



The Impact of Informativeness of Live Streaming in TikTok Live Shop Based on SOR Framework

Andrian Wijaya¹, Btari Mariska Purwaamijaya², Rangga Gelar Guntara³

^{1,2,3}Digital Business Study Program, Tasikmalaya Regional Campus, Universitas Pendidikan Indonesia, Jl. Dadaha No.18, Kahuripan, Tasikmalaya 46115, West Java, Indonesia
Correspondence: E-mail: andrianwijaya@upi.edu

ABSTRACT

This research can be used as information related to digital marketing and provide awareness that the importance of informativeness can be crucial in increasing consumer purchase intentions through live streaming promotions on TikTok. Data analysis was performed by adopting Structural Equation Modelling (SEM) and testing the conceptual model using the Smart-PLS (v. 3.2.9) application. This method is suitable for analysing complex models with small sample sizes, such as exploring moderator and mediator effects in business and marketing. Stimulus (informativeness) has a strong role in influencing the formation of consumer attitudes towards influencers. Consumer attitudes towards influencers are said to support purchase intention. The influence is said to be sufficient to influence someone's purchase intention. However, the stimulus (informativeness) does not have an influence on purchase intention if mediated by consumer attitudes towards influencers. The suggestion from this study is the need for research with focused subjects such as the content category to be studied, such as food, electronics, fashion, and others. Then respondents whose area is reduced, such as a regional part (province, city, district). It would also be interesting to research platforms other than TikTok Live Shop, such as YouTube Live Streaming, Twitch live streaming platform, and other platforms.

ARTICLE INFO

Article History:

Received 5 January 2024

First Revised 15 January 2024

Accepted 5 March 2024

Available online 25 March 2024

Publication Date 31 March 2024

Keyword:

SOR Framework,
Informativeness,
Live Streaming,
TikTok Live Shop,
Influencers.

1. INTRODUCTION

In the era of the 4.0 Industrial Revolution, technology is rapidly advancing and driving digitalization in various fields of human life ([Purwaamijaya et al., 2021](#)). Amid postpandemic uncertainty, many companies are investing in IT infrastructure to support their business growth. Social media platforms such as TikTok and Instagram have also developed shopping features within their apps.

TikTok is currently a popular digital marketing platform among business people as a place for online shopping. In 2021, there were about 99.1 million TikTok users in Indonesia with an average age of 18-24 years. Of this number, 68% are female users and 32% are male users ([Juliana, 2023](#)). Based on this number, it underlies that the market in Indonesia owned by TikTok is very large. Therefore, TikTok launched its Live Streaming feature called TikTok Live Shop. In the TikTok Live Shop feature, someone can broadcast live to show various content.

TikTok Live Shop is also used to offer products sold by various parties. It is expected that it can attract more customers and create brand awareness and brand trust in the products presented by the live streamer ([Pongratte et al., 2023](#)).

Streamers play a key role in live streaming. Their communication style and appeal can influence customer behaviour. Interaction and presence are important aspects for successful communication. Sales can occur when customers get information through interaction with the streamer ([M. Zhang et al., 2020](#)).

This research can be used as information related to digital marketing. This research can provide awareness that the importance of informativeness can be crucial in increasing consumer purchase intentions through live streaming promotions on TikTok ([P. Zhang et al., 2023](#)). This research can also be a useful source of information in digital marketing, especially in formulating its strategy. From the literature review that has been presented, it can be concluded that environmental stimuli can help consumers in forming various emotional responses to an object. Based on this, hypotheses for this study have been developed.

2. METHODS

2.1 Instrument Survey Development

Given the popularity of live streaming and influencer marketing in Indonesia, data was collected in Indonesia. Indonesia has a high potential for advertising reach on TikTok and TikTok occupies the top position in the Consumer Spending category in 2022 ([Kemp, 2023](#)).

The instrument was created by imitating and modifying according to the needs and conceptual form of this research which can be seen in Figure 1. Each indicator in the questionnaire is represented by a specific instrument. All items in the survey were measured using a five-point Likert scale (1: strongly disagree to 5: strongly agree).

2.2 Sample and Data Collection

This study uses purposive sampling technique with certain criteria for sample selection, with the following criteria: a) Male/Female; b) Over 18 years old; c) Have a TikTok account; d) Have watched live stream on TikTok Live Shop. The population is unknown, so the Cochran formula is used to calculate the sample size, $n = (Z^2 \times p \times q) / e^2$. From the calculation using the formula, the sample size was obtained as many as 97 respondents with a 95% confidence level and a margin of error of 10%.

The researcher distributed the questionnaire via WhatsApp, Instagram Direct Message by the researcher, and using the services of a professional Indonesian survey company (<https://kudata.id/>) to select respondents according to criteria. This study involves collecting

data through a questionnaire survey distributed online. Although, from the Cochran formula calculation, a sample of 97 samples, this questionnaire was able to obtain 149 questionnaires collected back, there were 8 respondents who were not members of the population, and 14 questionnaires were considered outliers. The data was eliminated so that the number of questionnaire data used in this study became 127 questionnaires that could be processed.

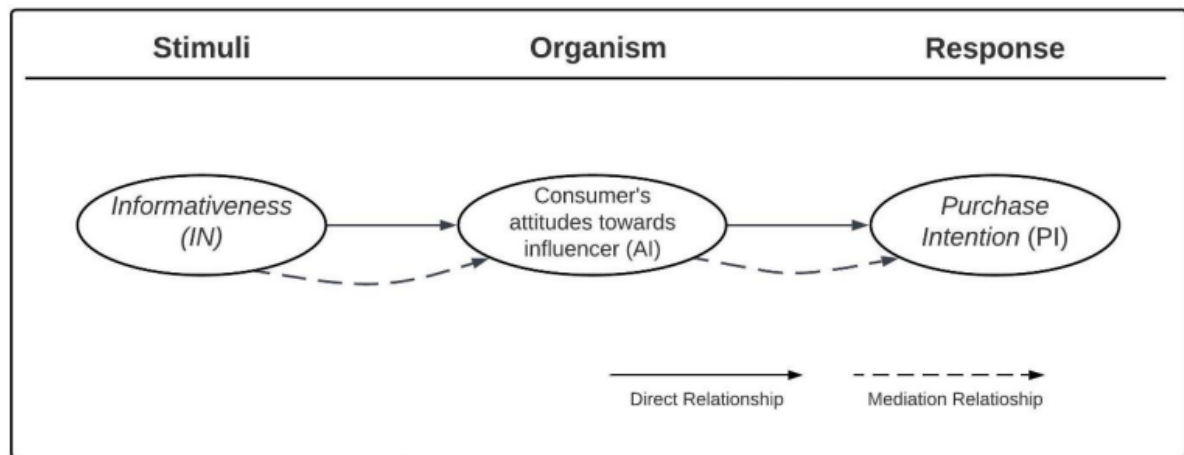


Figure 1. Conceptual Framework Research.

2.3 Analysis Approach

Data analysis was performed by adopting Structural Equation Modelling (SEM) and testing the conceptual model using the Smart-PLS (v. 3.2.9) application. This method is suitable for analysing complex models with small sample sizes, such as exploring moderator and mediator effects in business and marketing (P. Zhang et al., 2023).

3. RESULTS AND DISCUSSION

3.1. Descriptive Analysis

A total of 127 data were collected after data cleansing. Many respondents were aged 18-24 years (88.1%), followed by 25-34 years (8.66%), 35-44 years (2.36%), and 45-54 years (0.78%). There were no respondents aged >54 years. The complete data is presented in Figure 2.

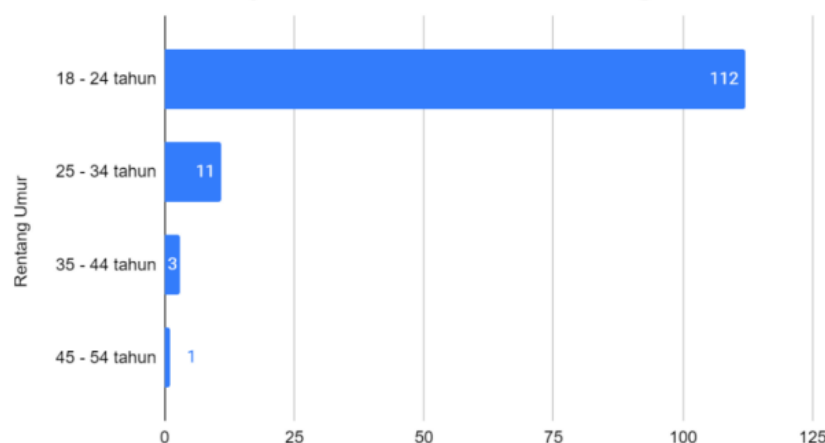


Figure 2. Respondent Age Range Diagram.

3.2. Reliability and Validity

In Table 1, each variable used has an AVE above 0.5 (>0.5) which is stated to be convergently valid. The loading factor is also stated to be valid because the value of the variable is above 0.6 (>0.6).

Table 1. Output Overview Model.

Desc.	AVE	Composite Reliability	R Square	Cronbach's Alpha
IN	0,680	0,9914		0,882
AI	0,730	0,890	0,650	0,816
PI	0,698	0,874	0,542	0,785

At the Fornell-Larcker criterion (table 2), which compares the square root of AVE to the correlation values between latent variables, it is evident that the square root of AVE is greater (highlighted values). As a result, it can be concluded that the variables have achieved discriminant validity.

In calculations using cross-loading, it can be concluded that all the variable constructs used in this study are discriminant valid because the cross-loading values of each variable construct are greater than 0.7 (>0.7). Additionally, the correlation value of the construct with its measurement items must be greater than that of other constructs. From the table above, it can be said that the research data is discriminant valid.

Table 2. Output Fornell-Larcker Criterion

Desc.	IN	AI	PI
IN	0,824	0,726	
AI		0,854	
PI	0,628	0,608	0,836

Table 3, The Heterotrait-Monotrait Ratio (HTMT) it possesses is valued at less than 0.9 (<0.9). As a result, the variable is discriminant valid. Table 1 shows the Cronbach's Alpha and Composite Reliability (CR) values that meet the minimum value for reliability greater than 0,7 (>0,7). Thus, the construct variables in this study can be considered reliable.

Table 3. Output Heterotrait-Monotrait Ratio (HTMT)

Desc.	IN	AI	PI
IN		0,841	
AI			
PI	0,751	0,749	

3.3. Conceptual Model Testing

Table 4 shows the VIF inner model value <5 indicating a low level of multicollinearity between variables. This strengthens the conclusion that the parameter estimates in the PLS SEM analysis are unbiased.

Table 4. Output VIF.

Desc.	IN	AI	PI
IN		2,033	
AI			2,211
PI			
AP			2,211

4. CONCLUSION

This study examines the influence between variables using environmental elements on a response. The environmental element tested is informativeness, which is tested whether it has an influence on consumer attitudes towards influencers and purchase intention, as well as the influence of informativeness on purchase intention with the mediation of consumer attitudes towards influencers.

Based on the data collected and data analysis, it can be concluded that the stimulus (informativeness) has a strong role in influencing the formation of consumer attitudes towards influencers. Therefore, influencers/streamers who have good knowledge and good delivery in their content will have an increasingly positive impact.

Consumer attitudes towards influencers are said to support purchase intention. The influence is said to be sufficient to influence someone's purchase intention. Positive consumer attitudes towards influencers or streamers in live streams will encourage the buying desire of viewers to make purchases of the product/service.

However, the stimulus (informativeness) does not have an influence on purchase intention if mediated by consumer attitudes towards influencers. This means that consumer attitudes towards influencers have no role at all in the stimulus (informativeness) in shaping a viewer's desire to buy.

The limitations of this study are the small number of respondents to represent generally. Then, the lack of focus on the category of TikTok live shop content discussed, there may be changes to the results if a focus is made on a category, such as fashion, food, electronics, and others. In addition, the non-specific demographics of the study because cultural differences in each demographic will influence someone's decision or desire.

The suggestion from this study is the need for research with focused subjects such as the content category to be studied, such as food, electronics, fashion, and others. Then respondents whose area is reduced, such as a regional part (province, city, district). It would also be interesting to research platforms other than TikTok Live Shop, such as YouTube Live Streaming, Twitch live streaming platform, and other platforms.

7. REFERENCES

- Abd Rahman, N. H., Ismail, S., Ahman, E., Nurasyiah, A., & Wulandari, N. S. (2021). The effect of regulatory performance on economic growth. *Entrepreneurship and Sustainability Issues*, 8(3), 604.
- Afifah, N., ML, D. A., & Nuryadin, A. (2023). PENGEMBANGAN BAHAN AJAR PEMROGRAMAN BERBANTUAN SCRATCH PADA MATERI OPERASI HITUNG BILANGAN CACAH KELAS V SD. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 8(2), 1117-1127.
- Guntara, R. G. (2023). Aplikasi Deteksi Phising Berbasis Android Menggunakan Metode Pengembangan Perangkat Lunak DSRM. *Jurnal Minfo Polgan*, 12(1), 303-310.
- Guntara, R. G. (2023). Pemanfaatan Google Colab Untuk Aplikasi Pendeteksian Masker Wajah Menggunakan Algoritma Deep Learning YOLOv7. *Jurnal Teknologi Dan Sistem Informasi Bisnis*, 5(1), 55-60.
- Guntara, R. G., & Azkarin, V. (2023). Implementasi dan Pengujian REST API Sistem Reservasi Ruang Rapat dengan Metode Black Box Testing. *Jurnal Minfo Polgan*, 12(1), 1229-1238.
- Hafina, A., Nur, L., & Malik, A. A. (2022). The development and validation of a character education model through traditional games based on the Socratic method in an elementary school. *Jurnal Cakrawala Pendidikan*, 41(2), 404-415.
- Hakim, D. R., Ahman, E., & Kusnendi, K. (2023). The effect of FDI on the host countries' employment: A meta-regression analysis. *Russian Journal of Economics*, 9(2), 158-182.
- Hodijah, E. S. E. S., Hamdu, G. H. G., & Nuryadin, A. N. A. (2023). Pengembangan Aplikasi Perangkat Pembelajaran Virtual Field Trip Berbasis ESD Di Sekolah Dasar. *JURNAL PENDIDIKAN DASAR*, 11(1), 48-60.
- Indriyanti, F., Fauziah, T. N., & Nuryadin, A. (2023). Analisis Bibliometrik Penggunaan Video Pembelajaran di Sekolah Dasar Tahun 2013-2022 Menggunakan Aplikasi VOSViewer. *Jurnal Educatio FKIP UNMA*, 9(1), 23-31.
- Irmayani, O., Albania, S. N., & Nuryadin, A. (2023). Pemetaan Komputasi Bibliometrik Analisis Pembelajaran Google Classroom Menggunakan Vosviewer. *SAP (Susunan Artikel Pendidikan)*, 8(1), 131-139.
- Juliana, H. (2023). Pengaruh Siaran Langsung Dan Manfaat Yang Dirasakan Terhadap Niat Beli Melalui Kepercayaan Konsumen Pada Aplikasi Tiktok Shop. *SINOMIKA Journal: Publikasi Ilmiah Bidang Ekonomi Dan Akuntansi*, 1(6), 1517-1538. <https://doi.org/10.54443/sinomika.v1i6.754>
- Kemp, S. (2023). Digital 2023: Indonesia. *Datareportal*. <https://datareportal.com/reports/digital-2023-indonesia>
- Lestari, D. R., Josephine, W., & Nuryadin, A. (2023). Analisis Bibliometrik Perkembangan Pembelajaran Online dengan Aplikasi Zoom Menggunakan VOSViewer. *Jurnal Ilmu Pendidikan (JIP) STKIP Kusuma Negara*, 14(2), 194-204.

- Loviani, S. D., Saputra, Y. M., Kusmaedi, N., Ray, H. R., & Nur, L. (2021). Effects of health-related fitness model to improve physical fitness and physical activity in vocational high school students. *Int J Hum Move Sports Sci*, 9(04), 654-660.
- Marlina, L., Senen, S. H., Yuniarsih, T., & Ahman, E. (2023). Human capital competitiveness model in the digital era of craft creative industry entrepreneurs. *Journal of Competitiveness*, 15(2).
- Monoarfa, H., Rahayu, A., Adirestuty, F., Abu Karim, R., Bahtar, A. Z., Ahmad Nazari, Z., & Mahmud, N. (2022). The influence of Islamic attributes on tourist satisfaction with pull motivation as an intervening variables. *International Journal of Tourism Cities*, 8(1), 140-152.
- Mulyana, R. N., Aulia, O., Adem, D. B., Nuryadin, A. N., & Prehanto, A. (2022). Hambatan Startup Edukasi Setelah Program Inkubasi (Studi Kasus pada Program Inkubator Startup CIAS). *Jurnal Studi Manajemen dan Bisnis*, 9(1), 59-64.
- MUNAWAROH, M., SANTOSO, B., GUMILANG, R. R., HIDAYATULLAH, D., HERMAWAN, A., MARHANAH, S., ... & PURWANTO, A. (2021). The effect of strategic leadership and organization culture on business performance: An empirical study in Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(6), 455-463.
- Nur, L., Stephani, M. R., & Malik, A. A. (2022). Teachers' Perspectives on Promoting Physical Activity in Early Childhood Education: A Pilot Study in Indonesia. *International Journal of Human Movement and Sports Sciences*, 10(6), 1189-96.
- Nuryadin, A. (2023). KOMUNIKASI DALAM LINGKUNGAN PEMBELAJARAN ONLINE: SEBUAH STUDI BIBLIOMETRIK. *Communications*, 5(1), 333-352.
- Nuryadin, A., Amelia, D. N., & Aryanto, S. (2022). Harnessing Serious Games For Developing Indonesian Elementary School Students' Critical Thinking Attitudes. *Naturalistic: Jurnal Kajian dan Penelitian Pendidikan dan Pembelajaran*, 6(2), 1248-1461.
- Nuryadin, A., Karlimah, K., Lidinillah, D. A. M., Apriani, I. F., Putri, I. R., Susilawati, L., ... & Nurhidayah, D. (2023). Using Augmented Reality for Geometry Learning: Indonesian Elementary School Teachers' Experiences. *Jurnal Pendidikan Sains*, 11(1), 1-6.
- Nuryadin, A., Lidinillah, D. A. M., & Muharram, M. R. W. (2021). Pre-service teachers' experiences in developing digital learning designs using ADDIE model amid COVID-19 pandemic. *Jurnal Basicedu*, 5(5), 4013-4025.
- Nuryadin, A., Muharram, M. R. W., & Guntara, R. G. (2021). Penggunaan model flipped classroom berbantuan digital tools untuk meningkatkan kualitas pembelajaran di sekolah dasar selama masa pandemi covid-19. *COLLASE (Creative of Learning Students Elementary Education)*, 4(3), 348-361.
- Nuryadin, A., Rusmana, N., Lidinillah, D. A. M., Prehanto, A., & Desmawati, S. A. (2023). Kehadiran Sosial (Social Presence) dalam Pembelajaran Online: Analisis Bibliometrik terhadap Publikasi tahun 2012-2022. *Edukatif: Jurnal Ilmu Pendidikan*, 5(1), 335-347.
- Pongratte, L. J., Liu, J., Putri, M. D. P. W., & Paulin, A. (2023). The Effect of Promotion via TikTok Live Streaming on Consumers' Buying Interest in Clothing Products. *Open Journal of Social Sciences*, 11(04), 333-347. <https://doi.org/10.4236/jss.2023.114024>

- Prawira, I. F. A., & Sandria, J. (2021). The determinants of corporate tax aggressiveness. *Studies of Applied Economics*, 39(4).
- Prehanto, A., & Aprily, N. M. (2021). The Existence of Cartooning Education in Semarang City. *Indonesian Journal of Curriculum and Educational Technology Studies*, 9(1).
- Prehanto, A., Hernawan, A. H., Nurmansyah, G. R., Nuryadin, A., & Ratnasari, A. Innovation Curriculum on Coffee Barista Education. *DWIJA CENDEKIA: Jurnal Riset Pedagogik*, 7(1).
- Purwaamijaya, B., Wijaya, A., & Shadani, S. (2021). Perceptions and Prospective Analysis of Artificial Intelligence and its impact on Human Resources in the Indonesian Industry 4.0. 12(1), 146–151. <https://doi.org/10.4108/eai.14-9-2020.2304637>
- Putra, A. R. A., Lidinillah, D. A. M., & Nuryadin, A. (2023). PENGEMBANGAN BAHAN AJAR PEMROGRAMAN BERBANTUAN SCRATCH PADA MATERI BANGUN DATAR DI SEKOLAH DASAR. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 8(2), 911-920.
- Putri, I. R., Lidinillah, D. A. M., & Nuryadin, A. (2023). Pemodelan RASCH terhadap Soal konsep geometri dengan pembelajaran blended learning di Sekolah Dasar. *Jurnal Cendekia: Jurnal Pendidikan Matematika*, 7(1), 527-537.
- Saputra, E. R., & Rusmana, N. (2021, July). Students' experience of online game-based assessment tool during emergency remote teaching. In *Journal of Physics: Conference Series* (Vol. 1987, No. 1, p. 012012). IOP Publishing.
- Setiadi, P. M., Alia, D., Sumardi, S., Respati, R., & Nur, L. (2021, July). Synchronous or asynchronous? Various online learning platforms studied in Indonesia 2015-2020. In *Journal of Physics: Conference Series* (Vol. 1987, No. 1, p. 012016). IOP Publishing.
- Zhang, M., Qin, F., Wang, G. A., & Luo, C. (2020). The impact of live video streaming on online purchase intention. *Service Industries Journal*, 40(9–10), 656–681. <https://doi.org/10.1080/02642069.2019.1576642>
- Zhang, P., Chao, C. W. (Fred), Chiong, R., Hasan, N., Aljaroodi, H. M., & Tian, F. (2023). Effects of in-store live stream on consumers' offline purchase intention. *Journal of Retailing and Consumer Services*, 72. <https://doi.org/10.1016/j.jretconser.2023.103262>