

Studies in Systems, Decision and Control 525

Bahaa Awwad *Editor*

The AI Revolution: Driving Business Innovation and Research

Volume 2

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Editor

The AI Revolution: Driving Business Innovation and Research

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Preface

In the landscape of technological progress, there are moments that redefine the way we live, work, and understand the world. The advent of artificial intelligence is undeniably one such epoch, heralding a revolution that permeates every facet of our existence. Welcome to “The AI Revolution: Driving Business Innovation and Research,” a compendium that embarks on a journey to unravel the profound impact of AI on the realms of business and research.

This book is more than a mere exploration of algorithms and data; it is a testament to the transformative power of ideas that have transcended the realm of science fiction to become integral components of our reality. As the boundaries between the digital and physical blur, AI emerges as a driving force, shaping the destiny of industries, sparking innovation, and propelling research into uncharted territories.

In the following chapters, we invite you to accompany us through a comprehensive odyssey into the AI revolution. We navigate the intricate interplay between technology and business strategy, dissecting the ways in which AI is not only disrupting traditional models but also birthing novel approaches to problem-solving and decision-making. Simultaneously, we delve into the world of cutting-edge research, where AI serves as both a tool and a muse, unlocking new possibilities and pushing the boundaries of human knowledge.

This book is a collaboration of minds, bringing together experts, visionaries, and practitioners who share a common passion for the potential of AI. Their collective insights provide a panoramic view of the landscape, from the boardrooms where AI strategies are crafted to the laboratories where breakthroughs are incubated.

As you embark on this intellectual voyage, we encourage you to engage critically with the material, challenge assumptions, and envision the possibilities that AI holds for your own sphere of influence. “The AI Revolution” is not just a documentation of the present; it is a compass guiding you through the ever-evolving terrain of the future.

May this book be your companion as you navigate the complexities, seize the opportunities, and contribute to the unfolding narrative of the AI revolution.

Ramallah, State of Palestine

Bahaa Awwad

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Analysis of Online Marketplace Success in Accounting Students of the University of North Sumatra: Application of Service Convenience Theory



Indzar Putri Madinah, Adi Syah Putra, and Sambas Ade Kesuma

Abstract This study aims to measure the impact of the success of online marketplaces among undergraduate students of the Faculty of Economics and Business of the Accounting degree program at Universitas Sumatera Utara. The study is a quantitative approach using a cross-sectional and survey method. The population of this study includes all undergraduate students in the Accounting Study Program of the Faculty of Economics and Business, Universitas Sumatera Utara, and a total sample of 291 students. Data is collected via an online questionnaire. The results of this study show that decision convenience, access convenience, transaction convenience, benefit convenience, and post-benefit convenience have a positive and significant influence on the success of online marketplaces. However, the success of the online marketplace is not affected by post-benefit convenience. This study suggests that improving decision convenience, access convenience, transaction convenience, and benefit convenience is the best strategy for the success of online marketplaces.

1 Introduction

The rapid progress of information technology today makes it easier for humans to fulfill various daily life needs. This includes shopping activities. With information technology, shopping can now be done online. This happens without direct face-to-face contact, buyers can purchase goods online, on websites, social media, and online marketplaces. In terms of online shopping, it will certainly be different from the offline shopping experience, therefore the level of success will be different.

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Wertz and Kingyens [39] define Online Marketplace as an online market or e-commerce site that connects producers with consumers. The development of online marketplaces is increasing rapidly in several countries, for example, Shopee which is the largest online marketplace platform in Southeast Asia in 2020 [41]. In the United States, many customers are getting used to buying products and services from online marketplaces or online shopping websites [38].

Online marketplaces greatly facilitate the process of buying and selling transactions for various goods and services [15]. Referring to the Momentum Works report, Shopee leads the value of e-commerce transactions in Southeast Asia with GMV reaching US\$47.9 billion or 48.14% of total e-commerce transactions in the region (Fig. 1).

Measure the success of an online marketplace, can be done using service convenience theory (SERVCON). SERVCON theory is a theory that is defined as consumers' perceptions of time and effort related to purchasing or using services [5]. SERVCON includes five variables that reflect the activities consumers undertake to purchase or use services.

SERVCON theory is the basis for developing the conceptual framework of this research. Because customers' tendency to shop using online marketplaces is very high in terms of seeking convenience [33], according to SERVCON theory, online marketplace success will be greatly influenced by Decision Convenience (DC), Access Convenience (AC). Transaction Convenience (TC), Benefit Convenience (BC) and

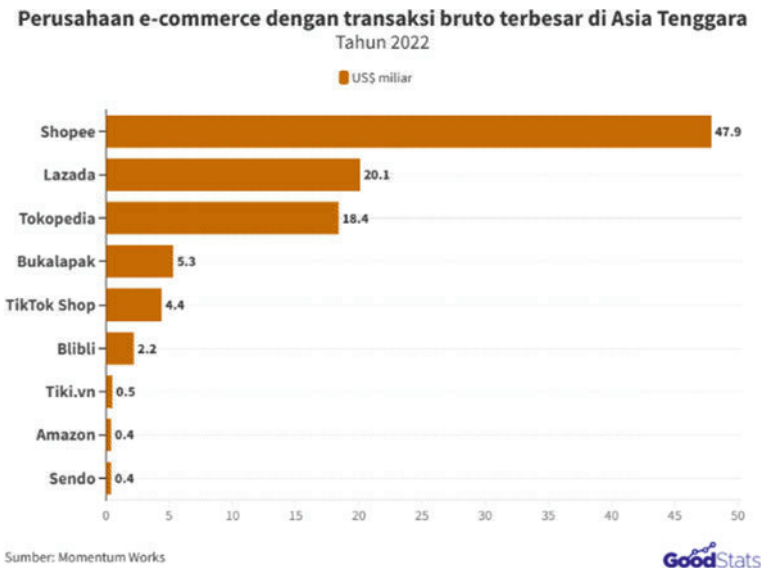


Fig. 1 e-commerce company with the largest gross transaction value in Southeast Asia 2022. *Source* Goodstats

Post-benefit Convenience (PBC). Therefore, this research uses the SERVCON theory to measure the impact on the success of online marketplaces among undergraduate students of the Faculty of Economics and Business of the Accounting degree program at Universitas Sumatera Utara.

2 SERVCON Theory

The notion of convenience was first introduced in marketing literature in connection with a specific product category. According to Copeland [10], the product category in question is finished products, including convenience goods. Berry et al. [5] said that the essence of SERVCON is service convenience which is constructed in the perception of consumer time and effort, which can be seen in Fig. 2. This time and effort is translated into five comfort variables: DC, AC, TC, BC, and PBC which reflect consumer activities in using the service [5]. Specifically, Berry et al. [5] stated that SERVCON is influenced by various factors, namely: service environment, information from consumers, company branding, and service system design. Perceptions of SERVCON influence all consumer assessments including satisfaction, perceived service quality, and fairness.

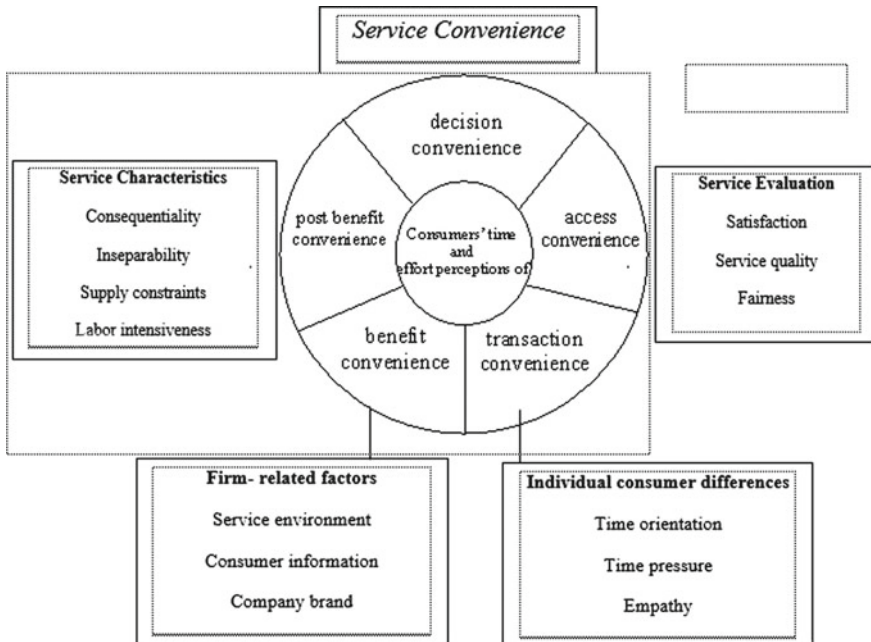


Fig. 2 SERVCON model. Source Berry et al. [5]

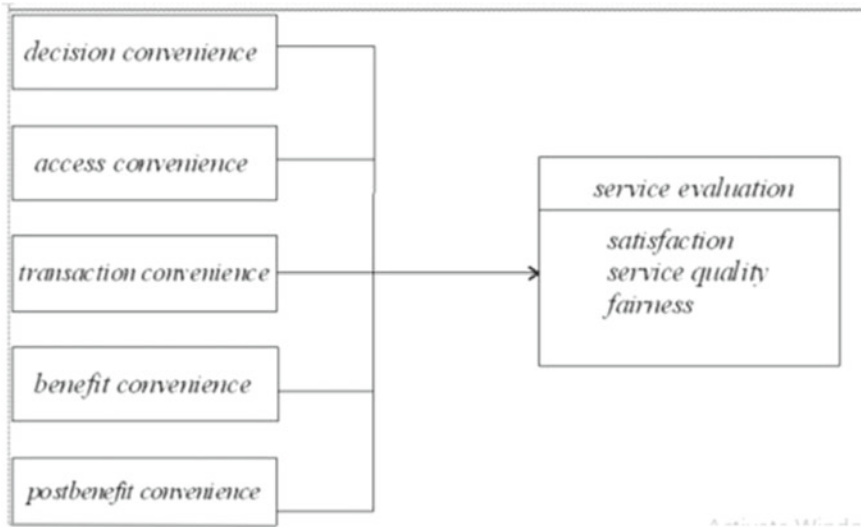


Fig. 3 SERVCON theoretical framework. Source Berry et al. [5]

Berry et al.'s five SERVCON variables [5] reflects the stages of purchasing activities and service use. The burden of time and effort affects the overall evaluation. In all literature that discusses services using an activity approach, the results are consistent [5]. According to Berry et al. [5], the variables are DC, AC, TC, BC, and PBC. Figure 3 shows the theoretical framework.

3 Variables

Online Marketplace Success. According to Rai et al. [30], the concept of information system success is widely accepted throughout information system research as the main criterion for evaluating an information system. User satisfaction is considered an important aspect of information system success [2]. Petter et al. [29] measure the success of an information system from the user's ability to make decisions or take action regarding the use of an information system. Wei [37] also uses user satisfaction in e-commerce as a measure of e-commerce success.

Decision Convenience (DC). According to SERVCON theory, DC refers to the consumer's impression of the time and effort required to decide whether or not to buy a good or service. An information system's degree of success is determined in part by DC. According to Berry et al. [5], DC can be evaluated based on the information's reliability, availability, speed, and quality.

Access Convenience (AC). According to SERVCON theory, AC is the consumer's impression of the time and effort required for quick and easy access to providers of products and services. AC tracks how users access services [11, 32, 33].

Transaction Convenience (TC). SERVCON theory describes TC as consumers' impression of the expense of time and effort expended when completing transactions to simply and comfortably purchase products and services. The speed and ease with which consumers execute a transaction can be used to calculate TC [33].

Benefit Convenience (BC). In SERVCON theory, BC refers to the consumer's view of the time and effort required to reap the advantages of consuming goods and services. The ease and speed with which you can find the thing you're seeking in the online marketplace can be used to calculate BC [25, 33].

Post-benefit Convenience (PBC). PBC, according to SERVCON theory, is how customers perceive the time and effort required to contact customer service after purchasing products or services. According to Berry et al. [5], PBC is connected to consumer demands for product maintenance, exchange, or repair. PBC, according to Lai and Wibowo [25], is a crucial indicator of an information system's performance.

4 Method

4.1 Participants

The research takes a quantitative approach, employing a cross-sectional and survey method. Cross-sectional (one-shot) research is conducted by collecting data only once, over several days, weeks, or months, to answer research questions [34]. An online questionnaire is used to collect data. Accounting undergraduate students FEB USU from the 2018 through 2022 classes comprise the population of this study. According to the website <https://direktori.usu.ac.id/> (2023), the 2018–2022 class has 1138 active undergraduate students. The Cohen, Manion, and Morrison table were used to show the sample size in this study, with a level of trust of 95% and an alpha of 0.1. Thus, 291 samples were gathered in this study.

4.2 Instruments

The questionnaire uses a 5-point Likert measurement scale (Table 1). This study's questionnaire followed the assessment measurement paradigm of Colwell et al. [9] and Seiders et al. [33]. Sekaran and Bougie [34] revealed that the Likert scale was designed to test how strongly respondents agree or disagree with statements on a five-point scale as follows:

Table 1 Variable measurement value scale

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

4.3 Procedure

Questionnaires were delivered via Google Form to FEB USU Regular Accounting undergraduate students who were still engaged online. To make it easy for respondents to fill out each statement item, the questionnaire is delivered online. Google Form is defined as an online questionnaire that can be useful in this study. Google Forms is a cloud-based data management system that is used to grow and manage online subscriptions [31].

5 Results

5.1 Data Quality Test

a. Validity Test

The validity test refers to Kuncoro [23] which states that if the r_{count} is > than the r_{table} (0.1150), it is declared valid. Therefore, the validity test results for the dependent variable online marketplace success and the independent variable DC, AC, TC, BC, and PBC are $r_{\text{count}} >$ from r_{table} . These findings demonstrate that all statement items are valid (Table 2).

b. Reliability Test

Referring to Kuncoro [23], if Cronbach's Alpha value is greater than 0.600, the result is considered reliable. Because all item statements in each variable have a Cronbach's Alpha value > 0.600, the findings of this study demonstrate that they are all reliable (Table 3).

5.2 Classic Assumption Test

a. Normality Test

Based on the Kolmogorov–Smirnov statistical test, if the significance level is greater than 0.05 then the data can be proven to be normal [19]. From Table 4 it can be seen that the significance value is greater than 0.05, namely 0.052. Therefore, it can be concluded that the residual data has a normal distribution.

Table 2 Validity test output

Variable	Statement items	r_{count}	r_{table}	Annotation
Online marketplace success	Y1	0.848	0.115	Valid
	Y2	0.880	0.115	
	Y3	0.806	0.115	
	Y4	0.840	0.115	
	Y5	0.827	0.115	
DC	X1.1	0.788	0.115	
	X1.2	0.792	0.115	
	X1.3	0.824	0.115	
	X1.4	0.761	0.115	
AC	X2.1	0.777	0.115	
	X2.2	0.840	0.115	
	X2.3	0.779	0.115	
	X2.4	0.704	0.115	
TC	X3.1	0.916	0.115	
	X3.2	0.935	0.115	
	X3.3	0.903	0.115	
BC	X4.1	0.808	0.115	
	X4.2	0.836	0.115	
	X4.3	0.853	0.115	
PBC	X5.1	0.875	0.115	
	X5.2	0.899	0.115	
	X5.3	0.912	0.115	

Table 3 Reliability test output

Variable	<i>Cronbach's alpha</i>	Annotation
Online marketplace success	0.895	Reliable
DC	0.791	
AC	0.766	
TC	0.905	
BC	0.775	
PBC	1.877	

b. Multicollinearity Test

Measurements to identify multicollinearity are determined based on tolerance values and variance inflation factor (VIF). A tolerance value < 0.10 or $VIF > 10.0$ is a cutoff value commonly used to prove the existence of multicollinearity [34]. The results of the multicollinearity test are presented in Table 5.

Table 4 Normality test results

		Unstandardized residual
N		291
Normal parameters	Mean	0
	Std. deviation	2.2190
	Absolute	0.079
	Positive	0.064
	Negative	- 0.079
Kolmogorov–Smirnov Z		1.351
Asymp. Sig. (2-tailed)		0.052

Table 5 Multicollinearity test results

Model	Collinearity statistics	
	Tolerance	VIF
<i>(Constant)</i>		
DC	0.493	2.027
AC	0.386	2.590
TC	0.527	1.898
BC	0.404	2.476
PBC	0.987	1.013

c. Heteroscedasticity Test

Heteroscedasticity testing in this research was carried out using the Glejser test. Table 6 shows the test results of this research data which states that heteroscedasticity does not occur because of the results of the Sig value. between variables > 0.05 . The results of the heteroscedasticity test are presented in Table 6.

Table 6 Heteroscedasticity test results

Variable	Sig.
DC	0.813
AC	0.859
TC	0.915
BC	0.696
PBC	0.739

Table 7 Multiple linear regression test results

Model	Unstandardized coefficient
	B
(Constant)	3.061
DC	0.480
AC	0.237
TC	0.272
BC	0.193
PBC	- 0.030

5.3 Multiple Linear Regression Analysis

Based on the multiple linear regression analysis test, the equation results are obtained:

$$Y = 3.061 + 0.480X1 + 0.237X2 + 0.272X3 + 0.193X4 + (-0.030X5)$$

- a. This constant value shows that if DC, AC, TC, BC, and PBC are 0, then the online marketplace success value is 3.061. If the independent variable does not exist, the online marketplace success variable will not change.
- b. The DC variable value from the results is 0.480. These results show that if DC is increased it will increase the success of the online marketplace by 48%.
- c. The AC variable value from the results is 0.237. These results show that if AC is improved it will increase the success of the online marketplace by 23.7%.
- d. The value of the TC variable from the results is 0.272. These results show that if TC is increased it will increase the success of the online marketplace by 27.2%.
- e. The value of the BC variable from the results is 0.193. These results show that if BC is increased it will increase the success of the online marketplace by 19.3%.
- f. The regression coefficient value of the PBC variable is - 0.03. This means that assuming the other variables remain constant (0), an increase in PBC of 1% will result in a decrease of 0.03% in online marketplace success units.

The outcomes of the test conducted for multiple linear regression analysis are presented in Table 7.

5.4 Hypothesis Testing

a. Coefficient of Determination Test (R²)

The R2 test results can be seen in the adjusted R² value, namely 0.503 (50.3%). So it shows that the variables DC, AC, TC, BC, and PBC can explain the online marketplace success variable by 50.3%. Meanwhile, the remaining 49.7% is influenced by other variables. The R2 test results are presented in Table 8.

Table 8 R² test results

Model	Adjusted R ²
1	0.503

Table 9 F test results

	Model	F	Sig.
1	Regression	59.711	0.000a

b. F Test

The simultaneous F test is applied to determine whether or not there is a joint influence between the independent variables on the dependent variable [16, 17]. The F test results reveal that the calculated F value (59.711) is higher than the F table (2.245). Meanwhile, the significant value is also smaller than 0.05, namely 0.000. Therefore, it can be concluded that the variables DC, AC, TC, BC, and PBC simultaneously have a significant influence on the success of the online marketplace. The F-test results are shown in Table 9.

c. T-test

This study has a ttable value of 1.968. According to the research test results, all independent variables have tcount > ttable and Sig values less than 0.05. This means that DC, AC, TC, BC, and PBC have an impact on the success of online marketplaces. Table 10 displays the t-test results.

Table 10 t test results

	Model	t	Sig.
1	(Constants)	6.228	0.000
	DC	2.664	0.008
	AC	2.978	0.003
	TC	2.797	0.002
	BC	- 0.523	0.601
	PBC	6.228	0.000

6 Discussions

The Influence of Decision Convenience on Online Marketplace Success

Based on research results, it is known that DC influences the success of online markets. Where respondents feel comfortable, and easily and quickly find the information they need before deciding to shop at the online market. This can be proven

when the majority of respondents agree that the online marketplace displays information that makes product selection easier. The results of this study are in line with research by Berry et al. [5], Dai and Salam [11], Lai and Wibowo [25], Seiders et al. [33] which revealed that DC influences the success of online markets. However, different from the research of Stephens and McGowan [35] revealed that DC does not affect online market success.

The Influence of Access Convenience on Online Marketplace Success

The results of this research confirm the influence of AC on the success of online marketplaces. It was found that respondents felt comfortable accessing the online marketplace system. This is shown by the majority of respondents giving an affirmative answer that the online marketplace is always available whenever the respondent needs it. Respondents agreed that online marketplaces can be accessed easily and operating hours are flexible and convenient. The results of this study are in line with research by Aagja et al. [1], Jiang et al. [18] who revealed that air conditioning influences the success of online marketplaces. However, contrary to Bi and Kim [6] research, Colwell et al. [9] revealed that AC does not affect the success of online marketplaces.

The Influence of Transaction Convenience on Online Marketplace Success

The results of this research confirm the influence of TC on the success of online marketplaces. It was found that respondents perceived online marketplaces as providing comfort when making transactions. This is reinforced by the majority of respondents agreeing that completing transactions on the online marketplace is very easy, fast, and uncomplicated. The results of this study agree with research by Kaura et al. [20] revealed that TC influences the success of online marketplaces. However, it does not agree with the research of Colwell et al. [9] which revealed that TC does not affect the success of online marketplaces.

The Influence of Benefit Convenience on Online Marketplace Success

The results of this research confirm the influence of BC on the success of online marketplaces. It was found that respondents perceived the online marketplace as providing comfort and benefits in its use. This is reinforced by respondents agreeing that they receive benefits from purchasing on the online marketplace. Respondents also agreed that the time needed to obtain benefits was relatively fast. The results of this research agree with research by Chang and Polonsky [7], Mpinganjira [27], which revealed that BC influences the success of online marketplaces. However, it does not agree with the research of Kumar et al. [22] which revealed that BC does not affect the success of online marketplaces.

The Influence of Post-benefit Convenience on Online Marketplace Success

The results of the hypothesis test show that PBC does not affect the success of the online marketplace. Thus, hypothesis 5 in this study is rejected. The results of this research are different from the SERVCON theory which states that PBC influences the success of online marketplaces. The demographic results of respondents show that

not many respondents who have shopped at online marketplaces experienced post-purchase problems. Furthermore, the majority of respondents agreed that online marketplaces quickly resolved the problems they were experiencing. This proves that in online marketplaces there is no need to wait a long time to return products. This can be seen from the demographics of respondents who only slightly chose the product return policy guarantee service feature. The results of this study agree with the research of Aagja et al. [1] which revealed that PBC does not affect the success of online marketplaces. However, contrary to research by Chang and Polonsky [7], Stephens and McGowan [35] revealed that PBC influences the success of online marketplaces.

7 Conclusion and Recommendations

Conclusion

1. DC has a positive and significant influence on the success of online marketplaces. In conclusion, users feel the ease of information, the ease of making decisions to buy, the clarity of information, and special offers when using the online marketplace.
2. AC has a positive and significant influence on the success of online marketplaces. The conclusion is that users will experience the availability of service providers, ease of access, convenience of operating hours, and ease of contacting providers when using the online marketplace.
3. TC has a positive and significant influence on the success of online marketplaces. The conclusion is that Users will benefit from transaction ease, transaction speed, and transaction simplicity.
4. BC has a positive and significant influence on the success of online marketplaces. The conclusion is that users will experience the availability of service providers, ease of access, convenience of operating hours, and ease of contacting providers when using the online marketplace.
5. PBC does not affect the success of online marketplaces. The conclusion is that users will experience the speed of problem resolution by the service provider, the ease of getting follow-up, and the provider resolving purchasing problems.

Limitations and Suggestions

1. The population of this research only focuses on FEB USU Accounting Undergraduate students. The analysis results presented are still limited and do not represent the general population of online marketplace users. For future research, it is recommended to select a wider population to represent the general population of online marketplace users. For example, outside of the FEB USU Accounting Undergraduate students population.
2. Research data was only obtained through online questionnaires. So respondents' answers may be inconsistent and uncertain. To obtain further research data, it

is recommended to conduct direct interviews and observations. So that research data is obtained consistently and definitely.

3. This research data collection was only carried out in one period. In future research, it is recommended to add periods in the cross-sectional and time series approaches. It can be added by extending the period for data collection so that consistency and variance in responses from each respondent can be maintained.

References

1. Aagja, J.P., Mammen, T., Saraswat, A.: Validating service convenience scale and profiling customers: a study in the Indian retail context. *Vikalpa J. Decis. Makers* **36**(4), 25–50 (2011)
2. Antonopoulou, M., Kotsilieris, T.: A literature review of user satisfaction models towards information system success. *Int. J. E-Serv. Mob. Appl.* **11**(2), 1–87 (2019)
3. Bao, H., Li, B., Shen, J., Hou, F.: Repurchase intention in the Chinese e-marketplace: roles of interactivity, trust and perceived effectiveness of e-commerce institutional mechanisms. *Ind. Manag. Data Syst.* **116**(8), 1759–1778 (2016)
4. Berry, L.L.: The time-buying consumer. *J. Retail.* **55**, 58–68 (1979)
5. Berry, L.L., Seiders, K., Grewal, D.: Understanding service convenience. *J. Mark.* **66**(3), 1–7 (2002)
6. Bi, Y., Kim, I.: Older travelers' e-loyalty: the roles of service convenience and social presence in travel websites. *Sustainability* **12**(1), 410 (2020)
7. Chang, Y.W., Polonsky, M.J.: The influence of multiple types of service convenience on behavioral intentions: the mediating role of consumer satisfaction in a Taiwanese leisure setting. *Int. J. Hosp. Manag.* **31**(1), 107–118 (2012)
8. Cohen, L.R., Manion, L., Morrison, K.: *Research methods in education*, 6th edn. Routledge, Oxfordshire (2007)
9. Colwell, S.R., Aung, M., Kanetkar, V., Holden, A.L.: Toward a measure of service convenience: multiple-item scale development and empirical test. *J. Serv. Mark.* **22**(2), 160–169 (2008)
10. Copeland, M.T.: Relation of consumers' buying habits to marketing methods. *Harv. Bus. Rev.* **1**(3), 282–289 (1923)
11. Dai, H., Salam, A.F.: Does service convenience matter? An empirical assessment of service quality, service convenience, and exchange relationship in electronic mediated environment. *Electron. Mark.* **24**(4), 269–284 (2014)
12. Davis, F.D.: Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Q. Manag. Inform. Syst.* **13**(3), 319–340 (1989)
13. DeLone, W.H., McLean, E.R.: Information systems success: the quest for the dependent variable. *Inf. Syst. Res.* **3**(1), 60–95 (1992)
14. DeLone, W.H., McLean, E.R.: The DeLone and McLean model of information systems success: a ten-year update. *J. Manag. Inf. Syst.* **19**(4), 9–30 (2003)
15. Dihni VA Databoks Homepage. <https://databoks.katadata.co.id/datapublish/2022/04/12/tokopedia-e-commerce-dengan-pengunjung-terbanyak-pada-2021>. Last accessed 2022/06/01
16. Ghozali, I.: *Aplikasi Analisis multivariete dengan program IBM SPSS 23*, 8th edn. Badan Penerbit Universitas Diponegoro, Semarang (2016)
17. Ghozali, I.: *Desain Penelitian Kuantitatif dan Kualitatif untuk Akuntansi, Bisnis, dan Ilmu Sosial Lainnya*, 1st ed. Yoga Pratama, Semarang (2016)
18. Jiang, L., Jiang, N., Liu, S.: Consumer perceptions of e-service convenience: an exploratory study. *Procedia Environ. Sci.* **11**(1), 406–410 (2011)
19. Juliandi, A., Irfan, Manurung, S.: *Metodologi Penelitian Bisnis, Konsep dan Aplikasi: Sukses Menulis Skripsi & Tesis Mandiri*, 1st ed. UMSU Press, Medan (2014)

20. Kaura, V., Prasad, C.S., Sharma, S.: Service quality, service convenience, price and fairness, customer loyalty, and the mediating role of customer satisfaction. *Int. J. Bank Mark.* **33**(4), 404–422 (2015)
21. Kuttikaden, H.S., Daniel, J.C.T.: A study on user experience of Amazon Pay. In: Aloysius Edward, J., Jaheer Mukthar, K.P., Asis, E.R., Sivasubramanian, K. (eds.) *Current Trends in Economics, Business and Sustainability. ICEBS 2023. Contributions to Environmental Sciences & Innovative Business Technology.* Springer, Singapore (2023)
22. Kumar, R., Sachan, A., Dutta, T.: Examining the impact of e-retailing convenience dimensions on behavioral intention: the mediating role of satisfaction. *J. Internet Commer.* **19**(4), 466–494 (2020)
23. Kuncoro, M.: *Metode riset untuk bisnis dan ekonomi*, 4th ed. Erlangga, Jakarta (2013)
24. Lai, J.: E-SERVCON and e-commerce success: applying the DeLone & McLean model. *J. Organ. End User Comput.* **26**(1), 1–22 (2014)
25. Lai, J., Wibowo, S.A.: How service convenience influences information system success. *Int. J. Future Comput. Commun.* **1**(3), 217–220 (2012)
26. Lai, J., Ulhas, K.R., Lin, J.: Assessing and managing e-commerce service convenience. *Inf. Syst. Front.* **16**(2), 273–289 (2014)
27. Mpinganjira, M.: Online store service convenience, customer satisfaction, and behavioural intentions: a focus on utilitarian oriented shoppers. *J. Econ. Behav. Stud.* **7**(1), 36–49 (2015)
28. Goodstats Homepage. <https://goodstats.id/article/7-super-app-terbaik-di-asia-tenggara-2022-VJLVO>. Last accessed 2023/10/12
29. Petter, S., DeLone, W.H., McLean, E.R.: The past, present, and future of IS success. *J. Assoc. Inf. Syst.* **13**(2), 7–10 (2012)
30. Rai, A., Lang, S.S., Welker, R.B.: Assessing the validity of IS success models: an empirical test and theoretical analysis. *Inf. Syst. Res.* **13**(1), 50–69 (2002)
31. Raju, N.V., Harinarayana, N.S.: Online survey tools: a case study of Google Forms. In: *National Conference on Scientific, Computational and Information Research Trends in Engineering, GSSS-IETW, Mysore* (2016)
32. Seiders, K., Berry, L.L., Gresham, L.G.: Attention, retailers! How convenient is your convenience strategy? *Sloan Manag. Rev.* **41**(3), 79–90 (2000)
33. Seiders, K., Voss, G.B., Godfrey, A.L., Grewal, D.: SERVCON: development and validation of a multidimensional service convenience scale. *J. Acad. Mark. Sci.* **35**(1), 144–156 (2007)
34. Sekaran, U., Bougie, R.: *Research Methods for Business: A Skill-Building Approach*, 8th edn. Wiley, New Jersey (2019)
35. Stephens, P., McGowan, M.: Service convenience: online versus brick and mortar bookstores. *Int. J. Inform. Syst. Serv. Sect.* **7**(3), 1–14 (2015)
36. Universitas Sumatera Utara Homepage. <https://direktori.usu.ac.id/>. Last accessed 2022/12/07
37. Wei, L.B.: Success Factors for Transactional eCommerce Websites: An Investigation Focusing on Technical and Business Contexts (2012)
38. Wen, C., Prybutok, V.R., Xu, C.: An integrated model for customer online repurchase intention. *J. Comput. Inform. Syst.* **52**(1), 14–23 (2011)
39. Wertz, Kingyens, A.T.: 2013. *A Guide to Marketplace*, 3rd ed. Versionone, San Francisco (2020)
40. Xu, J., Benbasat, I., Cenfetelli, R.T.: Integrating service quality with system and information quality: an empirical test in the e-service context. *MIS Q. Manag. Inform. Syst.* **37**(3), 777–794 (2013)
41. Yo, P.W., Kee, D.M.H., Yu, J.W., Hu, M.K., Jong, Y.C., Ahmed, Z., Nair, R.K.: The influencing factors of customer satisfaction: a case study of Shopee in Malaysia. *Stud. Appl. Econ.* **39**(12), 6–10 (2021)

Analysis of TikTok Shop Acceptance: An Indonesian Accounting Student Perceptions



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Abstract The objective of this study is to determine the effect of performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, habit, and personal innovativeness on TikTok Shop acceptance among undergraduate students of the Faculty of Economics and Business, Universitas Sumatera Utara. This study used a survey method with a cross-sectional approach. The population in this study is undergraduate students at the Faculty of Economics and Business, Universitas Sumatera Utara, and 333 samples. Data collection through online questionnaires, by using Google form. The results reveal that performance expectancy, facilitating conditions, price values, and habits affect TikTok Shop acceptance. However, there is no effect between effort expectancy, social influence, hedonic motivation, personal innovativeness, and TikTok Shop acceptance. This study points out that performance expectancy, facilitating conditions, price values, and habits are the ultimate factors in elevating TikTok Shop acceptance among undergraduate students at the Faculty of Economics and Business, Universitas Sumatera Utara.

Keywords TikTok Shop acceptance · Performance expectancy · Effort expectancy · Social influence · Facilitating condition · Hedonic motivation · Price value · Habit · Personal innovativeness

1 Introduction

The atmosphere of information technology (IT) development can be felt quickly. The emergence of IT has had an impact on online shopping which is used in everyday life. Online shopping is the process of buying and selling through digital media on the internet. Application in online shopping can be done anywhere and anytime. Online

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