

Influence of Perceived Usefulness on Using the Shopee Application: Study on College Students

Via Nur Azlyna

Universitas Negeri Surabaya Via.19048@mhs.unesa.ac.id

Jaka Nugraha

Universitas Negeri Surabaya Jaka.nugraha@unesa.ac.id

Abstract:

This research was conducted to determine the perceived usefulness's effect on attitude in the shop application using the TAM (Technology Acceptance Model). This research was conducted at the Faculty of Economics and Business, Surabaya State University, using a quantitative approach with an explanatory research approach. The samples used in this study were from the Office Administration Education student class of 2019, Economics Education student class of 2019, Commerce Education 2019, and Accounting Education 2019 with a total of 218 students. The data collection technique uses a questionnaire distributed via Google form; besides that, the data analysis technique in this study uses variant-based Structural Equation Modeling (SEM), namely by using the Generalized Structured Component Analysis (GSCA) method.

Keywords: *Perceived Usefulness, Attitude, TAM, SEM GSCA.*

INTRODUCTION

The era of revolution 4.0 makes it easier for people to use digitalization. Segoro and Sandra (2021) argue that an instant and fast-paced lifestyle is caused by people having high mobility in their daily lives. The rapid development of telecommunications technology has changed culture and everyday life (Putri et al., 2021). The increasing growth of E-commerce in Indonesia has made Shopee enliven the industry (Purbasari et al., 2020). Shopee is an application that can be used for online buying and selling transactions. It was founded in 2009 by Forrest LI under the auspices of the SEA Group from Singapore. They are buying and selling transactions (Arief, 2021).

The existence of increasingly advanced technological developments in the business realm is expected to help in sustainable development goals or SDGs at point 8, namely decent work and economic growth. Based on research on the page [www.sgd.go.id](http://www.sdg.go.id). Based on the Jakpat survey, most Shopee application users are millennials aged 20-24 (Trenasia, 2021). At that age, they are categorized as students and workers (AlQadrie et al., 2022). Based on the results of Prasetia & Suwitho (2022), it is explained that in the reviews or reviews provided by Shopee users on the Shopee application page, several obstacles are often complained about by users so that they change the perception of using the application, including (1) applications that are less responsive when used, feature emphasis that does not change so that users do not feel the convenience of using the application, (2) besides that the application often crashes when used, many users access the shopee application simultaneously so that users do not feel the usefulness when using the application. It can indirectly change the user's perception of using the shopee application.

The TAM model aims to provide an explanation of the behavioral relationship between the use of information technology and the acceptance of the technology itself. In this study, the use of the TAM model aims to analyze the system in the shopee application through the variables used. So that the use of the Shopee application can increase and improve the country's economy. Perceived ease of use and Perceived Usefulness are two primary constructs influencing the use and application of technology (Davis, 1986). According to Davis (1986), one of the things that can affect the use of information technology is perceived usefulness, namely a person's level of belief that the use of the system can specifically increase performance effectiveness. It also includes perceived ease of use, which means users feel at ease after using the system or application. Jahangir & Begum (2008) revealed that perceived usefulness can increase the number of users who complete the assigned task research. Aditya

(2020) also revealed that perceived usefulness provides benefits to its users and causes a positive attitude. Attitude or attitude also plays a significant role in influencing consumers when making decisions, said Sumarwan (Keren & Sulistiono, 2019). According to Muljono & S.P. Pertiwi (2021), attitude impacts a system's sustainability. Another opinion was expressed by Sidanti et al. (2020) that user attitude dramatically influences the use of applications.

This research uses the TAM approach because TAM is a model that can be used to test a system or determine whether the information system is accepted. Therefore, the researcher's objective is to determine the effect of perceived usefulness on attitude. The hypothesis made as follows:

H1: Perceived usefulness (PU) will positively influence attitude (A) of using Shopee

The urgency of this research is the importance of service quality in application systems that have benefits and ease of use. The results of this research can be used as a consideration for designing a system that is well for students and the community.

METHODE

This study uses a quantitative method with the approach used, namely exploratory research. Based on the opinion expressed by (Mahwadha, 2019). which provides an understanding that quantitative research is a type of research that can provide results with findings that can be accepted using statistical procedures or by other means of quantification or measurement. Sugiyono (2016) suggests that explanatory research is one of the research methods that can explain the position of the variables studied and the influence between variables. The technique used in this study is purposive sampling, which is a technique that distributes questionnaire links to active students majoring in economics unesa class of 2019, totaling 220 students. This research is located at Surabaya State University and includes a sample of active students in the Department of Economic Education class of 2019.

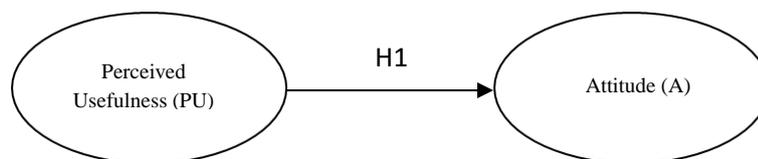


Figure 1 Research Model Proposed

Source: Research model development, 2023

Table 1. Questionnaire design

Construct	Dimension	Indicator	Code	Reference
<i>Perceived Usefulness (PU)</i>	<i>Enhance Effectiveness</i>	Shopee provides the needs of college students	PU1	Dimension: (Handayani & Saputera, 2019) Indicaron: (Damayanti, 2019)
	<i>useful</i>	It takes a short time to select the products I want.	PU2	
	<i>Work More Quickly</i>	It is easy for me to order the products I want to buy	PU3	
		I can shop online at Shopee while doing my activities	PU3	
		I can find " up-to-date " products and shop for my needs.	PU3	
<i>Attitude (A)</i>	<i>Belief</i>	I shop at Shopee because I believe the goods sold are based on what is offered	A1	Dimension: (Anggarani & Prasetyoning tyas, 2013) Indicator: (Mubarok, 2017)
		I shop at Shopee because the reviews of the goods are appropriate.	A1	
		I shop at Shopee because I am confident in the product of my choice	A1	
	<i>Evaluation</i>	I shop at Shopee by looking at other customer reviews	A2	
		I use Shopee when shopping, and it is enjoyable.	A2	

Source: Research document, 2023

The research procedure will involve several steps. First, the background relating to the problem to be discussed will be determined. Second, the research problem will be formulated. Third, the research objectives will be set. Next, observation and data research will be conducted. Next, data related to the research will be collected. The questionnaire will be designed, and the sampling method will be determined. The validity and reliability of the questionnaire design will be tested. Measurement model assessment will be conducted, followed by structural model assessment. A generalized structured component analysis (GSCA) structural model was used to test the hypotheses. Finally, the results will be interpreted to draw meaningful conclusions.

This research method aims to collect data from a target population of university students using a quantitative approach and established constructs from the TAM framework. Combining

data collection through a customized questionnaire and using GSCA for hypothesis testing provides a rigorous methodology for examining the relationship between perceived usefulness and user attitude toward the shop app in the JPE UNESA student's class 2019.

RESULT AND DISCUSSION

Characteristics of Respondent

The total number of respondents who filled out the questionnaire that had been distributed via Google Form was 151, based on the number of samples determined by the Krejcie table, with a significant level of 5%, namely 140 respondents.

Table 2. Characteristics of the respondent

Study Program	Frequency Frekuensi	Presents
Commerce Education	44 Students	29,1%
Pend. Adm. Perkantoran	32 Students	21,1%
Office Adm. Education		
Economics Education	49 Students	32,5%
Accounting Education	26 Students	17,2%
Total	151 Students	100%

Measurement Model Assessment

Table 3. Indicators of loading components

Indicator	PU	A
PU1	0,628	0,537
PU2	0,593	0,246
PU3	0,807	0,389
PU4	0,820	0,395
PU5	0,822	0,514
A1	0,453	0,814
A2	0,435	0,845
A3	0,419	0,787
A4	0,406	0,814
A5	0,406	0,814

Source: Primary data, 2023

Based on Table 3, the value of the loading indicator on Components in the study can be seen. F. Hair Jr et al. (2014) explain that the value of the Indicator of Loading on Components can be declared qualified if the value is ≥ 0.7 . However, another opinion expressed by Chin (1998) states that the value of Indicator of Loading on Component $\geq 0.5-0.6$ is considered sufficient. In terms of the indicator of loading on a component, the overall value is ≥ 0.6 , so this research model meets the requirements of the indicator of loading on a component.

Table 4. Indicator of loading components

	PU	A
PVE	0.549	0.658
Alpha	0.788	0.870
Rho	0.857	0.905
Dimensionality	1.0	1.0

Source: Primary data, 2023

The table above shows that the PVE for PU, PEU, PT, A, and CI variables is above 0.50. Alpha and Rho values for PU, PEU, PT, A, and CI variables are above 0.70, so all variables in the research model have an acceptable level of convergent validity, internal consistency, and composite reliability.

Table 5. Component validity assessment

Forner Lacker criterion values	PU	A
PU	0.741	
A	0.564	0.811
HTMT		
PU		
A	0.674	

Source: Primary data, 2023

The HTMT ratio on all variables, as shown in the table above, shows a value ≤ 0.90 ; the value of the HTMT ratio ≤ 0.90 indicates discriminant validity (Ali et al., 2021) as for the opinion of Henseler et al. (2015), which reveals that the HTMT value above 0.90 indicates that the discriminant value does not exist.

Table 6. R squared values of components in the structural model

PU	A
0.0	0.531

Source: Primary data, 2023

Table 6 shows that the value of variable A is 0.531 or 53.1%, which means that the independent variables influence 53.1% of A in the study. In comparison, 46.9% is influenced by variables outside this study. The value of the CI variable is 0.476 or 47.6%, which means that the independent variables influence 47.6% of CI in this study. In comparison, 52.4% is influenced by other variables outside this study. Overall, this research model has met the reliability and validity requirements so that it can be continued to assess the structural model.

Structural Model Assessment

Table 7. Structural model fit measure

FIT	AFIT	FITs	FITm	GFI	SRMR	OPE	OPEs	OPEm
0.550	0.544	0.201	0.620	0.962	0.086	0.457	0.811	0.386

Source: Primary data, 2023

The table's GFI and SRMR values are 0.962 and 0.086, respectively, which means that they meet the fit model.

Table 8. Path coefficient

	Estimate	SE	95%CI(L)	95%CI(U)	Conclusion
PU->A	0.158	0.086	0.004	0.329	H1 Accepted

Source: Primary data, 2023

The Path Coefficient results can be seen in the table and figure above. According to Hwang & Cho (2021), the Path Coefficient is declared significant if it is in the 95% confidence interval and the value is positive or there is no negative value (an estimate is considered statistically significant at the 0.05 level if the confidence interval does not include 0). Perceived Usefulness (PU) on Attitude (A) has a Path Coefficient of 0.158 (CI L = 0.004, CI U = 0.329). The first hypothesis is accepted, which means that Perceived Usefulness has a positive influence on attitude.

Discussion

The Effect of Perceived Usefulness on Attitude

The results of this study state that perceived usefulness has a significant positive effect on attitude. This study reveals that a system's usefulness will affect the user's attitude. The user's attitude can be a benchmark for whether or not a system will continue to be used. It can be shown when someone uses the shopee application. Perceived usefulness is when customers can make purchases quickly with complete information on the website and when they find it easy to make payments or transactions (Monica & Briliana, 2019). Therefore, a system must provide benefits to its users so that it can attract other customers to use the system itself. It aligns with research by Jiang et al. (2022), which reveals that perceived usefulness can affect the user's cheerful attitude.

Based on the loading value, it can be seen that in the perceived usefulness variable, the value of the PU5 indicator is at the highest value while PU2 is at the lowest value; this is because users feel that the indicator contained in PU5, namely I can find out "up to date" products while being able to shop for my needs, is more appropriate than the indicator in PU2. Namely, It takes a short time to choose the product I want. It is indicated by the search for goods in the Shopee application, which is easy, and with a wide variety of product choices offered, it takes more time to choose the desired product. Based on the loading on the attitude variable, it can be seen that the value in indicator A3 is at the highest value while the value in

indicator A3 is at the lowest value. The A2 indicator, namely, I shop at Shopee because I believe the goods sold are by what is offered, is more appropriate than the A3 indicator. I shop at Shopee because I am confident in the product of my choice. This shows that the offer provided by the shopee application is the best choice of goods, while the item of the user's choice is not necessarily the best item that will be obtained.

CONCLUSION

Based on the research results and discussion, Perceived Usefulness has a significant positive effect on attitude. Based on the research results, the Shopee application is used for online buying and selling transactions that can meet the needs of students. The high use of the Shopee application can make this application a benchmark for students and people who plan to make an application or system. In addition, the high use of the Shopee application can improve the country's economy per the sustainable development goals (SDGs) program at point 8, namely decent work and economic growth, to support inclusive and sustainable economic development.

REFERENCES

- Aditya, O. (2020). E-Commerce Shopping Experience Towards College Student's Intention to Adopt E-Commerce in The Future: Tam And Self Efficacy Approach. *Journal of Management & Business*, 3(3), 129–142.
- Ali, R., Bashir, F., & Ahmad, R. (2021). *Imprints of Lower Socioeconomic Class in English Speaking Anxieties and Academic Performance of Rural and Urban Students*. 3(3), 412–425.
- Anggarani, A., & Prasetyoning tyas, W. (2013). *Analisis Sikap Dan Perilaku Konsumen Terhadap Produk*.
- Arief, M. (2021). Marketing Analysis: Security and Public Trust Online Shopping at Shopee.co.id. *Enrichment: Journal of Management*, 11(2), 345–352. www.enrichment.iocspublisher.org
- Damayanti, V. (2019). Pengaruh Perceived Usefulness dan Perceived Ease Of Use Terhadap Purchase Intention Melalui Brand Image Sebagai Variabel Intervening Pada Mahasiswa UST Yogyakarta Pengguna Shopee. *Jurnal Ilmiah Ekonomi Dan Bisnis*, 16(2), 99–109.
- F. Hair Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM). *European Business Review*, 26(2), 106–121. <https://doi.org/10.1108/EBR-10-2013-0128>
- Fred D. Davis, J. (1986). A Technology Acceptance Model For Empirically Testing New End-User Information System: Theory and Result. *Ph.D. in Management*, 291. <https://doi.org/10.1126/science.146.3652.1648>
- Handayani, S., & Saputera, S. A. (2019). Pengaruh Persepsi Kemudahan Dan Persepsi

- Kemanfaatan Terhadap Penggunaan Sistem Kkn Online Dengan Pendekatan Tam. *Journal of Technopreneurship and Information System (JTIS)*, 2(2), 53–58. <https://doi.org/10.36085/jtis.v2i2.313>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). *A new criterion for assessing discriminant validity in variance-based structural equation modeling*. 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Jahangir, N., & Begum, N. (2008). *The role of perceived usefulness, perceived ease of use, security and privacy, and customer attitude to engender customer adaptation in the context of electronic banking*. 2(1), 32–40.
- Jiang, Q., Gu, C., Feng, Y., Wei, W., & Tsai, W. C. (2022). Study the continuance intention in using the virtual shoe-try-on function in mobile online shopping. *Kybernetes*, 2021. <https://doi.org/10.1108/K-12-2021-1346>
- Keren, & Sulistiono. (2019). *Pengaruh Motivasi, Budaya, dan Sikap Konsumen Terhadap Keputusan Pembelian Produk Indomie*. 7(3), 319–324.
- Mahwadha, W. I. (2019). Behavioral Intention of Young Consumers Towards E-Wallet Adoption: An Empirical Study Among Indonesian Users. *Russian Journal of Agricultural and Socioeconomic Sciences*, 85(1), 79–93. <https://doi.org/10.18551/rjoas.2019-01.09>
- Monica, C., & Briliana, V. (2019). Faktor-Faktor yang Mempengaruhi Continuance Intention Pengguna Go-Food di Jakarta. *Jurnal Wira Ekonomi Mikroskil*, 9(2), 115–126. <https://doi.org/10.55601/jwem.v9i2.624>
- Mubarok, wahyu rizqi. (2017). *Pengaruh kepercayaan konsumen terhadap kesediaan membeli ulang melalui mediasi sikap, dan persepsi risiko*.
- Muljono, W., & S.P. Pertiwi, D. P. S. K. (2021). *Digital economy : theory and practice*. 14(1), 7–20. <https://doi.org/10.18721/JE.14101>
- Prasetya, Iham A., & Suwitho. (2022). Pengaruh Persepsi Kemudahan dan Manfaat Terhadap Kepuasan Pelanggan dan Minat Pembelian Ulang Pada Aplikasi Shopee. *Jurnal Ilmu Dan Riset Manajemen*, 1–15. <http://jurnalmahasiswa.stiesia.ac.id/index.php/jirm/article/view/4899%0Ahttp://jurnalmahasiswa.stiesia.ac.id/index.php/jirm/article/download/4899/4911>
- Purbasari, R., Sari, D. S., & Muttaqin, Z. (2020). Mapping of Digital Industry Competitive Advantages: Market-Based View Approach. *Review of Integrative Business and Economics Research*, 9(4), 380–398. http://buscompress.com/uploads/3/4/9/8/34980536/riber_9-s4_27_u20-072_380-398.pdf
- Putri, A. D., Ghazali, A., & Ahluwalia, L. (2021). Analysis of Company Capability Using 7S McKinsey Framework To Support Corporate Succession (Case Study: Pt X Indonesia). *Manajemen Bisnis*, 11(1), 44–53. <https://doi.org/10.22219/mb.v11i1.17371>
- Segoro, W., & Sandra, R. A. (2021). The Influence Of Brand Image, Promotion, And Price On Shopee Customer Loyalty (Case Study On Shopee Customers In Karawaci). *International Journal of Science, Technology & Management*, 2(5), 1718–1721. <https://doi.org/10.46729/ijstm.v2i5.342>

- Sidanti, H., Citaningtyas, D., Kadi, A., Purwanto, H., & Lestari, W. S. (2020). *The Effect Of Easy Perception And Security Perception On The Intention Of Using Shopeepay Through Attitude As Intervening Variables In Madiun*. i(July 2019), 215–228.
- Sugiyono. (2016). *Metode Penelitian Administrasi Dilengkapi Dengan Metode R&D* (23rd ed.). Alfabeta.
- Trenasia. (2021). *data pengguna shopee*. <https://www.trenasia.com/amp/performa-e-commerce-shopee-si-paling-laris-tahun-ini>
- Zella AlQadrie, S., Prawira, D., & Ilhamsyah. (2022). Analisis Kesuksesan E-Commerce Shopee Di Kalangan Mahasiswa Menggunakan Delone & Mclean Is Success Model (Studi Kasus : Mahasiswa Universitas Tanjungpura). *Jurnal Khatulistiwa Informatika*, 10(2), 119.
<https://ejournal.bsi.ac.id/ejurnal/index.php/khatulistiwa/article/viewFile/13389/5712>