

THE EFFECT OF PERCEIVED PRIVACY, SECURITY, AND TRUST ON THE CONTINUANCE INTENTION TO USE SOCIAL NETWORKING SERVICES (A Study on Meta's Social Networks)

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ABSTRAK

Web 2.0 telah menjadikan layanan jejaring sosial (SNS) sebagai bentuk vital komunikasi manusia. Banyak faktor yang telah membentuk perilaku media sosial pelanggan di platform ini dari waktu ke waktu. Privasi, keamanan, dan kepercayaan adalah pilar utama yang menentukan penerimaan konsumen terhadap teknologi yang mengakses data mereka, seperti layanan jejaring sosial. Karena platform media sosial Meta, Facebook, Instagram, dan WhatsApp adalah yang paling populer, mereka digunakan untuk mempelajari hubungan antara Perceived Privacy, Security, dan Continuance Use Intention yang dimediasi oleh Trust. Oleh karena itu, penelitian ini bertujuan untuk mempelajari bagaimana persepsi privasi, keamanan, kepercayaan, dan kelanjutan penggunaan di SNS Meta dan mengeksplorasi hubungan di antara mereka. Penelitian ini bersifat kuantitatif dengan metode deskriptif sederhana. Sampel yang digunakan untuk penelitian ini adalah 209 responden yang pernah atau sedang menggunakan platform jejaring sosial Meta. Data dianalisis menggunakan analisis deskriptif dan teknik Structural Equation Modeling (SEM). Temuan penelitian ini menunjukkan bahwa Perceived Privacy, Security, dan Trust berpengaruh signifikan terhadap Continuance Use Intention. Kepercayaan sebagai variabel mediator berpengaruh signifikan terhadap hubungan antara Perceived Privacy dan Perceived Security terhadap Continuance Use Intention.

Kata kunci: Perceived Privacy, Perceived Security, Trust, Continuance Use Intention, Social Networking Platforms, Meta, Facebook, Instagram, WhatsApp

ABSTRACT

Web 2.0 has made social networking services (SNSs) a vital form of human communication. Numerous factors have shaped customer social media behaviour on these platforms over time. Privacy, security, and trust are the main pillars determining consumer acceptance of technologies that access their data, such as social networking services. Since Meta's social media platforms, Facebook, Instagram, and WhatsApp are the most popular, they are used to study the relationship between Perceived Privacy, Security and Continuance Use Intention mediated by Trust. Therefore, this research aims to study how privacy, security, trust, and continuance use intention in Meta's SNSs are perceived and explore their relationship. This study is quantitative with a simple descriptive method. The sample used for this research is 209 respondents who have previously used or are currently using Meta's social networking platforms. The data is analyzed using descriptive analyses and the Structural Equation Modelling (SEM) technique. The findings of this study show that Perceived Privacy, Security, and Trust have a significant effect on Continuance Use Intention. Trust as the mediator

variable significantly affects the relationship between Perceived Privacy and Perceived Security to the Continuance Use Intention.

Keywords: *Perceived Privacy, Perceived Security, Trust, Continuance Use Intention, Social Networking Platforms, Meta, Facebook, Instagram, WhatsApp*

INTRODUCTION

Since the beginning of civilization, technical progress has been the driving force behind the expansion of human society. Researchers' interests in business and economic sectors have evolved with technological advancements. This growth has been marked by four giant leaps called industrial revolutions resulting from crucial innovations. These inventions include the steam engine, electricity, digitalization, and the use of information technology, which culminated in significant advancements in the field of information and communications technologies (ICT) at the turn of the twentieth century, as well as the introduction and widespread use of the internet, which sparked the fourth industrial revolution (Sima et al., 2021).

Social networking sites (SNS) have become a vital element of modern communication and lifestyle. Due to the vast array of free services provided by SNSs, these sites are capturing the attention of all potential Internet users. Importantly, individuals of all ages have joined social networking sites. Because many users are unaware of the repercussions of information sharing, they freely reveal their personal information on SNSs (I.Powale & D. Bhutkar, 2013).

The more individuals use online social networks and get accustomed to them, the

more likely they are to engage in cooperative social activities. People's engagement in online social networks provides a trade-off between the chance to expand their social and professional circles and the related privacy risks. Consumer data refers to a variety of (sensitive and non-sensitive) data provided by users that may be shared with third parties (Aghasian et al., 2017).

Policy Research Centre (2017) defines consumer data as digital personal information; files posted online by the consumer; data created from consumers' online transactions, Internet-connected activity, or digital devices; data purchased or obtained from a third party that is about the identified consumer; and other digital data associated with commerce or activity that is pertinent to the transfer of data to a designated third party. This information may be transmitted in various ways, including spatial-temporal characteristics such as location and time stamp and personal characteristics such as background, hobbies, contacts, and personal opinions (Aghasian et al., 2017). Due to the high financial worth of this data to several parties, including Internet service providers and technology corporations, its analysis and utilization will grow more sophisticated, substantial, and compelling governing (Zhang, 2019).

population or sample, gather relevant data using research tools, and analyze quantitative data to test the chosen hypothesis (Sugiyono, 2017).

RESEARCH METHODS

This research is quantitative research with a casual descriptive approach. Quantitative research, as described by (Bryman, 2012), is "a research technique that places focus on quantification in the gathering and interpretation of data..." That is, quantitative research entails quantifying something. This technique focuses on measuring something or a set of factors in the social realm to explore a particular

The data was collected by distributing a survey on social media platforms, Facebook, Instagram and WhatsApp. More than 209 users of Meta's social networking site answered the survey; however, only 209 replies were deemed legitimate and included in the analysis.

The descriptive approach will be used to describe facts accurately and methodically. The method is based on the operation of variables structured as questions (questionnaire), where perceived privacy (X_1), perceived security (X_2), trust (Y), and continuance intention to use (Z), each of which includes five responses with varying values. The questions relating to the variables above will be quantified using a questionnaire that adheres to the Likert scale.

RESULTS AND DISCUSSION

2.1 Respondent's Characteristics

2.1.1 Respondent's Characteristics based on gender

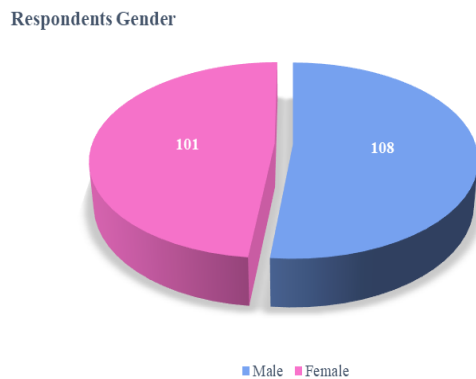


Figure 2. Respondents' characteristics based on their gender

Figure 1 shows that of the 100 respondents, 52% or 108 were males, and 48% or 101 were females. This indicates that up to 52% of respondents who utilize Meta's social networking services are men. A study by Mohamed Salehan (2018) shows similar findings; according to Mohamed's study, most social networking service (SNS) users are males, including as much as 67% of the sample size. This suggests that men use SNS, including Meta's social networking services, more than women.

2.1.2 Respondent's Characteristics based on age

Figure 2 indicates that Meta's social media platforms are the most utilized by

respondents. Facebook is the leading social network in respondent choice, and 176 out of 209 participants answered that they use it, making it the most utilized social networking platform among respondents. Instagram and WhatsApp ranked second and third, respectively, after Facebook, with

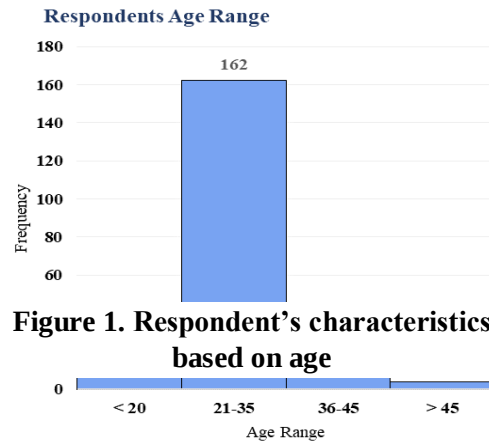


Figure 1. Respondent's characteristics based on age

Instagram having 163 users and WhatsApp having 141 users out of 209. In addition, several users have stated that they use platforms other than those offered by Meta, particularly LinkedIn, Twitter, Quora, Snapchat, Telegram, and Reddit, which are used by 38 respondents, placing them below Meta's social networking services. This is consistent with dataportal's results on social media platforms, which reveal that Meta's SNSs are the most popular social networking site used by people, and Facebook is the first among them all.

2.1.3 Respondent's Characteristics based on educational level

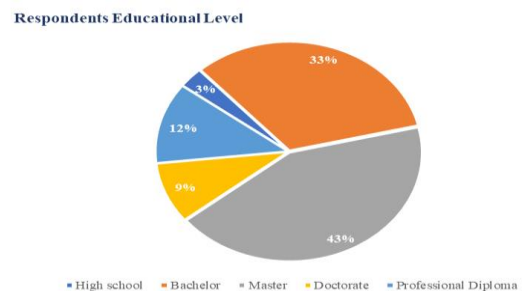


Figure 3 shows that 90 of the 209 respondents, or 43% of the total, have

Figure 3. Respondent's characteristics based on their educational level
master's degrees, making them the majority;

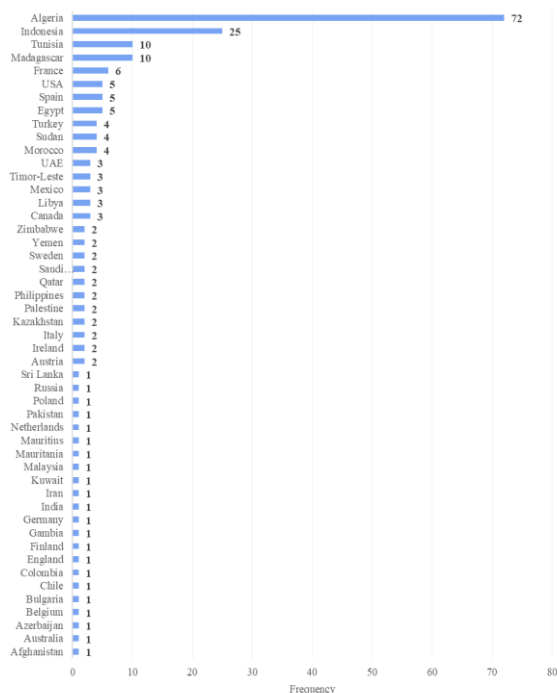
33% have bachelor's degrees, 12% have professional diplomas, 9% have doctoral degrees, and 3% have just high school diplomas. As observed, every responder is educated, with the majority holding either master's or bachelor's degrees. We can

interpret the latter findings by relating them to our previous results on the age range and conclude that the reason why the majority of our respondents have either master's or bachelor's degrees fall between the ages of 20 and 35 is that people within that age range are taking either bachelor's or master's studies.

2.1.4 Respondent's Characteristics based on country of origin

According to Figure 4, the respondents are distributed around the world, with 72 respondents out of 209 from Algeria, representing the majority. The rest are from other countries, from other parts of the globe. Distributing the questionnaire through social media is an advantage for expanding the targeted audience, in which in SNSs there are no boundaries, that is why the results include responses from 49

Respondents Country of Origin



different countries.

2.2 Validity Test

Table 1. Discriminant validity test (Fornell-Larcker Criterion)

	CUI	PP	PS	TR
Continuance Use Intention	0.807			
Perceived Privacy	0.191	0.880		
Perceived Security	0.680	0.022	0.944	
Trust	0.682	0.173	0.484	0.815

As shown in Table 1, the value for each latent variable is more than the most significant correlation value for that variable with other variables, indicating that the model has a high degree of discriminant validity.

2.3 Hypotheses Test

H₁: Perceived Privacy has a positive and significant effect on the Continuance Use Intention in Meta's Social Networking Services.

The hypotheses analysis results show that the research significance value on hand is $2.156 > 1.96$, the significance level is 0.032, less than 0.05, and the path coefficients value is positive 0.106, indicating that the link between perceived privacy and the continuance use intention is significant and in the positive direction. Therefore, this research concludes that the level of perceived privacy impacts the continuance use intention. A positive association suggests that when the quality of perceived privacy increases, the continuance use intention will also increase. The sample in this research consists of numerous users of Meta's social networking services and given the significant relationship between perceived privacy and continuance use intention, it may be applied to the whole population. Due to this, it is critical to consider how high of perceived privacy standard Meta's social networks have. The findings of this research are supported by (Novita & Budiarti, 2021).

Figure 4. Respondents' characteristics based on their country of origin

Therefore, H_1 is supported.

H₂: Perceived Privacy has a positive and significant effect on Trust in Meta's Social Networking Services

The research significance value on hand is $2.278 > 1.96$, the significance level is 0.000, less than 0.05, and the path coefficients value is positive 0.481, indicating that the link between perceived security and trust is significant and in the positive direction. Therefore, this research concludes that the level of perceived security impacts trust. A positive association suggests that when perceived security increases, trust will also increase. The sample in this research consists of numerous users of Meta's social networking services and given the significant correlation between perceived security and trust, it may be applied to the whole population. This makes it crucial to pay attention to how much Meta's social networks have contributed to users' trust. The findings of this research are supported by (Dhami et al., 2013), (Susanto et al., 2016), and (Al-Dwairi & Al-Ali, 2022). Therefore, H_2 is supported.

H₃: Perceived Security has a positive and significant effect on the Continuance Use Intention in Meta's Social Networking Services

The research significance value on hand is $6.176 > 1.96$, the significance level is 0.000, less than 0.05, and the path coefficients value is positive 0.466, indicating that the link between perceived security and continuance use intention is significant and in the positive direction. Therefore, this research concludes that perceived security impacts continuance use intention. A positive association suggests that when levels of perceived security increase, continuance use intention will also increase. The sample in this research consists of numerous users of Meta's social networking services and given the significant correlation between perceived security and continuance use intention, it may be applied to the whole population. This makes it crucial to pay attention to

how much Meta's social networks have contributed to what extent the users perceive its security. The findings of this research are supported by (Novita & Budiarti, 2021). Therefore, H_3 is supported.

H₄: Perceived Security has a positive and significant effect on Trust in Meta's Social Networking Services

The research significance value on hand is $8.162 > 1.96$, the significance level is 0.000, less than 0.05, and the path coefficients value is positive 0.466, indicating that the link between perceived security and continuance use intention is significant and in the positive direction. Therefore, this research concludes that perceived security impacts continuance use intention. A positive association suggests that when levels of perceived security increase, continuance use intention will also increase. The sample in this research consists of numerous users of Meta's social networking services and given the significant correlation between perceived security and continuance use intention, it may be applied to the whole population. This makes it crucial to pay attention to how much Meta's social networks have contributed to what extent the users perceive its security. The findings of this research are supported by (Dhami et al., 2013), (Susanto et al., 2016), and (Al-Dwairi & Al-Ali, 2022). Therefore, H_4 is supported.

H₅: Trust has a positive and significant effect on the Continuance Use Intention in Meta's Social Networking Services

The research significance value on hand is $5.984 > 1.96$, the significance level is 0.000, less than 0.05, and the path coefficients value is positive 0.438, indicating that the link between trust and continuance use intention is significant and in the positive direction. Therefore, this research concludes that trust impacts continuance use intention. A positive association suggests that when levels of trust increase, continuance use intention will also increase. The sample in this research consists of numerous users of

Meta's social networking services and given the significant correlation between trust and continuance use intention, it may be applied to the whole population. This makes it crucial to pay attention to how much Meta's social networks have contributed to what extent the users trust the latter. The findings of this research are supported by (Novita & Budiarti, 2021), (Susanto et al., 2016), and (Al-Dwairi & Al-Ali, 2022). Therefore, H₅ is supported.

H₆: Perceived Privacy has a positive and significant effect on the Continuance Use Intention in Meta's Social Networking Services through Trust

The results demonstrate a mediating impact between perceived privacy and continuance use intention or an indirect influence between perceived privacy and continuance use intention, and this effect is through trust. The significance value on hand is $2.108 > 1.96$; the significance level is 0.035, less than 0.05; and the path coefficients value is positive at 0.071. The results indicate that the direction of the association between perceived privacy and continuance use intention through trust is positive and statistically significant. This research concludes that perceived privacy affects continuance use intention through acceptable trust levels. A positive correlation shows that as privacy improves, so will the continuance use intention of Meta's social networks; however, trust must be achieved first. Meanwhile, a significant association may be extrapolated to the total population, given that the sample in this research represents the population of Meta's social network users. The findings of this research are supported by (Al-Dwairi & Al-Ali, 2022). Therefore, H₆ is supported.

H₇: Perceived Security has a positive and significant effect on the Continuance Use Intention in Meta's Social Networking Services through Trust

The test results show a mediating impact between perceived security and continuance use intention or an indirect influence between perceived security and continuance use intention, and this effect is

through trust. The significance value on hand is $5.383 > 1.96$; the significance level is 0.000, less than 0.05; and the path coefficients value is positive at 0.211. The results indicate that the direction of the association between perceived security and continuance use intention through trust is positive and statistically significant. This research concludes that perceived security affects continuance use intention through good trust levels. A positive correlation shows that as perceived security improves, so will the continuance use intention of Meta's social networks; however, trust must be achieved first. Meanwhile, a significant association may be extrapolated to the total population, given that the sample in this research represents the population of Meta's social network users. The findings of this research are supported by (Shao et al., 2019) and (Al-Dwairi & Al-Ali, 2022). Therefore, H₇ is supported.

CONCLUSION

Perceived privacy, security, and trust may improve the desire to continue using social networking sites such as Facebook, Instagram, and WhatsApp. Moreover, in terms of security and trust, users are persuaded and believe that SNSs have robust security procedures that will assist in securing their data and private information from any security concerns; this is the primary reason why users may continue to use these services in the future. As for privacy, users are concerned about the practices and attitudes of SNSs towards consumer data and private information, as they do not fully trust that their privacy is respected or protected. However, despite these concerns, users plan to continue using SNS services further, making their privacy pragmatic.

REFERENCES

- Aghasian, E., Garg, S., Gao, L., Yu, S., & Montgomery, J. (2017). Scoring Users' Privacy Disclosure Across Multiple Online Social Networks. *IEEE Access*, 5, 13118–13130. <https://doi.org/10.1109/ACCESS.2017.2720187>

- Al-Dwairi, R., & Al-Ali, O. (2022). the Role of Trust and Satisfaction As Mediators on Users' Continuous Intention To Use Mobile Payments: Empirical Study. *Journal of Theoretical and Applied Information Technology*, 100(9), 3035–3047.
- Bryman, A. (2012). *Social Research Methods*. 4.
- Dhami, A., Agarwal, N., Chakraborty, T. K., Singh, B. P., & Minj, J. (2013). Impact of trust, security and privacy concerns in social networking: An exploratory study to understand the pattern of information revelation in Facebook. *Proceedings of the 2013 3rd IEEE International Advance Computing Conference, IACC 2013, February 2016*, 465–469. <https://doi.org/10.1109/IAdCC.2013.6514270>
- I.Powale, P., & D. Bhutkar, G. (2013). Overview of Privacy in Social Networking Sites (SNS). *International Journal of Computer Applications*, 74(19), 39–46. <https://doi.org/10.5120/13005-0311>
- Novita, D., & Budiarti, A. P. (2021). OMISS Operations Management and Information System Studies. *Operation Maangement and Information System Atudies*, 1(1), 41–50.
- Shao, Z., Zhang, L., Li, X., & Guo, Y. (2019). Antecedents of trust and continuance intention in mobile payment platforms: The moderating effect of gender. *Electronic Commerce Research and Applications*, 33(December 2018), 100823. <https://doi.org/10.1016/j.eelerap.2018.100823>
- Sima, V., Gheorghe, I., Subi', J., & Nancu, D. (2021). Influences of the Industry 4.0 Revolution on the Human Capital Development and Consumer Behavior: A Systematic Review. *Journal of Ambient Intelligence and Humanized Computing*. <https://doi.org/10.1007/s12652-021-03177-x>
- Sugiyono. (2017). prof. dr. sugiyono, metode penelitian kuantitatif kualitatif dan r&d. intro (PDFDrive).pdf. In *Bandung Alf* (p. 143).
- Susanto, A., Chang, Y., & Ha, Y. (2016). Determinants of continuance intention to use the smartphone banking services: An extension to the expectation-confirmation model. *Industrial Management and Data Systems*, 116(3), 508–525. <https://doi.org/10.1108/IMDS-05-2015-0195>
- Zhang, D. (2019). Big data security and privacy protection. *Proceedings - 2019 International Conference on Virtual Reality and Intelligent Systems, ICVRIS 2019*, 77(Icmcs), 87–89. <https://doi.org/10.1109/ICVRIS.2019.00030>