negatively affected by such perceptions.

According to research by Salmita et al., in addition to technical issues, BRImo users are highly concerned about data security.[7] Many people worry that their personal and financial information might be leaked during purchases or transactions. Although Bank BRI has implemented several measures to protect customer data, much remains to be done, particularly regarding online fraud. Customers must remain cautious when using digital banking services, and this may hinder the broader implementation of BRImo.

Meanwhile, research by Sundari & Farhiyah on user interest revealed that 74.4% of respondents expressed interest in using DANA for their daily activities, while 25.6% were not interested.[8] Given this, further research is needed to understand the impact of user convenience and security risks on the use of DANA's digital services. However, despite the growing number of users, issues remain regarding the level of understanding and trust in digital security systems.

The findings of this study are based on this analysis. The study not only examines users' perceptions of security but also links them to their level of concern as measured through data collected from digital media and social media. This research offers new insights by connecting individual perception analysis with publicly available media information—an area that has been rarely explored in studies on the DANA application.

Based on the aforementioned studies, it is evident that much of the existing research still focuses on trust, reuse intention, or overall risk perception. There is no comprehensive research examining how users' perceptions of security influence their level of awareness, particularly regarding the integration of data from digital and social media sources. This situation highlights an underexplored research area and underscores the urgency of conducting further studies focused on the DANA application.

Method

This study employs a quantitative research design that integrates content analysis with statistical data processing using the EViews program.[9] The quantitative approach was selected due to its ability to systematically and purposefully measure relationships between variables—particularly the influence of security perceptions on users' anxiety levels when using the DANA application. This approach is appropriate because the data sources include publications, current news, and social media, which can be transformed into numerical data for statistical analysis. The use of a quantitative method is approach is ideal for testing relationships between variables through standardized statistical techniques. The study adopts a descriptive-verificative method to test the hypothesis and evaluate the extent to which perceptions of security affect user anxiety through a regression model.

6 Muhammad Alfaris, "Pengaruh Persepsi Manfaat, Persepsi Kemudahan, Dan Persepsi Keamanan Terhadap Keputusan Penggunaan Aplikasi Pembayaran Digital (E-Wallet)" 4, no. April (2023): 67–74.

7 Salmita et al., "Analisis Penggunaan Aplikasi Brimo Dalam Meningkatkan Kepuasan Nasabah Di Cabang BRI Kota Palopo" 02, no. 02 (2024): 1–5.

8 Siti Sundari and Rahmah Farhiyah, "Pengaruh Kemudahan Penggunaan Dan Risiko Keamanan Terhadap Minat Penggunaan Dompet Digital Dana" 7, no. 2 (2025): 167–77.

9 John W Creswell and Cheryl N Poth, *Qualitative Inquiry and Research Design: Choosing among Five Approaches* (Sage publications, 2016).

The information utilized in this research consists of two types of data. The first is primary data, obtained from public perceptions regarding the safety of the DANA application and their anxiety levels, collected through online surveys. The second is secondary data, comprising various sources such as news articles, social media posts, and other writings related to security issues in the DANA application, gathered using documentation techniques.[10] Each piece of information is categorized based on sentiment type (positive, negative, or neutral) and the issue discussed. The use of documentation for secondary data collection is common in studies of digital risk, as it effectively illustrates how the public perceives an issue based on available information (Hidayat, 2020). Data were analyzed using EViews 12 to examine how perceptions of security (independent variable) affect user anxiety (dependent variable).

A simple linear regression model was employed to test the hypothesis, where Y represents the dependent variable (user anxiety), X the independent variable (security perception), α the intercept, β the regression coefficient, and e the error term accounting for unobserved factors. The application of regression analysis in digital technology studies is supported by Batalgi (2021, cited in Wibowo, 2025), who emphasizes its suitability for assessing the impact of perceptual factors in technology adoption research. Data were collected from 25 respondents via news and social media platforms (specifically X), then processed using EViews 12 to investigate how DANA users' perceptions influence their sense of security and concern regarding the application's existing security features.

RESULTS AND DISCUSSION

Regression Analysis of Security Sentiment and User Concern Scores

The objective of this analysis is to empirically examine the impact of the independent variable Security Sentiment (X1) on the dependent variable Concern Score (Y). The method chosen is the Ordinary Least Squares (OLS) technique, a commonly used statistical approach for estimating parameters in linear regression models. This study is based on 24 observations included in the model. The interpretation of regression results focuses on four main aspects: estimated coefficients to determine the direction and magnitude of influence, individual significance tests (t-tests) to assess each variable's significance, simultaneous significance tests (F-tests) to evaluate the overall validity of the model, and the R^2 value to assess the model's explanatory power over variations in the dependent variable.

The three main variables derived from the data are Security Sentiment (X1), News Frequency (X2), and Concern Score (Y). Security Sentiment (X1) is categorized to determine whether a piece of information related to the DANA or FinTech application indicates safety or risk. Classification emphasizes terms related to security, such as *encryption*, *data protection*, *fraud*, or *data breach*. Information about secure systems is assigned a positive score of +1, incidents such as data breaches or thefts receive a negative score of −1, and general but non-specific information is assigned a neutral score of 0. Meanwhile, News Frequency (X2) represents the number of relevant news items published during a given period, where each news entry is assigned a frequency value of 1. Multiple news items on the same day share an X2 value equal to the total number of articles that day. Finally, using a keyword scoring technique, the Concern Score (Y) quantifies user emotional engagement on a scale of 1 to 5, where expressions such as "very worried" or "panicked" indicate high concern (Score 5), and terms like "very safe" indicate no concern (Score 1).

10 Sugiyono, *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, Dan R&D*, 19th ed. (Bandung: Alfabeta, 2013).

Command | Capture

View | Proc | Object | Print | Name | Freeze | Estimate | Forecast | Stats | Resids

Dependent Variable: SKOR_KEKHAWATIRAN__Y_
Method: Least Squares
Date: 12/07/25 Time: 13:18
Sample (adjusted): 1 24
Included observations: 24 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.980632	0.241940	12.31973	0.0000
SENTIMEN_KEAMANAN__X1_	-0.307849	0.099817	-3.084144	0.0054

R-squared	0.301852	Mean dependent var	3.250000
Adjusted R-squared	0.270118	S.D. dependent var	1.293798
S.E. of regression	1.105332	Akaike info criterion	3.117824
Sum squared resid	26.87870	Schwarz criterion	3.215995
Log likelihood	-35.41389	Hannan-Quinn criter.	3.143869
F-statistic	9.511946	Durbin-Watson stat	1.595773
Prob(F-statistic)	0.005422		

Figure 1. Output of regression analysis data from Eviews 12
Source: Program by Author

The regression analysis shows that the constant (C) has a value of 2.808032, representing the average public concern level when both Security Sentiment (X1) and News Frequency (X2) equal zero. For the effect of Security Sentiment (X1), the obtained coefficient is −0.307849 with a probability of 0.0054, which is below the 0.05 significance level. This negative and statistically significant coefficient supports the hypothesis that higher security sentiment reduces public concern.[11] Specifically, as positive security sentiment increases, user anxiety decreases. The variable News Frequency (X2) does not appear in the regression output, indicating that it was automatically removed from the model due to insignificance or insufficient data variability.

Thus, News Frequency does not contribute meaningfully to the regression model. Regarding model quality, the F-test probability is 0.005422, slightly below 0.05, suggesting that Security Sentiment (X1) significantly affects Concern Score (Y) collectively. The R-squared value of 0.391052 indicates that 39.11% of the variation in Concern Score (Y) is explained by Security Sentiment (X1), while the remaining 60.89% is attributed to other factors not included in the model. Lastly, the Durbin-Watson statistic of 1.595773 suggests that the classical assumption of no autocorrelation is likely satisfied.

Classical Assumption Tests

Normality Test of Residuals

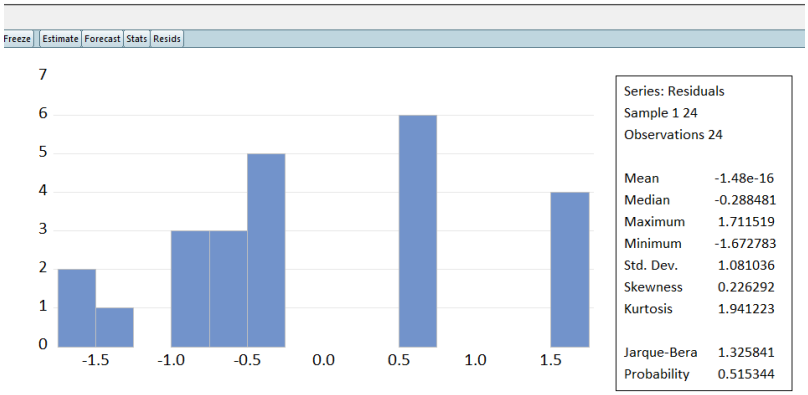

Figure 2. Residual Normality Test (EViews 12)
Source: Program by Author

11 Ashani Amarasinghe, "Public Sentiment in Times of Terror," *Journal of Development Economics* 162 (May 2023): 103058, https://doi.org/10.1016/j.jdeveco.2023.103058.

The residual normality test is conducted to ensure that the residuals of the regression model are normally distributed, which is one of the fundamental assumptions in Ordinary Least Squares (OLS) regression analysis.[12] Using the Jarque–Bera statistic, the test results show a value of 1.325841 with an associated probability of 0.515344. The decision criterion states that if the Jarque–Bera probability exceeds 0.05 (α = 5%), the residuals are considered normally distributed. Since the obtained probability value (0.515344) is significantly greater than 0.05, it can be concluded that the residuals of the regression model are normally distributed. This indicates that the normality assumption has been satisfied, and the regression model is valid for further analysis.

Heteroskedasticity Test

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Heteroskedasticity Test: Glejser
Null hypothesis: Homoskedasticity

F-statistic	0.222563	Prob. F(1,22)	0.6417
Obs*R-squared	0.240365	Prob. Chi-Square(1)	0.6239
Scaled explained SS	0.141836	Prob. Chi-Square(1)	0.7065

Test Equation:
Dependent Variable: ARESID
Method: Least Squares
Date: 12/07/25 Time: 19:43
Sample: 1 24
Included observations: 24

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.906437	0.116427	7.785435	0.0000
SENTIMEN_KEAMANAN__X1_	-0.022661	0.048034	-0.471766	0.6417

R-squared	0.010015	Mean dependent var	0.926266
Adjusted R-squared	-0.034984	S.D. dependent var	0.522846
S.E. of regression	0.531913	Akaike info criterion	1.654981
Sum squared resid	6.224489	Schwarz criterion	1.753152
Log likelihood	-17.85977	Hannan-Quinn criter.	1.681026
F-statistic	0.222563	Durbin-Watson stat	1.429228
Prob(F-statistic)	0.641739		

Figure 3. Test Heteroskedastisitas Eviews 12

Source: Program by Author

The heteroskedasticity test is used to determine whether the residuals of the regression model are consistent (homoskedastic) or inconsistent (heteroskedastic) across observations.[13] In this study, the Glejser test was employed, with the null hypothesis (H_0) stating that the model exhibits homoskedasticity (absence of heteroskedasticity). The results show Chi-Square and F-statistic probabilities of approximately 0.6239 and 0.6417, respectively. According to the decision rule, if these probability values exceed 0.05, the model does not exhibit heteroskedasticity. Since both probability values (0.6239 and 0.6417) are greater than 0.05, the null hypothesis is accepted. Therefore, it can be concluded that there is no heteroskedasticity problem in this regression model. The assumption of homoskedasticity is satisfied, confirming that the OLS regression model remains a Best Linear Unbiased Estimator (BLUE).

12 Amand F. Schmidt and Chris Finan, "Linear Regression and the Normality Assumption," *Journal of Clinical Epidemiology* 98 (June 2018): 146–51, https://doi.org/10.1016/j.jclinepi.2017.12.006.

13 Oscar L Olvera Astivia and Bruno D Zumbo, "Heteroskedasticity in Multiple Regression Analysis: What It Is, How to Detect It and How to Solve It with Applications in R and SPSS.," *Practical Assessment, Research & Evaluation* 24, no. 1 (2019): n1.

Multicollinearity Test

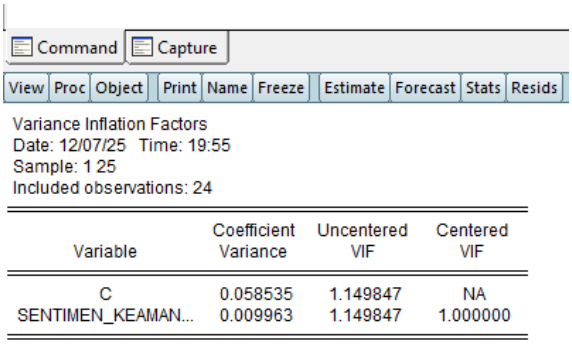

Figure 4. Uji Multikolinearitas Eviews 12

Source: Program by Author

The multicollinearity test aims to determine whether there is a strong linear correlation between independent variables in the regression model.[14] This analysis employs the Variance Inflation Factor (VIF) as an indicator. The general criterion is that if the VIF value is less than 10, the model is considered free from multicollinearity. The variable Security Sentiment (X1) shows a centered VIF value of approximately 1.000000, according to the EViews output. Since the regression model includes only one independent variable (X1), multicollinearity cannot theoretically occur because there are no other independent variables to correlate with. The obtained VIF value of 1.000000 confirms that it is far below the threshold of 10. Therefore, it can be concluded that the regression model is free from multicollinearity issues.

Autocorrelation Test

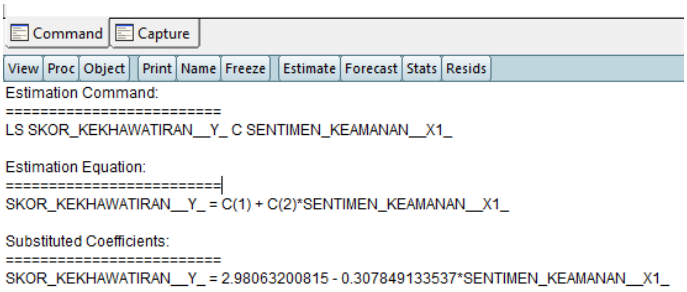

Figure 5. Eviews 12 Autocorrelation Test

Source: Program by Author

The purpose of the autocorrelation test is to determine whether there is correlation between residuals (errors) in one observation period and those in previous periods.[15] Although this test is typically used for time-series data, it provides important validation of the independence assumption of residuals in the regression model. Based on the previously presented OLS regression results, the Durbin–Watson statistic is 1.595773. This value indicates that the model does not suffer from serious autocorrelation problems, as it is close to 2, which represents the ideal midpoint suggesting no positive or negative correlation.

14 Jamal I Daoud, "Multicollinearity and Regression Analysis," in *Journal of Physics: Conference Series*, vol. 949 (IOP Publishing, 2017), 12009.

15 Yanguang Chen, "Spatial Autocorrelation Approaches to Testing Residuals from Least Squares Regression," ed. Guy J-P. Schumann, *PLOS ONE* 11, no. 1 (January 22, 2016): e0146865, https://doi.org/10.1371/journal.pone.0146865.

The Influence of Security Perception on Public Concern Toward the Use of the DANA Application

The results of the Ordinary Least Squares (OLS) regression analysis clearly demonstrate that Security Perception (Security Sentiment, X1) has a statistically significant effect on the Public Concern Level (Y) when using the DANA digital payment application. This is evidenced by the *t-test*, where the *p-value* for Security Sentiment equals 0.0054, which is below the 5% significance level ($\alpha = 0.05$). Moreover, the *F-statistic* probability of 0.005422 confirms that the model is statistically valid overall. The coefficient of $\beta_1 = -0.307849$ further establishes a negative relationship between both variables. This indicates that as the public perceives higher levels of digital security, their degree of concern about using DANA decreases significantly.[16]

The negative and significant coefficient demonstrates an inverse relationship between security perception and public anxiety. When individuals receive more positive information regarding DANA's system security—such as data encryption, fraud detection, or enhanced privacy policies—their trust and confidence increase. As trust grows, the psychological discomfort or fear of potential digital threats declines. Conversely, when negative information emerges, such as reports of data leaks or financial fraud, public concern tends to intensify. This pattern suggests that digital trust is highly sensitive to public discourse surrounding cybersecurity. In essence, the better users perceive DANA's digital safeguards, the lower their tendency to worry during financial transactions.[17]

Statistical validation further supports the reliability of this finding. The *F-test* and *t-test* results both show probabilities below the 0.05 threshold, confirming the statistical significance of the model. These dual results strengthen the conclusion that the perception of security plays a decisive role in shaping the emotional and behavioral responses of DANA users. The evidence indicates that users' attitudes toward digital safety are not random but systematically influenced by how secure they believe the system to be. This finding reinforces the hypothesis that trust in technological protection mechanisms is a fundamental predictor of consumer anxiety in digital finance environments.[18]

The degree of influence that Security Perception (X1) has on the variation in Public Concern (Y) is reflected in the coefficient of determination (R^2). In this model, $R^2 = 0.391052$, meaning that approximately 39.11% of the fluctuation in user concern is explained by differences in perceived security. This is a meaningful proportion, emphasizing that sentiment toward security significantly shapes emotional responses to the DANA platform. The remaining 60.89% of variation can be attributed to other factors outside the model—such as individual digital literacy, frequency of use, social influence, or previous experiences with financial technology platforms. These factors collectively highlight that user anxiety is multifaceted and influenced by both psychological and social contexts.[19]

16 Krishnan Kavitha, V. P Joshith, and Sonal Sharma, "Beyond Text: ChatGPT as an Emotional Resilience Support Tool for Gen Z – A Sequential Explanatory Design Exploration," *E-Learning and Digital Media* 0, no. 0 (June 2024), https://doi.org/10.1177/20427530241259099.

17 Sundari and Farhiyah, "Pengaruh Kemudahan Penggunaan Dan Risiko Keamanan Terhadap Minat Penggunaan Dompet Digital DANA."

18 Zoltán Rózsa et al., "Generation Z's Perception of Privacy on Social Media: Examining the Impact of Personalized Advertising, Interpersonal Relationships, Reference Group Dynamics, Social Isolation, and Anxiety on Self-Disclosure Willingness," *Oeconomia Copernicana* 15, no. 1 (March 2024): 229–66, https://doi.org/10.24136/oc.2956.

19 Gül Dikeç et al., "The Perceptions of Generation Z University Students about Their Futures: A Qualitative Study," *Sci* 5, no. 4 (December 2023): 45, https://doi.org/10.3390/sci5040045.

The obtained R^2 value signifies that while Security Perception is an important determinant, it is not the only contributor to public concern. Users' emotional responses to digital payment systems are often complex and shaped by multiple dimensions. For instance, factors such as trust in government regulation, perceived usefulness, and customer service responsiveness can influence feelings of safety. Additionally, the role of the media in amplifying cybersecurity narratives can heighten or reduce perceived risk. Therefore, while this model quantitatively demonstrates the importance of perceived security, it also opens avenues for broader interdisciplinary exploration into psychological, social, and contextual determinants of trust in FinTech platforms like DANA.[20]

From a theoretical standpoint, the inverse relationship between security perception and anxiety aligns with established frameworks such as the Technology Acceptance Model (TAM) and Protection Motivation Theory (PMT). Both models emphasize that perceptions of security, risk, and trust significantly affect behavioral intentions to use technology. When users believe that their data and transactions are secure, their motivation to engage with digital payment systems increases, while fear diminishes.[21] The findings from this study are therefore consistent with prior research, which highlights the central role of perceived security in maintaining user engagement and fostering adoption of digital financial platforms.[22]

From a practical perspective, these findings offer important insights for FinTech developers, policymakers, and regulators. For DANA, improving user perception of security should become a strategic priority. This includes transparent communication about data protection mechanisms, real-time fraud alerts, and visible compliance with cybersecurity regulations. At the policy level, financial regulators such as the Otoritas Jasa Keuangan (OJK) can leverage these insights to enhance national cybersecurity frameworks, promote digital literacy, and enforce consumer protection standards.[23] A clear and trustworthy security image will not only reduce user anxiety but also encourage broader digital financial inclusion.

In summary, the regression analysis confirms that Security Perception significantly and negatively influences Public Concern in the context of using the DANA application. The statistical evidence—through t-test, F-test, and R^2—collectively validates that user sentiment toward security explains nearly 40% of anxiety-related variations. While this is substantial, the remaining unexplained portion points to the complexity of user psychology in the digital age.[24] Future research may explore additional factors, including perceived risk, trust in technology, and social influence, using mixed-method or longitudinal designs. Overall, strengthening perceived security is essential to fostering public confidence and ensuring the sustainable adoption of FinTech services in Indonesia.

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20 Fabrizio Santoniccolo et al., "Gender and Media Representations: A Review of the Literature on Gender Stereotypes, Objectification and Sexualization," *International Journal of Environmental Research and Public Health* 20, no. 10 (May 2023): 5770, https://doi.org/10.3390/ijerph20105770.

21 Triadi Agung Sudarto and Dodik Juliardi, "Improving MSME Performance in Mojokerto City: Contribution of Digital Payment Convenience, Accounting Understanding and Business Experience," *International Journal of Business, Law, and Education* 6, no. 2 (September 28, 2025): 1346–54, https://doi.org/10.56442/ijble.v6i2.1240.

22 Ahmad Farid Fanani, Ahmad Nabil Annuha, and Muhammad Yusuf Pratama. 2025. "The Relevance of the Ternak Uang Financial Strategy to the Principles of Maqāṣid Al-Sharīʿah and Al-Ghazali's Ethics of Wealth". *Indonesian Journal of Islamic Economics Research* 7 (1). https://doi.org/10.18326/ijier.v7i1.4764.

23 David Spohn, "Financial Resilience and Innovation among Generation Z in the Face of Economic Adversity," *European Journal of Management, Economics and Business* 1, no. 3 (November 2024): 39–51, https://doi.org/10.59324/ejmeb.2024.1(3).04.

24 Ankita Badola et al., "The Effect of Social Media on Body Image, Self-Esteem, and Social Appearance Anxiety among Young Adults," *International Journal of Research in Medical Sciences* 13, no. 10 SE-Original Research Articles (September 29, 2025): 4159–62, https://doi.org/10.18203/2320-6012.ijrms20253158.

CONCLUSION

This empirical study demonstrates that security perception is a key factor that significantly influences the level of concern among users of the DANA digital payment application. With a regression coefficient of −0.307849 ($p = 0.0054 < \alpha = 0.05$), the simple OLS regression analysis using EViews 12 reveals that every positive increase in security perception (for instance, through awareness of data encryption or secure user behavior) leads to a significant reduction in public anxiety. This finding is further supported by an R-squared value of 0.391052, indicating that 39.11% of the variance in user concern is explained by security perception, while the remaining 60.89% is influenced by external factors such as digital literacy, individual awareness, or social dynamics. The validity of the regression model is confirmed as all classical assumption tests—normality, heteroskedasticity, multicollinearity, and autocorrelation—were satisfied. Meanwhile, the variable News Frequency (X2) was found to be statistically insignificant and was therefore excluded from the final model.

Theoretically, this research contributes to the Technology Acceptance Model (TAM) by demonstrating that security perception not only reflects user satisfaction or ease of use but also influences the psychological stress level experienced by digital technology users. The practical implications are particularly important for the development of the DANA application, where proactive communication and transparency regarding security features serve as critical strategies to mitigate public anxiety. For regulators such as the Financial Services Authority (OJK), these findings underscore the need to enhance public digital literacy and cybersecurity awareness, given that rising user consciousness is influenced not solely by security perception but also by broader socio-digital factors. However, since this study focuses exclusively on one application (DANA) with a relatively limited sample size (24 observations), caution must be exercised when generalizing the results. Future research should therefore aim to investigate the unexplained 60.89% variance in user concern, compare findings across other domestic digital wallet platforms (e.g., GoPay or OVO), and adopt both quantitative and qualitative approaches to better capture the psychological dimensions of user experience.

Building on the finding that security perception has a significant and positive effect on public concern, it is recommended that DANA and similar FinTech providers prioritize public perception management alongside the continued development of internal security technologies. First, DANA should maintain proactive and transparent communication about its security measures—not only during or after incidents, but continuously. This can be achieved through regular educational campaigns across social media and in-app notifications highlighting new security features, encryption mechanisms, and data protection guarantees to reinforce positive sentiment (X1). Second, because 60.89% of concern variation remains unexplained by security sentiment, further studies should explore additional contributing factors such as digital literacy gaps, personal cybersecurity habits, and exposure to phishing attacks. A deeper understanding of these aspects will enable more comprehensive strategies to enhance user confidence and foster safe, sustainable FinTech adoption in Indonesia.

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