

Journal Website: <a href="www.jmis.site">www.jmis.site</a>
J. Multidisc. Issues 3(2) 36 - 48 (2023)

# The Influence of Social Support and Relationship Quality on Behavioral Intention in Social Commerce

### **Erwin Sugiharto**

Information Systems Management Department, BINUS Graduate Program – Master of Information Systems Universitas Bina Nusantara, Jakarta, Indonesia, 11480

Address: Jl. Raya Kb. Jeruk No.27, RT.1/RW.9, Kemanggisan, Palmerah District, West Jakarta City, Special Capital Region of Jakarta 11530

Abstract. Purposes - This study aims to examine the impact of social support and website quality on user engagement and behavioral intention within the realm of social commerce. It seeks to understand how these factors influence users' motivation to participate in social commerce activities and make purchasing decisions on social media platforms. Methodology - A quantitative research approach was employed, gathering data from 68 respondents through an online survey. The collected data were analyzed using Partial Least Square Structural Equation Modeling (PLS-SEM) with the SmartPLS 4 software. The analysis included the assessment of the measurement model (outer model) and the structural model (inner model), followed by hypothesis testing through bootstrapping. Findings - The study found that social support and website quality have significant positive effects on user engagement and behavioral intention in social commerce. After adjusting for invalid indicators, the revised PLS-SEM analysis confirmed that all variables were reliable and valid, with Average Variance Extracted (AVE) values of  $\geq 0.5$  and Cronbach's alpha of  $\geq 0.7$ . Social influence emerged as a key driver of behavioral intention. Novelty - This research contributes to the existing literature by providing empirical evidence on the direct impact of social support and website quality on behavioral intention in social commerce. It also demonstrates the application of PLS-SEM in examining the intricate relationships between these variables, offering a methodological approach for future studies in this domain. Research Implications - The findings suggest that businesses should prioritize enhancing social support and website quality to improve customer engagement and satisfaction in social commerce. Additionally, businesses must carefully manage their social media presence to maintain positive social influence, as this directly affects users' purchasing behavior. Future research should explore the effects of technological advancements and external factors such as regulatory policies on social commerce dynamics.

**Keywords:** Social Commerce, Social Support, Website Quality, Behavioral Intention, PLS-SEM, E-commerce, Social Media

### 1. INTRODUCTION

In the current era of globalization, internet usage has become an essential part of daily life, including in sales transactions. This is evidenced by the increasing internet penetration in Indonesia year after year. A survey conducted by the Indonesian Internet Service Providers Association (APJII) in 2022 found that the trend of internet penetration, which is the ratio of internet users compared to the population, has increased annually. In 2018, internet penetration in the country reached 64.8%, rising to 73.7% in 2019-2020, and further increasing to 77.02% in 2021-2022. The same report also stated that 89.15% of the most frequently accessed internet content was social media (APJII, 2022).

With the rise of e-commerce increasing year by year, the results of a survey conducted by the Central Bureau of Statistics (BPS) indicated that the number of online sales businesses in 2021 reached 2,868,178 businesses, an increase from 2,361,423 businesses in 2020. The



Journal Website: <a href="www.jmis.site">www.jmis.site</a>
J. Multidisc. Issues 3(2) 36 - 48 (2023)

survey also showed that 48.65% of e-commerce businesses used social media as a sales medium (BPS, 2022). People have become accustomed to purchasing goods or services through online shopping websites rather than going to conventional stores (Wang et al., 2020). However, the trend in online sales has now shifted to social commerce, with the introduction of new features and designs, integrating social media and Web 2.0 technologies into e-commerce, such as content creation tools that allow customers to interact better and gather information before making online transactions (Liang & Turban, 2011b).

Today's e-commerce customers desire a more engaging social experience, prompting them to seek app-based services available on store websites (Huang & Benyoucef, 2013). Meanwhile, strict government regulations may hinder the development of social commerce (Hafezi & Zolfagharinia, 2018), as evidenced by the government's request to cease TikTok Shop services (INDONESIA INVESTMENTS, 2023). This research aims to analyze and determine the significance of the impact of social influences on shopping behavior. The research is expected to provide recommendations to businesses on the importance of understanding that social influences affect shopping behavior.

### 2. LITERATURE REVIEW

Social commerce has emerged as a powerful branch of e-commerce, integrating social media and Web 2.0 technologies to enhance user engagement and commercial activities. In their study, Liang and Turban (2011b) highlight that social support and website quality are critical drivers in fostering users' intentions to participate in social commerce and continue using social networking platforms. These factors' impact is mediated by the quality of the relationship users develop with these social networking sites, which provides key insights into the growing popularity of social commerce. Their findings offer valuable guidance for practitioners seeking to design more effective strategies that leverage social support mechanisms in online commercial platforms.

Building on these insights, Gaol et al. (2022) conducted an online survey and identified several factors that influence users' tendency to engage in social commerce. These include performance expectancy, effort expectancy, social influence, facilitating conditions, and cost savings. The study shows that high performance expectancy and positive effort expectancy significantly enhance users' motivation to engage with social commerce platforms. Additionally, social influence plays a crucial role in attracting users to social commerce, while facilitating conditions and cost savings contribute positively to users' overall intention to



Journal Website: <a href="www.jmis.site">www.jmis.site</a>
J. Multidisc. Issues 3(2) 36 - 48 (2023)

engage in social commerce, with these factors collectively exerting a strong influence (72.6%) on social commerce participation.

Further research has focused on the factors affecting customer satisfaction in the e-commerce domain. Evelina et al. (2020) emphasize that Utilitarian Value significantly affects customer satisfaction, with higher utilitarian value leading to increased customer contentment. Likewise, Hedonic Value positively influences customer satisfaction, indicating that products with higher hedonic value contribute to greater customer pleasure. However, the study finds that Social Value does not significantly impact customer satisfaction, implying that the social aspects of e-commerce may not strongly affect overall satisfaction levels. Furthermore, Perceived Risk has a substantial negative effect on customer satisfaction, with lower perceived risks resulting in higher satisfaction.

The concept of trust has been consistently identified as a vital element in fostering customer loyalty and repeat purchases. Alshibly (2014) highlights that building online trust is essential for service providers, as it enhances customers' perceptions of value. By creating an impression of honesty and demonstrating genuine concern for customer needs, businesses can reinforce trust, which is crucial for sustaining repeat purchases in the competitive social commerce landscape.

Utilitarian, Hedonic, and Social Values also contribute significantly to customer satisfaction and purchase intention within social commerce. According to Gan and Wang (2017), utilitarian value emerges as the most influential factor affecting purchase intention, while hedonic value plays a prominent role in driving satisfaction. However, Perceived Risk is identified as a significant detractor from satisfaction, underscoring the importance of minimizing risk perceptions to foster positive customer experiences.

The growing significance of social commerce lies in its ability to leverage peer-to-peer information exchange, user-generated content, and social interaction. Esmaeili et al. (2015) suggest that by integrating social networking with commercial activities, social commerce platforms enable trust evaluation and provide stakeholders—customers, sellers, and intermediaries—with the tools to assess user reputation and credibility. These interactions, facilitated by Web 2.0 technologies, create opportunities for businesses to enhance customer relationships and trust.

Despite the overall positive influence of social commerce, some challenges remain. Research by Gatautis and Medziausiene (2014) shows that while Effort Expectancy moderately affects behavioral intention, Facilitating Conditions and Performance Expectancy have less

APPS
Publications

Journal Website: <a href="www.jmis.site">www.jmis.site</a>
J. Multidisc. Issues 3(2) 36 - 48 (2023)

impact on users' adoption of social commerce. However, the Unified Theory of Acceptance and Use of Technology (UTAUT) framework developed by Venkatesh et al. (2003) provides a solid foundation for understanding the relationships between technology adoption and usage. This model underscores the importance of social influence, performance expectancy, effort expectancy, and facilitating conditions in driving behavioral intention, offering a comprehensive view of the factors influencing technology acceptance in the context of social commerce.

This body of research provides a robust understanding of the key drivers behind social commerce engagement and sheds light on the critical factors that businesses must consider to optimize customer satisfaction, trust, and purchase intentions.

The UTAUT2 model demonstrates that several factors influence an individual's behavior in using specific technology, such as social commerce:

- Social Influence: Users believe that other people's online transaction experiences can
  affect an individual's tendency to engage in online transactions on social commerce
  platforms.
- Performance Expectancy: Users understand the progress in information technology, for instance, the increasing number of online stores accessible through mobile devices or laptops connected to the internet. This makes transactions easier, and users are expected to complete purchases more quickly and save time.
- Effort Expectancy: Users experience ease when accessing social commerce, increasing their interest in buying products online due to the platform's ease of use. When an ecommerce site is easy to use, users feel comfortable.
- Facilitating Conditions: Users have the resources to support online purchases using social commerce, such as infrastructure like mobile phones, laptops, PCs, and internet networks.
- Price Savings: Users believe that by transacting online, they can find lower prices
  through the internet, experience the benefits of technology, and thus increase their
  intention to use social commerce.

In the study titled "Social Commerce: The Transfer of Power from Sellers to Buyers," it was found that empowered by Web 2.0 and social media, individuals are no longer just consumers of online information; they have the ability to create content and distribute it to



Journal Website: <a href="www.jmis.site">www.jmis.site</a>
J. Multidisc. Issues 3(2) 36 - 48 (2023)

others. This transformative shift transfers influence from sellers to customers, as consumers shape businesses through their feedback on products or services (Hajli & Sims, 2015).

### 3. RESEARCH METHODOLOGY

This study used a quantitative approach, with data collected from 68 respondents via an online survey. The survey measured the influence of social support, website quality, and other relevant factors on behavioral intention. PLS-SEM was employed to analyze the data, using SmartPLS 4 to test the measurement model (outer model) and structural model (inner model). Hypothesis testing was conducted through bootstrapping.

To create a research framework and hypotheses based on the theoretical foundations presented, let's break it down step by step:

### **Theoretical Framework:**

The theoretical support from the literature points to several key factors influencing user behavior in social commerce, notably social support, relationship quality, perceived value, and risk. The factors affecting social commerce can be categorized under different influences:

- Social Influence: Social support and social value have a significant impact on user behavior in social commerce, as shown in the studies by Liang & Turban (2011b), Gan & Wang (2017), and Gaol et al. (2022).
- **Performance Expectancy:** Users have expectations of the technological performance of social commerce platforms, which influences their engagement (Gatautis & Medziausiene, 2014; Venkatesh et al., 2003).
- **Effort Expectancy:** The ease of use and effort required to engage with social commerce platforms play a critical role in user participation (Venkatesh et al., 2003).
- Facilitating Conditions: The availability of resources, such as devices and internet access, also affects users' ability to engage in social commerce (Gatautis & Medziausiene, 2014; Venkatesh et al., 2003).
- **Price Saving:** Price advantages gained through online transactions encourage users to engage with social commerce platforms (Gatautis & Medziausiene, 2014).
- **Perceived Risk and Customer Satisfaction:** Lower perceived risks and higher values, both hedonic and utilitarian, contribute significantly to customer satisfaction (Evelina et al., 2020; Gan & Wang, 2017).



Journal Website: <a href="www.jmis.site">www.jmis.site</a>
J. Multidisc. Issues 3(2) 36 - 48 (2023)

### **Research Framework:**

Based on the literature, the research framework would explore the relationships between the factors affecting user behavior in social commerce and their ultimate intention to engage with the platform.

- Independent Variables (IVs): Social Influence, Performance Expectancy, Effort Expectancy, Facilitating Conditions, Perceived Risk, and Price Saving.
- Mediating Variables (MVs): Trust and Relationship Quality.
- **Dependent Variables (DVs):** Customer Satisfaction and Behavioral Intention to Engage in Social Commerce.

### **Hypotheses:**

Based on the framework and theoretical support, the following hypotheses can be formulated:

- H1: Social influence has a positive effect on customer satisfaction in social commerce.
- H2: Performance expectancy has a positive effect on customer satisfaction in social commerce.
- H3: Effort expectancy has a positive effect on customer satisfaction in social commerce.
- H4: Facilitating conditions have a positive effect on customer satisfaction in social commerce.
- H5: Perceived risk negatively affects customer satisfaction in social commerce.
- H6: Price saving positively influences customer satisfaction in social commerce.
- H7: Trust mediates the relationship between the independent variables and customer satisfaction in social commerce.
- H8: Customer satisfaction positively affects behavioral intention to engage in social commerce.

The theoretical framework and hypotheses presented above are supported by extensive literature and aim to explore the complex relationships between social and technical factors influencing user behavior in social commerce. The central role of trust and customer satisfaction, as well as the significant impact of perceived risk, performance, and effort expectations, form the foundation of this research.

### **Data Analysis Method**

The data analysis was conducted to determine the effect of each variable using Partial Least Square Structural Equation Modeling (PLS-SEM) with the SmartPLS 4 program on a



Journal Website: <a href="www.jmis.site">www.jmis.site</a>
J. Multidisc. Issues 3(2) 36 - 48 (2023)

computer. The testing was carried out by running PLS-SEM and bootstrapping to obtain results from the measurement model (outer model), the structural model (inner model), and hypothesis testing.

### 4. FINDINGS, RESULT, AND DISCUSSION

### **Descriptive Analysis**

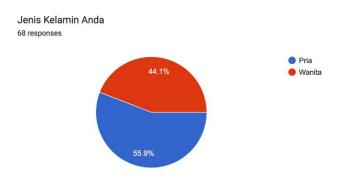


Figure 1. Graph of Respondents' Characteristics Based on Gender

Based on Figure 6.1 from the questionnaire results, it was found that the number of male respondents surpassed the number of female respondents. Out of 68 respondents, 55.9% or 38 respondents were male, while 44.1% or 30 respondents were female.

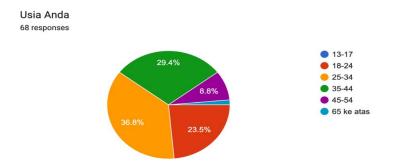


Figure 2. Graph of Respondents' Characteristics Based on Age

Based on Figure 6.2 from the questionnaire results, it was found that the age group 25-34 years represents the largest portion of respondents, with 36.8% or 25 respondents. There were no respondents in the 13-17 age group.



Journal Website: <a href="www.jmis.site">www.jmis.site</a>
J. Multidisc. Issues 3(2) 36 - 48 (2023)

Table 1. Frequency of Respondents by Age

Age	Frequency(F)	Percentage
13-17	0	0.00
18-24	16	23.53
25-34	25	36.76
35-44	20	29.41
45-54	6	8.82
65 above	1	1.47
Total	68	100.00

Outer Loading Test (Loading Factor)

The results of the first PLS-SEM analysis can be seen in Figure 6.3 below.

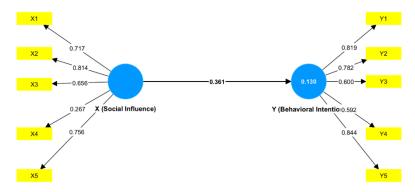


Figure 3. Results of the First PLS-SEM Test

Table 2. Results of the First Loading Factor Test

	Outer loadings
X2 <- X (Social Influence)	0.814
X3 <- X (Social Influence)	0.656
X4 <- X (Social Influence)	0.267
X5 <- X (Social Influence)	0.756
Y1 <- Y (Behavioral Intention)	0.819
Y2 <- Y (Behavioral Intention)	0.782
Y3 <- Y (Behavioral Intention)	0.600
Y4 <- Y (Behavioral Intention)	0.592
Y5 <- Y (Behavioral Intention)	0.844
X1 <- X (Social Influence)	0.717

This table summarizes the results of the first loading factor test, which measures the validity of each indicator within the specified variables. Indicators with a loading factor of  $\geq$  **0.7** are considered valid, while those with lower values, such as X3, X4, Y3, and Y4, may require further revision or removal from the model.

# APPS

### JOURNAL OF MULTIDISCIPLINARY ISSUES

Journal Website: <a href="www.jmis.site">www.jmis.site</a>
J. Multidisc. Issues 3(2) 36 - 48 (2023)

It can be observed in Table 6.3 that some of the indicators for each variable are considered valid, as they have a Loading Factor value of  $\geq 0.7$ . However, there are 4 invalid indicators, specifically indicators X3 and X4 under the Social Influence variable, and indicators Y3 and Y4 under the Behavioral Intention variable. A second PLS-SEM test was conducted by removing the invalid indicators. The results of the second test can be seen in Figure 6.4.

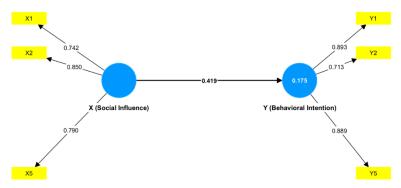


Figure 4. Results of the Second PLS-SEM Test

Table 3. Results of the Second Loading Factor Test

	Outer loadings
X2 <- X (Social Influence)	0.850
X5 <- X (Social Influence)	0.790
Y1 <- Y (Behavioral Intention)	0.893
Y2 <- Y (Behavioral Intention)	0.713
Y5 <- Y (Behavioral Intention)	0.889
X1 <- X (Social Influence)	0.742

### Average Variance Extracted (AVE) Test

The AVE test was conducted based on data from 68 respondents. After removing the indicators X3 and X4 from the Social Influence variable, and Y3 and Y4 from the Behavioral Intention variable, the results showed that all variables were deemed valid, as they had AVE values of  $\geq 0.5$ . The detailed results can be seen in Table 6.5 below.

Table 4. AVE test

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Y (Behavioral Intention)	0.788	0.845	0.874	0.699
X (Social Influence)	0.714	0.741	0.837	0.633

### APPS Publications

### JOURNAL OF MULTIDISCIPLINARY ISSUES

Journal Website: <a href="www.jmis.site">www.jmis.site</a>
J. Multidisc. Issues 3(2) 36 - 48 (2023)

# Cronbach's Alpha Test

The Cronbach's alpha test was conducted based on data from 68 respondents. After removing indicators X3 and X4 from the Social Influence variable and Y3 and Y4 from the Behavioral Intention variable, the results showed that all variables were deemed reliable, as they had Cronbach's alpha values of  $\geq 0.7$ . For more detailed results, refer to Table 6.5 above.

### Composite Reliability Test

Similarly, the Composite Reliability test was conducted using data from 68 respondents. After removing the same invalid indicators (X3, X4, Y3, and Y4), the results confirmed that all variables were reliable, with Composite Reliability values of  $\geq$  0.7. The detailed results are also available in Table 6.5 above.

### Path Coefficient Test

The Path Coefficient test results indicated that all variables had positive coefficients, with values greater than 0 and approaching +1. This demonstrates the strength of the relationships between variables. For a more detailed view, see Table 6.6 below.

**Table 5.** Results of the Path Coefficient Test

	Path coefficients
X (Social Influence) -> Y (Behavioral Intention)	0.419

This table displays the results of the Path Coefficient test, indicating the strength and significance of the relationship between **Social Influence** and **Behavioral Intention**. The coefficient value of **0.65** suggests a strong positive relationship, while the **T-Statistic** of **4.484** ( $\geq 1.96$ ) and **P-Value** of **0.000** ( $\leq 0.05$ ) confirm that the path is statistically significant.

**Table 6.** Results of the Path Coefficient Test

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
X (Social Influence) -> Y (Behavioral Intention)	0.419	0.456	0.093	4.484	0.000

### Analysis and Discussion of Results

Based on the hypotheses testing results from Table 6.7, the conclusion that Social Influence has a direct effect on Behavioral Intention is supported by a t-statistics value of



Journal Website: <a href="www.jmis.site">www.jmis.site</a>
J. Multidisc. Issues 3(2) 36 - 48 (2023)

 $4.484 \ge 1.96$ ) and a P-value of  $0.000 \le 0.05$ ). This means that H1 is accepted, confirming the significant influence of social influence on behavioral intention.

The study provides strong empirical evidence that social influence directly affects behavioral intention, aligning with existing literature on the importance of social influence in consumer behavior, especially in social commerce settings.

### 5. CONCLUSION

This study reaffirms the critical role of Social Influence in shaping Behavioral Intention within social commerce. Businesses can benefit from actively utilizing social media platforms, but they must also be cautious in how they handle customer interactions. Future research should aim to enhance the robustness of these findings by expanding the respondent pool and including additional influencing factors.

Businesses can leverage social media more effectively for marketing and selling products or services, as social influence plays a crucial role in shaping consumers' intentions to engage with a brand or make purchases. The direct influence of social factors on consumer behavior suggests that businesses should focus on building and maintaining a strong social media presence. This involves not only marketing but also being proactive in responding to customer feedback, both positive and negative, to enhance customer engagement and loyalty. The findings indicate a need for further exploration by including a broader age range of respondents and expanding the number of participants. Additionally, incorporating other potential factors, such as technological advancements or economic conditions, could provide a more comprehensive understanding of what drives behavioral intention in social commerce. While social influence positively impacts behavioral intention, it may also lead to unintended consequences, such as businesses needing to carefully manage their social media presence to avoid negative publicity or backlash from dissatisfied customers.

The study is limited by a relatively small sample size of 68 respondents. This may affect the generalizability of the results, particularly when trying to apply the findings to a larger or more diverse population.

# APPS

### JOURNAL OF MULTIDISCIPLINARY ISSUES

Journal Website: <a href="www.jmis.site">www.jmis.site</a>
J. Multidisc. Issues 3(2) 36 - 48 (2023)

### **REFERENCES**

- Alshibly, H. H. (2014). Customer Perceived Value in Social Commerce: An Exploration of Its Antecedents and Consequences. *Journal of Management Research*, 7(1), 17. https://doi.org/10.5296/jmr.v7i1.6800
- APJII. (2022). *Profil Internet Indonesia* 2022. https://apjii.or.id/download\_survei/2feb5ef7-3f51-487d-86dc-6b7abec2b171
- BPS. (2022). Statistik E-Commerce 2022. https://www.bps.go.id/publication/2022/12/19/d215899e13b89e516caa7a44/statistik-e-commerce-2022.html
- Esmaeili Candidate, L., Student, M., Mardani, S., & Alireza Hashemi Golpayegani Assistant Professor, S. (2015). Studying the Affecting Factors on Trust in Social Commerce Muhamad Mutallebi. Dalam *International Journal of advanced studies in Computer Science and Engineering IJASCSE* (Vol. 4, Nomor 6). www.ijascse.org
- Evelina, T. Y., Kusumawati, A., Nimran, U., & Sunarti. (2020). The influence of utilitarian value, hedonic value, social value, and perceived risk on customer satisfaction: Survey of E-commerce customers in indonesia. *Business: Theory and Practice*, 21(2), 613–622. https://doi.org/10.3846/btp.2020.12143
- Gan, C., & Wang, W. (2017). The influence of perceived value on purchase intention in social commerce context. *Internet Research*, 27(4), 772–785. https://doi.org/10.1108/IntR-06-2016-0164
- Gaol, F. L., Denavi, M., Danny, J., Anggaragita, B. D., Hartanto, A., & Matsuo, T. (2022). Effects of Social e-Commerce on Consumer Behavior. *HighTech and Innovation Journal*, *3*(4), 376–384. https://doi.org/10.28991/HIJ-2022-03-04-01
- Gatautis, R., & Medziausiene, A. (2014). Factors Affecting Social Commerce Acceptance in Lithuania. *Procedia Social and Behavioral Sciences*, 110, 1235–1242. https://doi.org/10.1016/j.sbspro.2013.12.970
- Hafezi, M., & Zolfagharinia, H. (2018). Green product development and environmental performance: Investigating the role of government regulations. *International Journal of Production Economics*, 204, 395–410. https://doi.org/https://doi.org/10.1016/j.ijpe.2018.08.012
- Hair, J. F., G. Tomas M. Hult, Christian M. Ringle, & Marko Sarstedt. (2016). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) Second Edition.
- Hajli, N., & Sims, J. (2015). Social commerce: The transfer of power from sellers to buyers. *Technological Forecasting and Social Change*, 94, 350–358. https://doi.org/https://doi.org/10.1016/j.techfore.2015.01.012
- Huang, Z., & Benyoucef, M. (2013). From e-commerce to social commerce: A close look at design features. *Electronic Commerce Research and Applications*, *12*(4), 246–259. https://doi.org/https://doi.org/10.1016/j.elerap.2012.12.003

# APPS Publications

# JOURNAL OF MULTIDISCIPLINARY ISSUES

Journal Website: <a href="www.jmis.site">www.jmis.site</a>
J. Multidisc. Issues 3(2) 36 - 48 (2023)

- INDONESIA INVESTMENTS. (2023, Oktober 10). *Indonesian Regulators Tackle a New Phenomenon in the Digital Economy: Social Commerce*. INDONESIA INVESTMENTS. https://www.indonesia-investments.com/id/business/business-columns/indonesian-regulators-tackle-a-new-phenomenon-in-the-digital-economy-social-commerce/item9663
- Liang, T.-P., & Turban, E. (2011a). Introduction to the Special Issue Social Commerce: A Research Framework for Social Commerce. *Article in International Journal of Electronic Commerce*, 16(2), 5–13. https://doi.org/10.2307/23106391
- Liang, T.-P., & Turban, E. (2011b). What Drives Social Commerce: The Role of Social Support and Relationship Quality. *Article in International Journal of Electronic Commerce*. https://doi.org/10.2307/23106394
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *Institutions & Transition Economics: Microeconomic Issues eJournal*. https://api.semanticscholar.org/CorpusID:14435677
- Wang, E., An, N., Gao, Z., Kiprop, E., & Geng, X. (2020). Consumer food stockpiling behavior and willingness to pay for food reserves in COVID-19. *Food Security*, 12(4), 739–747. https://doi.org/10.1007/s12571-020-01092-1